



Enhancing Resilience Against War-Related Disinformation: Insights from Diagnostic Studies and Interventions at Polish Schools

Katarzyna MOLEK-KOZAKOWSKA

Lucian Blaga University of Sibiu, University of Opole

Corresponding author emails: molekk@uni.opole.pl

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Abstract: This paper reports on design and results of implementation of a series of diagnostic studies and interventions devoted to building up resilience against disinformation regarding the Russian-Ukrainian conflict, with a special focus on Polish teenagers. The initiative, called DisInfoResist, was conducted in the spring of 2024, and was motivated by the need to engage in co-creation with partner schools in order to propose a series of tailored actions given the ongoing hybrid war. However, adequate resilience-enhancing interventions can only be based on a thorough diagnosis of needs and competence gaps. Such diagnosis was undertaken in DisInfoResist with localized data collected through thematic analysis of 20 oral histories, 2 focus group sessions and 87 narrative auto-ethnographies. The subsequent piloted interventions addressed to a group of Polish secondary school students represented a way to boost their resilience against war-related disinformation by allowing them to practice their critical media literacy competences via a variety of specifically tailored activities related to critical language awareness, responding to fake news, overcoming disengagement, recognizing sensationalist media practices and algorithmic patterns.

Keywords: Russian-Ukrainian war, disinformation, DisInfoResist, diagnostic studies, critical language awareness.

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1. Introduction

In early spring 2024, a community outreach research-based initiative called DisInfoResist coordinated academically by the author and with the active contribution from seven MA/PhD students and two school teachers was approved at University of Opole, Poland. Its main aim was to co-create ways to develop or enhance resilient responses against disinformation in a cohort of Polish teenagers. The project was to deepen the ongoing work within CORECON—a research project on the coverage and reception of Russian-Ukrainian conflict in the media—with a resilience-oriented insights and intervention scenarios. In particular, DisInfoResist initiators planned to empower young people to consume news in a competent manner, for example by being able to successfully spot and identify fake news about the Russian-Ukrainian conflict and develop a capacity of remaining alert to possible war-related manipulations.

The initiative was informed by a literature review on most recent media literacy interventions devoted

to false news and language awareness studies,¹ on the history of presentations of Russian-Ukrainian relations before and after the invasion,² and on the high levels of distress and anxiety resulting from media exposure to Ukraine war coverage in Poland.³ It is claimed that while avoiding or minimizing one's exposure to war-related information might lessen the stressful stimulus, this "protective approach" is not conducive to developing resilience.⁴ In fact, it is proposed here that allowing young people to work with war-related content in an environment that helps to raise awareness of media practices, mobilize the available social resources, and develop new competences to engage with alienating narratives would offer a better prospect for resilience.

This article reports on how the diagnostic actions undertaken in DisInfoResist yielded a host of preliminary observations about typical teenage media usage patterns regarding war-related content, retention of salient war imagery and information, awareness of journalistic practices in conflict coverage, techniques of coping with unverified information and self-monitoring of emotions and attitudes developed as a result of exposure to conflict coverage. While diverse, these observations led to systematized insights that could be transferred into scenarios for specific interventions, some of which (workshops, games, multimodal presentations) were tested at a partner school. The advantage of this approach was to reach out to various groups of pupils, not only those interested in politics and the media. Given the unequal level of teenagers' media literacy, the project thus sought to equip a larger cohort of young people with language awareness, analytic skills and knowledge of media practices to help resist the spreading disinformation.

2. Defining resilience and disinformation: Aims of the project

Resilience is understood here as the capacity to cope with uncertainty and anxiety (stress) related to media exposure (stressor) under traumatic (war) or confusing (disinformation) circumstances, especially by developing adaptive pathways to bounce back to wellbeing, be they cognitive, emotional or behavioral.⁵ Personal psychological resilience is not a stable personality trait, but depends, among others, on the types and strength of the stressor as well as on the previously developed adaptation strategies and skills. This approach to resilience is further operationalized in recent models of psychological immunity and elasticity⁶ that explain how some individuals are able to deal with difficult or even traumatic experiences. For the purposes of this project, it is sufficient to highlight that a resilient person will be able to demonstrate a "tolerance" of the stressor—here, the prolonged interaction with misleading and alienating war coverage. This also implies that they will not be responding defensively or avoiding situations causing the stress, as withdrawal is not conducive to resilience

