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ПІДЛІТКИ, РОЗ'ЄДНАВЧА ПРОПАГАНДА ВОЄННОГО ЧАСУ І БУЛІНГ: ЯК ВОНИ ПОВ'ЯЗАНІ?

Актуальність. Зростання ролі інформаційного складника у війні Росії проти України та використання країною-агресоркою роз'єднавчої пропаганди підкреслюють нагальну потребу вивчення її впливу на підлітків, особливо в освітньому середовищі.

Мета статті – з'ясувати, чи зазнають підлітки впливу поляризуючих повідомлень і з яких саме медіаканалів, а також чи впливають такі повідомлення на зміни в шкільному цькуванні.

Методи і методологія. Дослідження охоплювало три етапи, його завданням було оцінити взаємозв'язок між впливом повідомлень розбрату і формуванням упереджень, які відтак можуть призводити до булінгу. Серед застосованих методів – кабінетне дослідження (контент-аналіз соціальних мереж медіаекспертами), серія фокус-групових інтерв'ю та національне опитування учнів 5-9 класів (n = 5 351).

Результати. Контент-аналіз показав, що повідомлення розбрату про бійців, внутрішньо переміщених осіб (ВПО) та регіональні розбіжності поширюються переважно через російські/проросійські акаунти. На противагу цьому повідомлення розбрату на підставі мови часто виходили з українських акаунтів. Фокус-групи визначили TikTok та Instagram як основні канали, де підлітки стикаються з такими повідомленнями. Респонденти також повідомили, що були свідками того, як поляризуючі наративи ставали приводом для булінгу в реальних ситуаціях. Згідно з результатами опитування, 60,5% учнів стикалися з

повідомленнями розбрату переважно в соціальних мережах (39%). Як показав критерій кутового перетворення Фішера, підлітки, які натрапляли на такі повідомлення, значно частіше погоджувалися з негативними стереотипами, які поширювала пропаганда (наприклад, фемп.=12,043 – для упереджень за регіоном походження, фемп.=12,998 – для упереджень, пов'язаних з мовою).

Висновки. Результати дослідження підтверджують, що пропаганда розбрату спричинює поширення упереджень, які можуть призводити до булінгу через відмінності в досвіді, пов'язаному з війною. Дослідження підкреслює необхідність розроблення та впровадження програм медіаграмотності для протидії впливу пропаганди та наголошує на ролі батьків як акторів втручання, здатних зупинити руйнівний вплив пропаганди.

Ключові слова: булінг; пропаганда; інформаційна війна; упередження.

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ADOLESCENTS, WARTIME DIVISIVE PROPAGANDA, AND BULLYING: HOW ARE THEY RELATED?

Relevance. The growing role of the information component in Russia's hybrid war against Ukraine and its use of divisive propaganda emphasize the urgent need to study its impact on adolescents, especially in the educational environment.

This article **aims** to answer the question of whether and from which channels adolescents are exposed to polarizing messages and whether such messages influence changes in school bullying.

Methods and methodology. The study consisted of three stages and aimed to assess the relationship between exposure to divisive messages and the formation of prejudices that can lead to bullying. Methods included desk research (content analysis of social media by media experts), a series of focus group interviews, and a national survey of students in grades 5-9 ($n = 5,351$).

Results. The content analysis showed that divisive messages about refugees, internally displaced persons (IDPs), and regional differences are predominantly spread through russian/pro-russian accounts. In contrast, language-based divisive messages often came from Ukrainian accounts. The focus groups identified TikTok and Instagram as the main channels adolescents are exposed to such messages. Respondents also reported that they had witnessed polarizing narratives being used as a pretext for bullying in real-life situations. The survey showed that 60.5% of students have been exposed to propaganda messages of division, primarily through social media (39%). According to Fisher's angular transformation criterion, adolescents who were exposed to such messages were significantly more likely to agree with the negative stereotypes spread by propaganda (e.g., $\phi_{emp}=12.043$ for prejudice based on region of origin, $\phi_{emp}=12.998$ for language-related prejudice).

Conclusion. The results of the study confirm that propaganda divisive messages contributes to the spread of prejudice, which can lead to bullying based on differences in war-related experiences. The study emphasizes the need for media literacy programs to counteract the influence of propaganda and the role of parents as points of intervention to stop the influence of propaganda.

Keywords: bullying; propaganda; information warfare; prejudice.

Introduction. The Russian Federation, as a successor to the Soviet Union, the Russian Empire, and the Tsardom of Moscow, has a rich tradition of using propaganda to achieve its goals. Since the beginning of Russia's full-scale invasion, Ukraine has been the particular target of Russian propaganda (Blank, 2022; Olechowski et al., 2023). If earlier the vector of Russian propaganda was aimed at imposing a certain idea or ideology, now it is increasingly aimed at polarizing society (Komar, 2022) in order to weaken its ability to withstand external threats. Russia does this, in particular, through so-called divisive messages.

Social media is the main medium for spreading divisive messages, and each audience has its own channel for receiving these messages (Zakharchenko, 2024). For example, Ukrainians living in Ukraine receive such messages mostly from Telegram. Ukrainians who have moved to Russia receive them from Odnoklassniki or Vkontakte (ibid.). Social psychologists have documented a link between the amount of consumption of stereotyped content (such as hate speech) and the degree of agreement with it (Davidio, 2010).