Apart from confronting the situation, a resilient person will also be able to make sense of the stressful

1. See A. Guess, "A Digital Media Literacy Intervention Increases Discernment Between Mainstream and False News in the United States and India," *Proceedings of the National Academy of Sciences* 117, no. 27 (2020): 15536–15545; I. de Andrade Gama and W. Mozgin, "Media Literacy and Its Role in Countering Hybrid Warfare (The Case of Ukraine)," *Future Human Image* 15 (2021): 4–13, <https://doi.org/10.29202/fhi/15/1>; N. M. Tymoshchuk, "Euphemisms in Modern Political Discourse: Joseph Biden's Speeches in the War in Ukraine," *Alfred Nobel University Journal of Philology* 26, no. 2 (2023): 210–224, <https://doi.org/10.32342/2523-4463-2023-2-26/2-13> as examples.

2. See O. Pavlova et al., "The War Between Ukraine and Russia as a Historical and Civilizational Aspect," *Trames* 27, no. 4 (2023): 327–349. <https://doi.org/10.3176/tr.2023.4.01>; S. Kot et al., "The Discursive Power of Digital Popular Art During the Russo-Ukrainian War: Re/shaping Visual Narratives," *Arts* 13, no. 1 (2024): 38. <https://doi.org/10.3390/arts13010038>.

3. See W. P. Malecki, H. Bilandzic, and P. Sorokowski, "Media Experiences During the Ukraine War and Their Relationships with Distress, Anxiety and Resilience," *Journal of Psychiatric Research* 165 (2023): 273–281.

4. See R. C. IJntema, W. B. Schaufeli, and Y. D. Burger, "Resilience Mechanisms at Work: The Psychological Immunity-Psychological Elasticity (PI-PE) Model of Psychological Resilience," *Current Psychology* 42 (2023): 4719–4731, <https://doi.org/10.1007/s12144-021-01813-5>.

5. Malecki et al., "Media experiences during the Ukraine war", 273–281.

6. See M. Rutter, "Resilience as a Dynamic Concept," *Development and Psychopathology* 24, no. 2 (2012): 335–344; D. Fletcher and M. Sarkar, "Mental Fortitude Training: An Evidence-Based Approach to Developing Psychological Resilience for Sustained Success," *Journal of Sport Psychology in Action* 7, no. 3 (2016): 135–157; IJantema et al., "Resilience Mechanisms at Work," 4719–4731.



interaction and come to terms with it by creating certain (self-)narratives.⁷ As noted by IJantema et al.,⁸ resilience-oriented narrative construction of the stressful experience is highly personalized and may include incorporating the experience into existing narratives (assimilation) or creating new narratives (accommodation), which represent the self in “constructive” ways in the world. This includes, for example, retaining the sense of benevolence and meaningfulness of the world, or regaining the feeling of self-worthiness. So, if the aim of the intervention is to mobilize one’s constructive responses, both the environmental context and the personal factors must be optimized towards resilience. If successful, an intervention can yield such adaptive outcomes as sustainability (enduring the stressor), recovery (bouncing back to pre-stressor conditions), transformation (changed functioning through narrative reconstruction), or growth (optimization of functioning).⁹ In DisInfoResist’s context, an intervention could lead young people to endure war coverage without excessive anxiety, be able to control their own consumption of the media, know how to seek or evaluate credible information, and learn how to feel safer and less prone to media manipulation.

While collective psychological resilience translates into social resilience (the more individuals are resilient, the more resilient the community), social resilience also depends on environmental context, particularly on the risks and resources that affect adaptation. Broadly conceived, the contextual resources for resilience include (1) the access to quality information and knowledge, (2) the opportunity to acquire skills and competences that enable adapting to changes, (3) community networks that provide support, (4) sustainable livelihood and stable connections to place, as well as (5) access to facilities and infrastructures, (6) economic innovativeness and engaged governance.¹⁰ The first two—information/knowledge and skills/competences—were in the focus of DisInfoResist project, which explored tailored ways to educate the youth to develop competences and protocols to deal with misleading, confusing and stress-inducing war-related content disseminated in various mediated formats.

Hence, to operationalize the issue of resources for resilience against disinformation better, the concepts related to misinformation, disinformation and fake news in the context of the hybrid war should be revisited. The umbrella term of “fake news” encompasses any false information, from unintended misrepresentation to deliberate deception,¹¹ which may be spread for the sake of certain financial or political benefits, with the intent of manipulating larger numbers of people into believing something that is not the case.¹² To make matters worse, fake content often takes the form of journalistic genres and styles in order to appear as credible. It is also spread digitally via strategic use of social networking platforms to achieve higher visibility.¹³ While this study does not concern the characteristics of texts that contain fake news, it traces how skillful (young) people are in resisting them in general and then it offers examples of designing interventions that enhance these skills with respect to common false narratives identified by VoxUkraine.

Misinformation is a type of information that, even though not false, is likely to produce incomplete or wrong cognitive schemas or images of social reality in the minds of its target audience, who could then use it to take decisions that are against their best interests. In this vein, misinformation (as well as disinformation) may also refer to the way of providing information that is driven by a manipulative motivation of the communication.¹⁴ In contrast, disinformation refers to deliberate lies or distortions

7. See T. D. Wilson, *Redirect: The Surprising New Science of Psychological Change* (New York: Back Bay Books, 2011).

8. IJantema et al., “Resilience Mechanisms at Work,” 4722–4723.

9. See R. A. Neimeyer, “Re-Storying Loss: Fostering Growth in the Post-Traumatic Narrative,” in *Handbook of Posttraumatic Growth: Research and Practice*, ed. L. G. Calhoun and R. G. Tedeschi (Lawrence Erlbaum Associates, 2006), 68–80.

10. See K. Maclean, M. Cuthill, and H. Ross, “Six Attributes of Social Resilience,” *Journal of Environmental Planning and Management* 57, no. 1 (2014): 144–156.

11. See G. Di Domenico et al., “Fake News, Social Media and Marketing: A Systematic Review,” *Journal of Business Research* 124 (2021): 329–341, <http://dx.doi.org/10.1016/j.jbusres.2020.11.037>.

12. See X. Zhang and A. A. Ghorbani, “An Overview of Online Fake News: Characterization, Detection, and Discussion,” *Information Processing and Management* 57, no. 2 (2020): 102025; G. Pennycook and D. G. Rand, “The Psychology of Fake News,” *Trends in Cognitive Sciences* 25, no. 5 (2021): 388–402.

13. See Simina Maria Terian, “What Is Fake News: A New Definition,” *Transilvania*, no. 11-12 (2021): 112–120. <https://doi.org/10.51391/trva.2021.11-12.17>.

14. See T. Van Dijk, “Discourse and Manipulation,” *Discourse and Society* 17, no. 3 (2006): 359–383.

that may be disseminated as news or other types of content.¹⁵ It has long been recognized that disinformation campaigns are well-planned efforts to propagate false and harmful information on a mass scale by entities that are not always apparent.¹⁶

The design of DisInfoResist initiative was based on the understanding that a thorough mapping and assessment of current levels of media literacy regarding teenagers' awareness of disinformation would allow to collect concrete observations, good practices and preliminary insights. On this basis, workshop scenarios and pilot interventions could be tailored and piloted to address specific needs and competence gaps, regarding, among others, critical language awareness, responding to fake news, overcoming disengagement, countering some media corporate practices and algorithmic patterns.

3. Design of the diagnostic studies and interventions

As a reliable diagnosis of the current or baseline situation is a precondition for any successful recommendation toolkit or remedial intervention, the preparatory step in the DisInfoResist project was to find out as much as possible about what young Poles know about the Russian-Ukrainian war and if any of this information is false, where they get that information from, and how they form their opinions and judgments about the conflict participants. This could be done by asking young people to provide specific insights through oral histories (section 3.1.), to participate in issue-related focus groups (section 3.2.), or share narrative auto-ethnographies (section 3.3.) for more specific mappings of knowledge and competence gaps, awareness-raising needs and emotional or attitudinal dispositions.

3.1. Collecting oral histories to map evolving patterns in the reception of war coverage

Oral history is a qualitative method where researchers ask people about their memories of past behaviors or actions or past beliefs or attitudes.¹⁷ While oral histories tend to be subjective and determined by the material and social circumstances of the persons who deliver their reflective accounts, they may also shed new light on historical events and bring multiple perspectives into public discourse, in a way akin to interview-based journalism.¹⁸ Here, oral histories can expand the baseline of the researchers' understanding of war-related media consumption patterns, specific reactions to war developments and ways of feeling and acting that have been discontinued or have been evolving due to new technological advancements or social situations.