This article aims to answer the question of whether and from which channels adolescents are exposed to polarizing messages and whether such messages influence changes in school bullying. We hypothesize that exposure to divisive messages is related to whether or not the recipient agrees or disagrees with negative stereotypical statements about certain categories of Ukrainians. Agreeing with negative stereotypical statements may indicate the formation of prejudice.

To identify this, at our request, independent media experts conducted a preliminary analysis of social media in accordance with the research objectives to identify divisive messages that carry the most emotional charge for Ukrainians and are, at the same time, understandable to adolescents. We also conducted ten focus group interviews (n = 50 in total) and a nationally representative survey (n = 5351 after weighting) among adolescents studying in grades 5-9 in Ukraine in schools with different forms of education.

Literature review. “*Divisive messages*” is a general term used in the literature to refer to media/social media messages aimed at dividing and polarizing (e.g., Watts, 2017; Mapes et al., 2019) as part of information warfare to achieve goals beneficial to an external source, such as attacking “integrity of the nation-state itself” (Sarsfield, 2019, p. 131) or other “strategic or geopolitical objectives” (Aceves, 2019, p. 180).

Divisive messages are propaganda tools used to “disinformation, controversy manufacturing, inflaming social tensions, and keeping attention focused on divisive issues”, (Sarsfield, 2019, p. 131).

In our case, by “divisive messages”, we mean the targeted influence of Russian propaganda aimed at exacerbating existing tensions between Ukrainians or artificially creating new tensions and polarizing society during the war (*Words and Wars*, 2017; Yuskiv, 2020). Similar approaches have been used by Russia to undermine the unity of communities in other countries around the world (Geissler et al., 2023; Aceves, 2019; Sillanpää et al., 2017, and others).

As a component of hybrid warfare, these messages come from an external source and stir up debate on issues at points of social tension (Aceves, 2019). They introduce the “good us” - “bad them” divide and reinforce the natural (group-driven) bias of one group against another (Anastasio et al., 2005).

The external source intensifies the differences, highlighting them. For example, prejudice against those who fled abroad because of the war did not exist until 2022.

Such propaganda activities aimed at polarizing a society in which freedom of speech is a value of democracy have been practiced by Russia for quite some time.

The Russian troll farm organized by the Internet Research Agency (IRA) actively influenced the political sphere online to provoke conflicts between different groups of US citizens and to influence the 2016 presidential election in a certain way (Golovchenko et al, 2020). Notably, this activity was not aimed at supporting Trump (Russia’s preferred candidate) or at causing reputational damage to Hillary Clinton as a candidate who supported sanctions against Russia (Office of Public Affairs, 2018). Instead, the propaganda

simultaneously and almost equally supported Democratic and Republican voters, polarizing society (Stewart et al., 2018). Thus, the trolls' goal was not to persuade one side or the other but to spread polarizing content on information networks, probably to emphasize differences and promote division.

According to a study by Llewellyn et al. (2019), the same techniques were used in the United Kingdom before the Brexit vote. "This is consistent with known Kremlin disinformation approaches, and 'active-measures', utilizing controversial topics to escalate underlying uncertainty and to create a sense of mistrust, instability and insecurity in foreign regimes." (Llewellyn et al., 2019, p. 1162).

Another example is the #BlackLivesMatter campaign, in which Russian trolls spoke out both for and against the movement (Arif et al., 2018). The same was observed during the COVID-19 epidemic with regard to quarantine (Benson, 2020) and vaccination in general (Broniatowski et al., 2018).

Prejudice-based bullying. Messages, especially those that contain hate speech (which is what divisive messages are), can lead to prejudice between one group of youth and another (Bravo et al., 2019), which in turn often leads to bias-based bullying (Walton, 2018).

Prejudice-based bullying is "any form of bullying occurring because of one's social identities and group membership (e.g., immigrant-origin, race or ethnicity, nationality, religion, gender, sexual orientation, or disability)" (Gönültaş & Mulvey, 2021, p.e296). Refugees, returnees, IDPs, children under occupation, and others are at risk of such bullying in times of full-scale invasion. Gönültaş & Mulvey argue that since bias-based bullying is conceptually different from regular bullying, as it lies in the plane of intergroup relations and group membership, it should be studied from the perspective of group identity.

The very design of divisive messages implies the existence of a "good majority" versus a "dangerous minority" (after Oddo, 2011). Thus, the "good majority" believes that the "whole world" thinks like them, except for the "dangerous minority" that should be sanctioned (ibid.).

Our research was conducted in three stages:

In the first stage, a request was formulated to an analytical group of media experts to analyze the most popular generalized (i.e., accessible to children's understanding, without the need for political competence) topics of discord in Ukrainian social media during the first year of the full-scale invasion, according to a number of criteria.

In the second stage, a focus group study (n = 50, adolescents aged 10-14 studying in Ukrainian schools on the territory of Ukraine) was conducted to determine whether children encounter such messages in general and, if so,

through which information channels. The results of this stage provided the basis for the hypothesis of the nationwide study.

In the third stage, we conducted a representative national survey to understand whether children receive propaganda messages from what sources and whether they agree with the negative stereotypical statements of these messages. We also investigated whether the respondents witnessed bullying based on prejudices that coincide with those imposed by propaganda.

Results

Stage 1: Analysis of social media. Identification of the features of divisive messages

Method

The analysis to understand vectors of discord was conducted at our request by the media experts group. The goal was to determine how social media influences the formation, spread, and deepening of divisive lines among Ukrainian users and to analyze the most common divisive narratives.

Using the automated YouScan system, posts from the most widespread social networks in Ukraine were collected - Facebook, Instagram, YouTube, Telegram, TikTok, and others - that had the most extensive coverage and dealt with topics of discord that did not require political competence (refugees, IDPs, language issues). Topics were selected based on previous observations and publications (e.g., *CAT-UA*, 2022).

Comments and reposts were excluded; the study focused on original posts with a set geolocation for the audience as “Ukraine” or “Undefined.” Thus, accounts that write for Ukraine (including the occupied territories), identify themselves as Ukrainian, but can be Russian or pro-Russian in rhetoric could be selected.

Given the limitations of the automated monitoring system, such as difficulties in accurately formulating search queries and a low percentage of relevant messages, a specific approach to sample formation was adopted. The first 1000 messages on the specified topics with the highest coverage were coded. If there were 400 or more relevant posts containing negative messages about one or more social groups and their authors were residents of Ukraine (for users with an automatically determined geolocation based on the results of coding their profile), the sample was limited to this. If not, additional messages with decreasing reach were included in the sample for coding until the target of 400 coded messages was achieved.² The number of coded messages is separate for each topic of identified divisive messages.

² The analysis was carried out according to the method of Zakharchenko, 2022.

The manual coding of posts was conducted for the period from February 25, 2022, to December 31, 2022, with the following categories defined: which social group was targeted by the negative messages (the target of the accusation); readiness to understand the position of the other side and readiness to reconcile with it; the presence of hate speech in relation to the target of the accusation; emotion of the message (determined based on key emotionally charged words); the author's position (which was classified through an analysis of the author's profile and their statements about the ongoing war as either pro-Ukrainian or pro-Russian).

Additionally, parameters such as the author's gender and region of residence were automatically determined. To analyze the posts, we used the content analysis method, allowing us to study textual materials' content. The main purpose of this method is to identify key topics, the frequency of mentions of certain concepts, and structured semantic units. This allowed us to identify trends, repetition, and interconnections in the texts.

Results

The most popular generalized vectors of the split were "locals/IDPs (internally displaced persons)", "left Ukraine during the war/stayed", "Russian-speaking/Ukrainian-speaking", "east of Ukraine/west of Ukraine" (or "resident of a certain region of Ukraine vs. resident of another region of Ukraine"). These messages were selected from the messages that have received the most coverage since the start of the full-scale invasion on February 24, 2022. They were the most emotionally charged in social media discussions.

Users began to express their indignation at the behavior of the so-called "refugees" the very next day after the start of the full-scale invasion. Analysis of the social media space (the study covered the period from 24.02.2022 to 31.12.2022) showed that it was those who fled abroad who were most criticized (the word "refugees", although commonly used in everyday life to refer to Ukrainians who went abroad to seek temporary protection, is not entirely correct, as they do not formally have "refugee" status). Most of the divisive messages related to IDPs and "refugees" are mainly generated by pro-Russian bloggers/speakers or Russian publics or pages. As of 12/31/2022, 473 relevant analyzed hate messages targeting refugees had a reach of 141 million views. Later, Zakharchenko (2024) analyzes the top 350 hate messages against refugees and reports a reach of 290.3 million views.

Among the divisive messages is the resentment of residents of the western regions against IDPs. Negative messages include "urban legends" about the shameful deeds of IDPs, anger at their wealth, and accusations that they are not defending the country in the ranks of the Armed Forces, "not working" (it is noteworthy that accusations that IDPs are not working also appear the day after the start of the full-scale invasion). In 86% of the

messages, no understanding of the opponent is recorded. Instead, the emotions of indignation (55.5% of cases) and anger (21.1%) towards IDPs and “refugees” prevail.

As for the “Russian-speaking/Ukrainian-speaking” pair, it is impossible to call them the result of the Russian information campaign unequivocally. Most of the messages came from Ukrainian accounts. However, given the timeframe for the messages being analyzed, the situation may have changed when the article was published. The divisive messages on the language vector mostly condemn Russian-speaking people (44.5%) and consumers of Russian content (16%), as well as those who are too aggressive in promoting the Ukrainian language (15%).

Researchers also name other topics of discord (e.g., “Porokhobots”, “Chongar”, unfair access to electricity during power outages, etc.) that we do not consider in the context of the teenage environment. We consider these topics too uninteresting/difficult to understand for the age group under study (approx. 10-14 years old) and not relevant to the sphere of attention and interests of adolescents of this age.

Thus, at the following stages of the study, the generalized vectors of discord “locals/IDPs”, “east of Ukraine/west of Ukraine” (a topic that is almost inseparable from the first), “left Ukraine during the war/stayed”, “Russian-speaking/Ukrainian-speaking” was considered as the most common in the social media environment and those that would be understandable and resonate with adolescents aged 10-14. Additionally, “father does not serve in the Armed Forces” and “being under occupation” were considered.

Stage 2. Focus group study on adolescents and divisive messages

Method

At this stage of the study, the aim was to discover the sources of divisive messages and the emotions adolescents experience when they consume such messages.

To do this, we used focus group interviews. Series of 10 online focus groups (in total n=50, 27 males, 23 females) involved children and adolescents aged 10-14. The criterion for inclusion in the sample was also studying in a Ukrainian school of any form as of 2022.

No sensitive data was collected from the respondents; they were registered under pseudonyms, and their data was coded to distinguish them.

Participants were recruited through their legal representatives using the convenience sampling technique. Focus groups were held on the Zoom video conferencing platform. Parents gave written permission to the focus groups, and children gave oral consent at the beginning of the meeting after explaining the study’s features and anonymity. Consent was obtained for audio and video recording.