In the context of the reception of Ukraine war narratives in Poland, it is important to track the memory and knowledge accumulation, attitudes and dispositions that are evolving as a result of over two years of media presentations of the conflict, as well as the personalized characteristics of resilient media use. In this part of the analysis, for ethical reasons, only adult participants were admitted, as detailed interviews about memories of war footage and being a victim of disinformation campaigns might expose minors to the risk of compromising the emotional and mental wellbeing.¹⁹ As a result, for the diagnostic purposes of this project, four areas of memories were identified and each was operationalized through two personal questions to be asked of interviewees:

Memory of initial situation: (1) How did you learn about the war breaking out? (2) What was the dominant terminology or sentiment used by news media at the beginning of the war?

Memory of personal reaction to initial situation: (3) Did you change your routine media consumption patterns in the first few days and weeks of the war? (4) Did you start following or did you abandon any media outlets due to pursuit of war-related information?

Memory of exposure to disinformation: (5) Was any information you had learnt about the war discredited as false, can you give an example? (6) Are you aware of any false information that was disseminated in the early stages of the war?

Memory of habituated or cumulative exposure: (7) Have you ever been in a situation where you withdrew from consuming media because of feelings of alienation? (8) How and how often do you

15. See W. L. Bennett and S. Livingston, eds., *The Disinformation Age* (Cambridge: Cambridge University Press, 2020).

16. See P. Herson, "Disinformation and Misinformation Through the Internet: Findings of an Exploratory Study," *Government Information Quarterly* 12, no. 2 (1995): 133–139, [https://doi.org/10.1016/0740-624X\(95\)90052-7](https://doi.org/10.1016/0740-624X(95)90052-7).

17. See P. Leavy, *Oral History: Understanding Qualitative Research* (Oxford: Oxford University Press, 2011); J. Stokes, *How to Do Media and Cultural Studies* (Sage Publications, 2012).

18. See M. Feldstein, "Kissing Cousins: Journalism and Oral history," *Oral History Review* 31, no. 1 (2004): 1–22.

19. Leavy, *Oral History*.



tend to get the news about war now as opposed to early stages?

The oral histories were collected throughout mid-March and mid-April 2024, almost exactly two years after the full scale invasion of Ukraine by Russia. The interviewers were 6 MA students of English language and communication major at University of Opole taking their academic research course. The 8 questions (above) were translated into Polish/Ukrainian, as the interviews were to be conducted in the native language of the interviewees and the replies were recorded or noted down (basing on informed consent arrangements). The material obtained from interviewees was then transcribed, processed and translated into English by students using manual literal translation techniques. The MA students represented advanced/proficient level of English (C1-C2) and the transcription was double-checked by the supervisor-author to ensure the content and sentiment were conveyed faithfully. Within one month, 20 oral histories were elicited from 18 Poles and 2 Ukrainians settled in Opole (unacquainted with one another), using convenient sampling based on availability (gender: male—9, female—11). Given the exploratory nature of this diagnostic action, MA students reached mainly young adults (11: in their 20s—9, 30s—2), or older adults who were parents or grandparents to teenagers (9: in their 40s—4, 50s—5).

The overview of the collected insights from oral histories presented below has been co-created by 6 students (interviewers) and the author through close reading of translated transcriptions individually and then collectively in class. A synthetic overview of memory presented below was obtained through induction basing on (1) frequency of mentions of certain aspects, (2) semantic overlaps in variously worded accounts, and (3) the quality of vivid details shared by interviewees. Because of the qualitative nature of oral histories, unique personal memories are included, provided they are representative of self-reflection. Obviously, the exploratory nature of this small-scale diagnostic activity prevents DisInfoResist from generalizing the insights to the whole population but has proved to be useful for follow-up activities.