During the hour-long discussion, the adolescents were asked about the sources of information about the war, the degree of trust in the sources and the information itself, and ways to verify the accuracy of the information. Examples of the most popular divisive messages at the time of the discussion were also given, and it was found out whether the participants had heard such messages, where they had heard them, how they reacted, and what emotions they experienced.

Results

Most focus group participants had encountered divisive messages on the topics we suggested. These messages evoked strong emotions practically in all responders: anger, hatred, indignation, vague negative emotions ("*it was very unpleasant*"), disgust, and condemnation.

Participants noted the unfairness of such messages of discord (for example, when responding to negative comments about Russian-speaking, an IDP respondent of 10 years old explained that her family was trying very hard to speak Ukrainian, but since they had been speaking Russian all their lives,

"We fail. We keep forgetting."

Some people justify the existence of divisive narratives: "*And when I read things like this about the split of Ukraine into western and eastern parts, I rather have a negative attitude towards it. Because Ukraine is united. But now, through the positions of people and martial law, we have seen who is who. Moreover, it is not surprising that such conflicts are happening because each person has their position. People are divided into groups who support this or that opinion*" (girl, 13 years old, Lviv oblast).

The topic of prejudice and division based on language (the "Russian/Ukrainian" discord vector) is the topic that children most often encounter on the Internet.

The topic of artificially contrasting the western and eastern regions of Ukraine, as well as prejudice against representatives of these (as well as southern) regions, is quite prominent among the divisive messages being spread. Many focus group participants encountered messages of the "locals/IDPs" vector, with a variation of "Eastern Ukraine/Western Ukraine". The most common messages in this context were the following: "Western regions do not know what war is"; "Representatives of western regions rent apartments to IDPs from the east at a very high price"; and that "Easterners/IDPs support russia".

For example: "*...I heard about this, (...) that the east is fighting there, and in the west everyone is sitting around and doing nothing. Moreover, I saw a lot of not-very-good jokes about this in Tik Tok. I remember the particular one that the East [Eastern regions] was at war and the Western part of Ukraine was a whiners factory*" (girl, 13, Vinnytsia region). According to

Zakharchenko (2024), “*left the territory of Ukraine during the war/stayed*” is the line of division that propaganda puts the most effort into. However, this applies to more adults, while focus group participants rarely encountered these messages. We assume that this is because all of the participants are in Ukraine.

Nevertheless, cases of consumption of such messages are recorded.

“In TikTok, it was about the West-East [of Ukraine], about refugees, the same thing, like Russian speakers are not refugees, on the contrary.(...) That they are traitors. That they are not in Ukraine. Or even if they [some people] want to leave, it’s the same” (boy, 12 years old, Vinnytsia region). *“They wrote that they are no longer Ukrainians - those who have left Ukraine, and that is all.”* (girl, 14, Odesa region)

Focus group participants most often receive divisive messages on social media through TikTok. Unexpected sources include Discord and gaming platforms.

The focus group study also shows that prejudice transmitted through divisive messages can lead to actual actions. Adolescents describe how they have been insulted once or repeatedly on polarizing topics or have witnessed such actions. Sometimes, respondents-witnesses justify bullying or insults based on prejudice along the vectors of discord. Most often, it is about harassment/insults based on language or a dispute based on IDP status/origin from a particular region.

Stage 3. A national survey on divisive messages, prejudice based on these messages, and new pretexts for bullying

Method

The national survey was conducted from November 2023 to January 2024. It was conducted online through the Qualtrics platform among students in grades 5-9 studying in Ukraine.

The objectives of this stage were to determine whether adolescents are exposed to divisive messages and to identify their sources. The study also sought to determine the extent to which adolescents agreed with these messages and recorded evidence of bullying that would coincide with divisive propaganda.

A stratified sample was used to obtain representative data, using official statistics as of the beginning of the 2021/22 school year for students in grades 5-9 from different regions of Ukraine. In total, the survey covered 14,728 respondents aged 9 to 16 from 24 regions of Ukraine and Kyiv (excluding the temporarily occupied territories, the Autonomous Republic of Crimea and Sevastopol). Due to different responses to the survey in different regions, to ensure the representativeness of the data, the technique of “weighting” the sample population by region was used in accordance with the planned sample,

which corresponds to the structure of the minor population of Ukraine by region, gender, and age. After weighting, the sample totaled 5351 respondents.

Socio-demographic characteristics of the respondents. The survey involved 52.4% of boys and 47.6% of girls. Breakdown by grade: Grade 5 - 22.4%; Grade 6 - 20.5%; Grade 7 - 18.8%; Grade 8 - 18.9%; Grade 9 - 19.4%.

44.7% of respondents study at school in Ukraine full-time, 19.6% in a mixed form of education, 20.9% online with their class in Ukraine, 7.8% online at a distance school in Ukraine, and 6.4% combine studying abroad and distance school in Ukraine.

Procedure: After obtaining parental permission and respondents' consent to participate in the anonymous survey, respondents were offered certain generalized stereotypical statements, namely negative messages about Ukrainians from some areas of Ukraine, refugees, speakers of specific languages, etc., that are spread through divisive messages. An example of divisive message, from which stereotypical statements were extracted, is the following: "Ukrainians are drinking instead of shouting to the world about the war in Ukraine. London's Territorial Defense Forces is standing in a huge line for Drunken Cherry. I am ashamed of you" (Telegram channel 'Wonderful Kyiv,' March 2024. A video of the opening of the Ukrainian franchise of "Drunken Cherry" in London accompanied the message).

These negative statements were formulated based on the analysis of media messages from Stage 1.

Results

According to the study, 60.5% of adolescents in grades 5-9 have encountered at least one of the generalized divisive messages listed in the examples.

Level of agreement with divisive messages. 18.8% of respondents agreed that "representatives of some regions of Ukraine (for example, those who live in the west or those who come from the east or south) behave inappropriately." In comparison, 48.5% of the surveyed students disagreed with this statement, and the rest hesitated to answer this question. The vast majority of students (74.4%) disagreed with the statement that "representatives of some regions of Ukraine deserve the negative things that are said about them", 7.7% agreed, and 17.9% were undecided. 21.3% of respondents agreed with the stereotypical statement that "native speakers of a certain language (e.g., Ukrainian or Russian) have no place in Ukraine", and 19.9% agreed that "Ukrainian speakers are too aggressive in imposing their language." In comparison, every second respondent disagreed with these statements (51% and 55.4%, respectively).

The majority of students surveyed disagreed with the statement that “the bad things that are said about immigrants from other regions (south, east, west, north) are true” (62.6%).

14.7% of the surveyed students agreed with the stereotypical statement, “A true Ukrainian would not leave Ukraine during the war.” 19% of respondents agreed with the statement that “a real Ukrainian would not stay in Ukraine during the war to put their family in danger” (Table 1, Figure 1).

Table 1

Breakdown of answers to the question “Do you agree with the statement?”, %.

Negative stereotypical statement	Agree	Disagree	Hesitate to answer
1) representatives of some regions of Ukraine (for example, those who live in the west or those who come from the east or south of the country) behave inappropriately	18,8	48,5	32,7
2) representatives of some regions of Ukraine deserve the negative things that are said about them	7,7	74,4	17,9
3) speakers of a certain language (e.g., Ukrainian or Russian) have no place in Ukraine	21,3	51	27,7
4) Ukrainian speakers are too aggressive in imposing their language	19,9	55,4	24,7
5) bad things that are said about IDPs from other regions (south, east, west, north) are true	9,0	62,6	28,3
6) a true Ukrainian would not have fled Ukraine during the war	14,7	50,4	34,8
7) a true Ukrainian would not stay in Ukraine during the war and put their family in danger	19	36,8	44,2

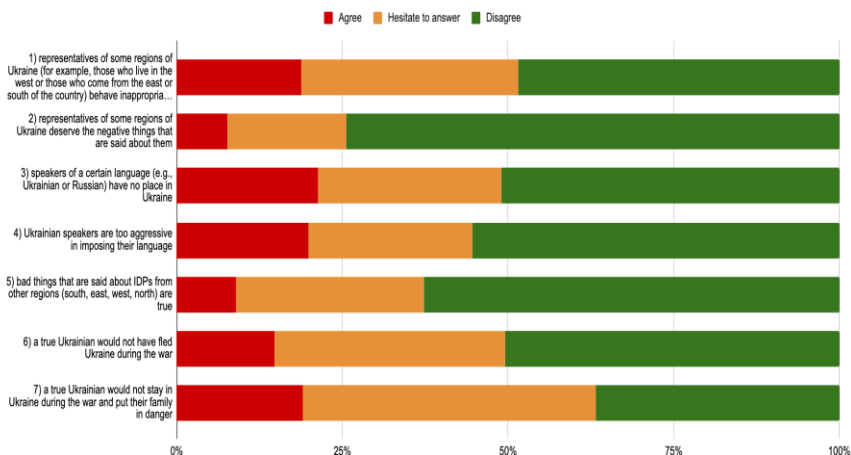


Figure 1. Breakdown of answers to the question “Do you agree with the statement?”, %

Most often, respondents agreed with the following stereotypes: “native speakers of a certain language (e.g., Ukrainian or Russian) have no place in Ukraine”, ‘Ukrainian speakers are too aggressive in imposing their language,’ ‘representatives of some regions of Ukraine behave inappropriately,’ and ‘a true Ukrainian would not stay in Ukraine during the war to put their family in danger.’

There were some differences in the distribution of responses among respondents, depending on their residence in a particular macro-region and abroad. It is worth noting that we did not intend to include the “abroad” group in the study. However, the recruited schools voluntarily recruited their affiliated students who were forced to leave Ukraine because of the war. The group “abroad” included mostly respondents from the Eastern and Southern macro-regions, which imposed regional specifics on the nature of their answers.

The Western region is significantly more likely than others to agree with the statement that “*representatives of some regions of Ukraine (e.g., those living in the West or those from the East and South) behave inappropriately*” (Narrative 1). In the statement “*speakers of a certain language (e.g., Ukrainian or Russian) have no place in Ukraine*” (Narrative 3), the Western macro-region also scores significantly higher than the other regions. “*Ukrainian speakers are too aggressive in imposing their language*” (Narrative 4) is the opposite: the scores for the macro-regions of Eastern, and Southern regions are significantly higher than those of Western and Central Ukraine. Distribution of

responses to the statement “A true Ukrainian would not leave Ukraine during the war” (Narrative 6) predictably revealed that responses from those abroad were significantly lower than those from other regions, while the opposite trend was seen for Narrative 7 (“A true Ukrainian would not remain in Ukraine and expose their family to danger during the war”), where responses from those abroad were significantly higher compared to other regions (Table 2, Figure 2).