Memory of initial situation: Most people interviewed have had a relatively vivid memory of the way they learnt the war broke out on 24th Feb 2022. Approximately half were informed by family or friends, another half through a phone notification, from the internet, or received the news about the invasion while watching news on TV or from the radio. The Ukraine war coverage in Poland was ubiquitous, so even people who do not have a habit of following news were aware of the invasion. Participants tend to remember reading flashy and aggressive headlines, as well as seeing televised imagery of destroyed property including ruined civilian buildings. They also have vivid memories of seeing images of Ukrainian refugees in overcrowded trains or at border crossings. Most interviewees report a very negative sentiment that dominated the coverage, especially outrage, anger and fear, expressed with terms: “tragedy”, “war”, “invasion”, “attack”, “crisis”. A strong condemnation of Russia and solidarity with Ukraine prevailed, and new military terminology was introduced to media discourse. Some participants recall the invasion being represented as some kind of historic watershed—a new era in Europe, and the economic prospects reduced from bad to worse. Some younger participants admit to anxiety (using such words as “stress”, “panic”) and wondering who else would be attacked. The negativity was more marked in online portals, where the sense of outrage against Russia was laced with pity on Ukrainians as a nation and a people. Some social media users applied profile modifications and used flag colors to express solidarity.

Memory of personal reaction to initial situation: According to most interviewees, it was impossible for them to avoid the intense coverage. Those who had previously consumed much media content reported receiving an increased frequency of updates, and spending more time surfing more channels. However, also those who were not usually interested in news and opinion started reaching out for more news, or consulted a preferred credible source (a news bulletin on TV, a subscribed media channel). They also remember some online spaces that started ridiculing Russia and ultimately also Russians. Social media consumption dominated for younger segment of the participants and day or evening television news for older or working people. Within a few weeks, younger people reported signs of fatigue or anxiety, and the need to reduce the amount of time spent online, mute alerts, unsubscribe from content. Yet, with the war entering another year, there was a growing desensitization to war coverage, the habit of “scrolling over” the war news. A quarter of respondents did not report much change in their media consumption routines at all.

Memory of exposure to disinformation: Information overload was reported by some participants. Initially, there was an awareness of sensationalism, profit motive in reporting, and the possibility of spreading misinformation. Many interviewees reported their reliance on trusted media channels or

joining new online groups to get very specific content (e.g., on military technology, help for refugees). While most individuals were aware of propagandas released on both sides, there was no urgent need for fact-checking, although some added the word “regrettably” or “unfortunately” when they looked back on the early days. Others just increased the number of outlets they consulted (especially when in doubt) to make sure they have access to a variety of perspectives. Some report talking with other people and comparing if what they know overlaps with what others are aware of. This indicates that a few people are aware of informational bubbles and of algorithms leading them to more of the same information and diminishing the diversity of news they get. Some interviewees report an awareness of Russian propagandas and being exposed to war euphemisms (e.g., “special operation”). They know that there is a “Russian side of the story” about self-defense, which they do not believe in or approve of. Approximately half have a memory of being informed about something about the attacks, military technology and seizure of territory, or political developments that was later disconfirmed. There is a near universal acknowledgement of Russia’s blame for disinformation tactics and some individuals report still consuming content that continues to expose the false information that is circulated to discredit Ukraine. At the same time, no mentions were made on propaganda actions undertaken by Ukraine, which is an indication that people tend to attribute disinformation only to the opposing side.

Memory of habituated or cumulative exposure: While a small group of interviewees report taking short breaks from media so as not to feel anxious, most insist that it is very important to follow the coverage, and that it would be wrong (ignorant, weak) not to. There is an understanding that the less one knows the easier it is to manipulate them and the more susceptible one is to fake news. In the longer perspective, few people report significant changes to their media consumption routines (except for attending to a few more channels, and having higher frequency of updates and conversations). Some interviewees admit that they have more awareness of misinformation now and the mental and emotional investments are mostly back to normal after two years. Most people can also see that some political actors use the ongoing war for political benefit (electoral politics, economic pressure).

In summary, the overview of the material collected via oral histories, even though it is hardly representative of the whole adult population, is useful as a diagnostic tool to trace what aspects of media reception of war are brought to the conversation by ordinary media users. While dealing with personal experiences at the ethnographic level, these oral histories allowed to spotlight the larger issues that can be worked on in the context of resilience. These issues correspond to the four areas of memory mapped above: (1) the tension between credible war reporting and media’s preoccupation with sensational and negative coverage; (2) the role of self-monitoring of emotional reactions and media-generated effects from panic to desensitization; (3) the forging of critical skills of fact-checking and consulting multiple sources, especially in the algorithm-driven environment of social media platforms, (4) the understanding of the nature of hybrid wars with the continuous attempts at misrepresentation and disinformation.