Table 2

Breakdown of affirmative answers to the question “Do you agree with the statement?”, by macro-regions

	Abroad	Western	Central	Kyiv	Northern	Eastern	Southern
1) Representatives of some regions of Ukraine (for example, those who live in the west or those who come from the east or south of the country) behave inappropriately (Narrative 1)	18,2	22,8	18,7	4,2	13,9	16,1	17,1
2) Representatives of some regions of Ukraine deserve the negative things that are said about them (Narrative 2)	6,1	9,3	7,6	6,5	6,6	6,4	7,2
3) Speakers of a certain language (e.g., Ukrainian or Russian) have no place in Ukraine (Narrative 3)	8,3	33,8	22,3	6,2	22,8	12,8	12,9
4) Ukrainian speakers are too aggressive in imposing their language (Narrative 4)	27,7	14,8	15,4	9,4	17,8	21,9	23,1
5) Bad things that are said about IDPs from other regions (south, east, west, north) are true (Narrative 5)	11,2	10,7	8,4	6,5	5,2	8,0	9,2
6) A true Ukrainian would not have fled Ukraine during the war (Narrative 6)	3,4	14,9	17,8	11,3	17,5	15,1	14,5
7) A true Ukrainian would not stay in Ukraine during the war and put their family in danger (Narrative 7)	27,6	18,3	17,9	13,0	17,8	15,9	18,7

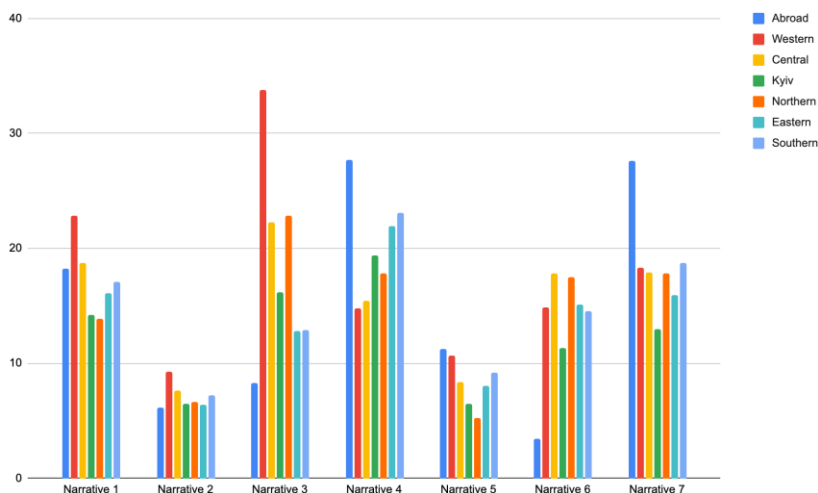


Figure 2. Breakdown of affirmative answers to the question “Do you agree with the statement?”, by macro-regions, % of those living in a particular region

It is noteworthy that we record a connection between whether adolescents have encountered divisive messages and whether they agree with stereotypical statements spread by propaganda (Table 3).

To analyze the distributions of nominal ratings (“agree” with a particular stereotypical statement) in the two conditional groups of respondents who *had heard* or *hadn’t heard* divisive messages, we chose the Fisher’s Angle Transformation Criterion (ϕ^*). This approach allows us to determine the significance of the difference in the proportion of respondents who agree with the stereotypical statement (i.e., the presence of an effect) in the two groups. Initially, the scale of answers was three-part (“agree”, “disagree”, and “hesitate to answer”), but for the analysis, we focused on the open agreement since the category “agree” directly reflects the level of acceptance of the stereotypical statement. It makes it the most relevant and clearly related to the purpose of the study, unlike other categories that may have a greater variety of motivations or interpretations. Therefore, the “effect” in our study was defined as the respondents’ “agreement” with the statement.

Table 3

Comparison of indicators of “agreement” with statements among those who had heard and hadn’t heard these statements, according to the Fisher’s angular transformation criterion (φ^*)

Statements (narratives)	There is an effect (had heard and agree), %.	There is an effect (hadn’t heard and agree), %.	φ^*_{emp}
1) Representatives of some regions of Ukraine (for example, those who live in the west or those who come from the east or south of the country) behave inappropriately	22,9	10,8	12,043
2) Representatives of some regions of Ukraine deserve the negative things that are said about them	9,5	4,2	7,853
3) Speakers of a certain language (e.g., Ukrainian or Russian) have no place in Ukraine	22,6	17,4	4,667
4) Ukrainian speakers are too aggressive in imposing their language	24,4	11,1	12,988
5) Bad things that are said about IDPs from other regions (south, east, west, north) are true	10,9	5,4	7,504
6) A true Ukrainian would not have fled Ukraine during the war	16,0	11,5	4,903
7) A true Ukrainian would not stay in Ukraine during the war and put their family in danger	20,8	14,6	5,775

Thus, across all stereotypes, those who have heard divisive messages are significantly more likely to agree with the statement of these stereotypes.

Channels of receiving divisive messages. The surveyed adolescents encountered the above stereotypical statements most often on social networks such as TikTok or Instagram (39.0%) and less often in messengers (Viber, Telegram, WhatsApp, etc.). 14.8% of surveyed students met them on the Internet while searching for information, 14.2% on YouTube, 14.1% in chats,

forums, and online communities, and 7.2% in online game chats. 38.3% of respondents have not encountered such messages.

Adolescents seek clarification from people in their immediate social environment. Almost every second student surveyed said that when hearing something they did not agree with internally or needed clarification on (for example, that “all refugees of the Russian-Ukrainian war are traitors”), they usually asked their parents or guardians for clarification (50.2%), 13.5% relatives, 9.6% teachers, and 10.1% friends. 16.3% of respondents said that they searched for information on the Internet on their own.

One in three respondents did not ask anyone or check the information when they heard something they did not agree with internally or needed to clarify (34.5%).

Pretexts for bullying that coincide with divisive messages. 36.2% of surveyed students said they had witnessed Russian-speaking being used as a pretext for bullying, 34.1% - Ukrainian-speaking. 20.6% had witnessed fleeing to Europe or America because of the war, and 18.0% had witnessed being from a particular region of Ukraine being used as a reason for bullying. In addition, 18.7% of surveyed students said they had witnessed “father not serving or not serving in the Armed Forces”, and 10.8% had witnessed “being under occupation” as pretexts for bullying. (Fig. 3).

Have you ever witnessed any of the following being used as a pretext for bullying (calling someone names, reproaching them, accusing them)?

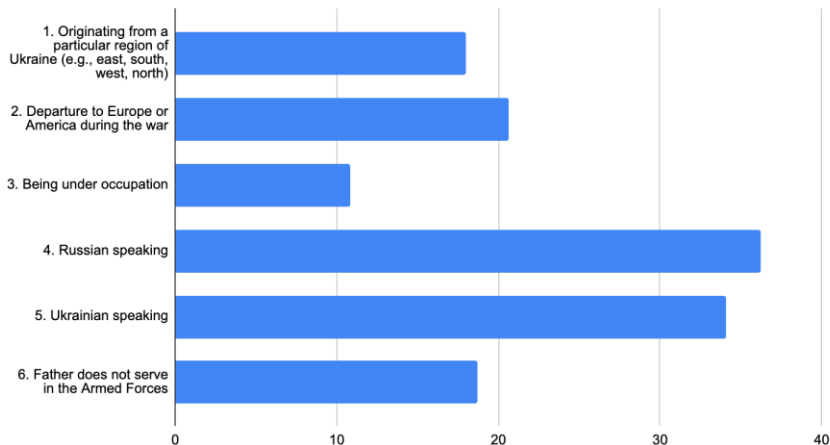


Figure 3. Breakdown of answers to the question “Have you ever witnessed any of the following being used as a reason for bullying (someone being called names, reproached, accused)? This can be about you, your friends, or just strangers” (only ‘yes’ answers are shown in the figure), %.

Note: The respondent could choose several answers, so the sum of answers does not equal 100%.

General Discussion

According to the results of the study, we see that adolescents, like adults, not only face polarizing narratives online and offline but also witness (or even participate in) bullying, the pretexts for which coincide with the topics of divisive messages.

It is important to understand this because not only adults but also school students are exposed to the effects of information warfare.

Our task is to understand how divisive propaganda penetrates the adolescents' environment and whether it affects educational institutions.

Divisive propaganda uses ideological influences to polarize society. It uses online tools to form separate groups of like-minded people who are biased against each other (Bissell & Parrott, 2013). These groups, acting within the media space, consist of real people and trolls whose task is to reinforce the beliefs of real users and disperse polarizing topics (Simchon et al., 2022). Divisive messages and the spread of prejudice become their tool.

Prolonged exposure of users to such narratives leads to desensitization, and similar messages with hate speech against the outgroup become routine and do not cause such outrage as at the first exposure (Buturoiu & Corbu, 2020). Even passive exposure to hate speech and divisive messages affects recipients, regardless of their initial views (Soral et al., 2017). Self-report studies have shown a significant relationship between the amount of stereotyped content consumed by respondents and the formation of prejudice against the social groups about which negative stereotypes were spread (Dovidio, 2010).

The division of people into groups already serves as a basis for the formation of intergroup prejudice, and not necessarily through hostility to the outer group: ingroup favoritism plays a role first (Gaertner et al., 1993). However, under the pressure of propaganda that highlights or suggests negative features of the outgroup and emphasizes the confrontation between "us" and "them", hostility toward the outgroup is formed (Perdue et al., 1990).

According to Oddo (2011), under the influence of polarizing propaganda, society is divided through legitimization through values and demarcation of group membership. In the first case, the polarizing tactic is to distinguish between what are values for "us" (i.e., the perceived "good") and "them" (i.e., the perceived "bad"). Those who share certain values belong to the "we are the world" or "good majority" group (according to Oddo, 2011, p. 303-304), as opposed to the outgroup, which is the embodiment of a "dangerous minority" and must be punished. As can be seen from the results of the study, for the western macro-region, the "good majority" (Ukrainian-

speaking, local) is opposed to the “dangerous minority” (Russian-speaking, IDPs); for adolescents who come from/study in the east and south, the “good majority” is Russian-speaking, those who have seen the war, as opposed to the “dangerous minority” that “imposes the Ukrainian language too aggressively” and does not know what war is. Almost any topic of discord can be divided into two poles, depending on the region and the war experience.