3.2. Focus groups to identify youths’ awareness of sensational misrepresentation

Given the articulations of tension between legitimate and proportional war coverage and sensationalist coverage in the course of analyzing oral memories, subsequently two large focus groups were organized around the topic of clickbait headlines and media sensationalism.²⁰ Some adult oral history interviewees mentioned that they refrained from following war coverage because they had a sense of the war reporting not presenting it objectively and proportionally, but politicizing it and stirring up panic, sense of threat and feelings of fear and uncertainty. The notion of sensationalist misrepresentation is related to disinformation as well as to emotional and cognitive resilience.²¹ As a result it was offered as a relatively self-contained issue that could be addressed with teenagers from partner schools.

In the course of co-creation with the teachers, the two larger focus groups of 15 and 17 persons each, lasting for about 20 minutes each, were organized in early June 2024. Polish secondary school pupils from the partner school (aged 15-16) were asked to collectively explore the broad question “why click?”. This relatively open issue was then refined allow them to reflect on various aspects determining what kinds of news and mediated information tends to be ultimately followed and explored. The focus groups were conducted within DisInfoResist project related to the coverage of Ukraine war, so the

20. Stokes, *How to Do Media and Cultural Studies*.

21. See K. Molek-Kozakowska, “Towards a Pragma-Linguistic Framework for the Study of Sensationalism in News Headlines,” *Discourse & Communication* 7, no. 2 (2013): 173–197, <https://doi.org/10.1177/1750481312471668>.



focus group participants were instructed to keep that context in their minds. It needs to be noted that each group included a person of Ukrainian origin, as this is the natural arrangement in the majority of Polish schools at this moment with over 1,477 thousand Ukrainians residing in Poland.²²

Teenagers' comments were noted down in shorthand writing on a whiteboard by 2 focus group moderators and facilitators—MA students of English language and communication major at University of Opole—because it was deemed that recording pupils speaking could prevent them from freely expressing their thoughts. Additionally, two other focus group co-organizers made “field notes” of examples and comments that were voiced, but not noted. The two datasets emerging in the discussion were archived, compared and then analyzed thematically. As a result, teenagers' answers to the question “why click?” could be classified into the following areas:

Comments pertaining to the characteristics of the person clicking. Teenagers ventured to specify that their motivations to click include: “being curious about the world”, “wanting to know more, have more knowledge about a given theme”, “having a sense of information deficit and wanting to remedy it”. This points to a relatively rational and motivated media use, especially as for young people who are still in the process of learning how societies work and how to prepare better for being a citizen and voter in the near future.

Comments pertaining to the characteristics of the situation of media consumption included “being bored”, “just scrolling and finding a piece of information by chance”, “clicking by accident because it is prominent and attention catching”, “being attracted to or interested in a given topic, person, country”. These comments can be interpreted as showing that teenagers have an understanding that not all routine media consumption patterns are purposeful, deliberate and can be rationalized. Sometimes people click on some information because it is simply accessible, easy to reach, brought to them by the media provider, and made available in an attractive manner.

Comments pertaining to presenting content as attractive highlighted the following features: “originality—something not found before or elsewhere”, “the element of surprise—something unexpected, not part of the routine”, “carrying a reference to a known person, a celebrity”, “having a nice picture, e.g., esthetic photo, mysterious image”, “reference to a military expert”, “with slogans, keywords that draw attention”, “references to concrete persons; these could be children or even cute animals”. The reflections and examples indicate that teenagers are aware of the media editors “tricks of the trade” when it comes to packaging even trivial and unsolicited information in an attractive, palatable and seemingly credible way.

Comments pertaining specifically to the language patterns (headlines) listed such observations as: “short, energetic, slogan-like phrases”, “not specific, not much revealed, general information that requires clicking to find out the details”, “something that is happening right now”, “suggesting a twist in the war, a turning point in a longer process”, “emotional words—could be anger or outrage, could be joy or pride”, “a lot of negative, strong, fear-inspiring words or phrases”, “exclamation points and capital letters”. These specific observations indicate that when pressed to identify the linguistic mechanics and rhetorical maneuvers in clickbait, the Polish teenagers can spot many instances.