Thus, we can assume that adolescents, consuming messages of discord and eventually losing sensitivity to the broadcast hate speech, feel increasingly belonging to a group with certain views on a polarizing issue/a specific common fate/experience of war. Even if real-life practices or the so-called descriptive norm (how the majority of the group behaves, Perkins, 2003) in the school environment differs from what is broadcast online about the outgroup, the intensity of the divisive messages creates a false perception that this is the norm for the ingroup (Prentice & Miller, 1993; Reid & Aiken, 2013). It seems to the user that most group members think and behave in a certain way. Over time, adolescents may adjust their behavior to the “false norm”; thus, the false norm becomes a descriptive norm (ibid.). If an adolescent feels a strong sense of group belonging, then the subjective norm (the way people who are important to the adolescent behave) also comes into play, which, along with the descriptive norm, forms behavioral intentions (Fishbein & Ajzen, 1975; Park et al, 2009).

Intention is one of the key concepts of Ajzen’s theory of planned behavior (Ajzen, 2019). It is a predictor of behavior and a motivator for its implementation (Armitage & Conner, 1999). Intention is based on subjective norms and attitudes, namely behavioral beliefs (*I will practice the behavior that is beneficial to me*), normative beliefs (*I will do what is the norm for my group*), and control beliefs (*I can control it*; Arafat & Mohamed Ibrahim, 2018).

People who hold a clear stance on a particular issue consume information from different streams than those who are undecided or hold mixed views (Mitchell et al., 2014). These streams are more closed, resembling circles of like-minded individuals, where alternative opinions rarely penetrate. Therefore, the whole world seems to think this way (“we are the world”). This belief is reinforced by the effects of pluralistic ignorance (a shared misconception of how others think or behave, Sparkman et al., 2022) and false consensus effect (the tendency to overestimate the extent to which other people share a subject’s views, opinions, beliefs, or behaviors, Krueger & Clement, 1994).

Thus, under the influence of ideological (divisive propaganda) and social (explicit and implicit messages transmitted by the ingroup) influences (Bissell & Parrott, 2013), adolescents tend to form prejudiced perceptions of

the outgroup. These biases are at the heart of prejudice-based bullying. In different local environments, due to migration processes and different war experiences, situational minority groups are formed in wartime. These groups, being targets of propaganda, become objects of prejudice and intergroup conflict because members of the majority group do not know and understand the experiences of others than their own. It is interesting that, unlike minority groups in peacetime, when vulnerable categories are predetermined (representatives of sexual, racial, ethnic minorities, etc.), in times of war, these vulnerable minorities change depending on the environment and the region's/individual's experience of war. For example, Russian-speaking IDPs are minorities in western Ukraine, Ukrainian-speaking IDPs are minorities in Kyiv and the Southern/Eastern regions, etc. Although bullying on some grounds was also observed in peacetime, we assume that due to artificial polarization and forced migration processes, the situation with the opposition between majority and minority groups has intensified. We have observed bullying on these grounds since February 22, 2024 (Figure 3).

Moreover, since the outbreak of the war, Ukrainians have been experiencing a rise in their national and ethnic identity, and, according to Pfeifer et al (2007), in the early stages of the formation of such identity, an increase in intergroup bias is recorded (especially against those who are not considered “real Ukrainians” due to prejudice). According to a survey conducted by the Rating Group (*Sotsiologichne doslidzhennya do Dnya Nezalezhnosti...*, 2023), 45% of respondents consider speaking Ukrainian a sign of patriotism, and 33% consider staying in Ukraine during the war to be a sign of patriotism. Thus, those categories of adolescents who do not meet these criteria (and, at the same time, are often IDPs) are considered a “dangerous minority” that is the opposite of the “good majority” to which children feel they belong based on patriotism.

At the same time, it is encouraging to see adolescents' willingness to discuss with adults information from hate messages that are confusing or provoke strong emotions. Both focus group and survey participants are primarily ready to ask their parents for an explanation (50.2% of all respondents of Stage 3). To a much lesser extent (9.6%) - to teachers. Thus, parents become the point of intervention through which the influence of propaganda divisive messages can be stopped. Similarly, the results of both stages of the study show that a certain percentage of children are ready to deal with the issue on their own. Accordingly, practitioners should conduct classes on information hygiene and media literacy among middle school children.

Conclusions

Adolescents encounter and experience emotions about the wartime messages of discord available to them: the “locals/IDPs”, “left Ukraine during

the war/stayed”, “Russian-speaking/Ukrainian-speaking”, “eastern Ukraine/western Ukraine (or ‘resident of a certain region of Ukraine vs. resident of another region of Ukraine’) division lines. Both Stage 2 and Stage 3 identify the topic of Ukrainian/Russian language as the main polarizing issue. It is the most frequently reported topic for adolescents to encounter hate messages and witness harassment on this basis, almost equally about both Russian and Ukrainian. Another hot topic is the issue of locals/IDPs (and the opposition of different regions of Ukraine as a variation of it).

We record the existence of bullying, the pretexts for which coincide with propaganda messages of discord. While we cannot yet draw a direct link between propaganda, prejudice, and bullying, our theoretical model suggests a way in which propaganda may influence changes in bullying during the Russia-Ukraine war.

To confirm whether polarizing propaganda impacts bullying, another nationwide study using the same methodology as the first is planned for the end of 2024. This provides a path forward for further research.

Authors’ Contributions

Melnychenko A. A.: Study design; questionnaire creation; coordination of participant recruitment; conducting the survey and focus groups; proposing correlation interpretations; explaining anomalies; drafting the main text of the article; verifying some of the calculations.

Tilikina N. V.: Sampling design; selection of calculation methods; data analysis; anomaly identification; correlation verification; writing the section of the article related to sociological calculations.

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Ethics

Stage 3 was approved by the Institutional Review Board of Princeton University (IRB# 15642).

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