It is worth noting that in the large focus groups, the questions and answers were framed in non-personal ways, so that the teenage participants could share their observations, but were not pressed to reveal their personal experiences. However, when the focus group discussion subsided, the facilitators attempted to boost it by reversing the question, namely by asking “what would make you avoid clicking?”. The answers included very open and personal responses that touched on “boring topics”, “badly phrased, incomprehensible titles”, “clearly false or exaggerated information or gossip”, “a topical issue that has been revisited over and over again to the point of fatigue”, “a clichéd teaser—like ‘check this out’ that clearly wants people to jump on it”, “a place that first requires accepting cookies or registering for some kind of subscription”. This type of reverse-engineered reflection may be indicative of some teenagers' capacity for a relatively skillful self-monitoring when it comes to avoiding certain information. However, a focus group discussion may only reveal what the participants know and declare they do, not their actual behavior. Last but not least, one person's voicing an opinion or an insight in the focus group discussion cannot be seen as representative of the whole group, let alone a cohort.

22. See Główny Urząd Statystyczny (Polish Central Statistical Office), *Ukrainians in Poland. Data for January 2024*. <https://www.google.com/url?sa=t&source=web&rct=j&opi=89978449&url=https://www.gov.pl/attachment/831fe2c9-ecbc-4c06-a9d5-7380e82457ea&ved=2ahUKEwiKIsWn7N2JAXd-wlHHSdVIZwQFnoECCsQAQ&usq=AOvVaw2DIYhxrzP9KFpm4IIS4939>.

DisInfoResist's thematic analysis of focus group discussions also revealed certain blind spots.²³ For example, what the teens did not seem to be aware of is how the algorithmic design of social media platforms and online portals determines their exposure to certain recurrent information. They largely missed the fact that, by clicking cookies, accepting terms of use, and allowing access to personal data, the users are training the algorithm to continue suggesting certain material that might be preferable and thus sealing off other important or interesting content. In fact, the facilitators left the teenagers with an additional task: to be attentive if—given that their smartphones are capable of picking up their conversations—they would get an increased number of suggestions to access political news or war-related information in the following days.

3.3. Narrative auto-ethnographies mapping media induced war-related attitudes

Another diagnostic action in the DisInfoResist project was to consult with the school history and civics teachers to establish how much Polish teenagers know about the Russian-Ukrainian war and if any of this information is false, as well as where they get that information from, and how they form their opinions and judgments about the conflict participants. This was done by asking pupils to provide narrative auto-ethnographies, in order to elicit more information from a larger cohort. With that, DisInfoResist team could better diagnose the general level of awareness of various mechanics of propagation of disinformation and insidious media influence. The teachers from the partner school selected a cohort of secondary school first-graders (15-16-year-olds) due to their being relatively vulnerable to media influence, and to their proneness to emotional volatility in some cases. Instead of a questionnaire or a structured interview, students were given 40 minutes of lesson time to express themselves in writing through a narrative. The instruction was consulted with teachers and included six prompts, asking teenagers to share on:

- any associations or images of the war starting or any memorable media coverage (with the aim here being to set the mood for auto-ethnographic detail);
- their preferred sources of information about the war and the way they customarily made use of them (with the aim being to establish whether the pupils used the (social) media, the family/friends or the school as their dominant sources, and if news exposure was deliberate or occurred incidentally as a by-product of other activities);²⁴
- any changes to the way they approached media coverage since the war started (in order to check if the pupils took any precautions against possible disinformation campaigns that might have been launched as part of hybrid war);²⁵
- reactions and feelings they had in relation to the way the war developments were reported at the beginning and now (to spark reflection about media-induced emotions may have been driving their reactions);²⁶
- the attitudes with respect to the participants in the conflict, primarily Ukraine/Ukrainians and Russia/Russians (to elicit specific sentiments, attributions and salient representations);²⁷
- expressing their expectations for the future (with the aim being to bring closure to their reflections, or introduce additional nuances or examples).

The narratives were anonymized; the pupils were allowed to write as much or as little as they preferred, but they were incentivized to be open about their opinions. The teachers ensured that the instruction was given in a language that teenagers understood and offered additional assistance during the writing session. It was made clear that pupils should not treat writing the narrative as "schoolwork". The format of the unstructured first-person narrative was chosen by the school as a preferred form of elicitation because it was deemed as able to bring a broad spectrum of reflections, especially from shy

23. Stokes, *How to Do Media and Cultural Studies*.

24. Cf. S. Schäfer, "Incidental News Exposure in a Digital Media Environment: A Scoping Review of Recent Research," *Annals of the International Communication Association* 47, no. 2 (2023): 242–260.

25. Cf. G. Pennycook and D. G. Rand, "The Psychology of Fake News," *Trends in Cognitive Sciences* 25, no. 5 (2021): 388–402, <https://doi.org/10.1016/j.tics.2021.02.007>.

26. Cf. M. Mousoulidou, L. Taxitari, and A. Christodoulou, "Social Media News Headlines and Their Influence on Well-being: Emotional States, Emotion Regulation, and Resilience," *European Journal of Investigation in Health, Psychology and Education* 14, no. 6 (2024): 1647–1665.

27. Cf. E. Kubin and C. von Sikorski, "The Role of (Social) Media in Political Polarization: A Systematic Review," *Annals of International Communication Association* 45, no. 3 (2021): 188–206.



or foreign students (including Ukrainians).

Over the course of May and June 2024, the DisInfoResist team (6 MA students and the author) processed 87 (25+20+24+18) pupils' narratives and coded and classified the data. Each narrative was analyzed by several individuals and prominent keywords, patterns of expression and themes were identified. A list of pupils' reflections and evaluations was compiled and recurrent content categories, themes or labels were grouped and hierarchized. Ultimately, the analysts were able to sort out some patterns emerging from the data and produce more or less neat thematic categorizations, which they were also able to generalize and represent numerically and visually.

Classifying the preferred sources of war news (prompt 2) was not very challenging, as pupils admitted to drawing on both people (family members and friends, or teachers and experts) and media (established outlets or internet or social media platforms). However, it was harder to establish the level of trust or criticality that the teenagers exerted in approaching these sources (cf. prompt 3). The data related to expressions of individual reactions, feelings and evaluations (prompts 4 and 5) was also very diverse and unstructured, so it was important to classify and reclassify different keywords in order to establish and validate characteristic patterns. However, the multiple close readings, the discussions during two joint coding sessions and the possibility to compare and elaborate on selected interpretations allowed for a relatively streamlined assessment of teenage media literacy and resilience and offered ideas for the intervention. The results regarding the four prompts are listed below:

Sources of information. Family and friends are popular sources of information that is relatively easy for teenagers to reach out to, but these individuals have partial knowledge, subjective opinions and may not be as well informed about details as experts. Ideally, the teenagers should have access to a variety of sources of information, in order to be able to compare information, assess credibility and identify biases. They should remember that the author/institution that releases information may have vested interests in promoting some issues (e.g., financial benefits, fame and recognition).

Media usage patterns. Some young people express concern about false information and are becoming more careful and scrupulous in examining news. Some also notice that various news media outlets are presenting contradictory information—either because they report news before facts are confirmed, or because they have a political agenda. The teenagers are aware that media outlets may favor clickbait and sensation over fact and verification, so it is important to refrain from making final judgments. It would not be wise to accept the information received in an “incidental” way (a random broadcast, odd notification, casual conversation) at face value; the widespread access to the internet means that a lot of unverified information is reposted, publicized and propagated.

Feelings and reactions. High levels of stress are related to the understanding of brutality and destruction brought by the war, as well as its possible long-term consequences for Europe. The sense of threat is enhanced by the feelings of confusion and uncertainty in relation to disinformation, the lack of credibility and contradictory accounts or outlooks for the future. Nevertheless, some young people do continue to explore war coverage despite adverse reactions, in order to gain a better understanding of causes and consequences of war, and to prepare for active citizenship. Hopes for peace and resolution are high because they allow teenagers to engage in positive values and constructive attitudes.

Evaluating the conflict participants. Political and military conflicts are accompanied by high emotional investments, polarized debates and hate speech. It is important for young people not to simplify the complexities and lump together the country's political regime, its military and the civil population (in case of Russia), especially when the context is crucial to the understanding of political decisions. Making subtle distinctions between refugees, migrants, citizens, military actors, political decision-makers and the nation state (in case of Ukraine/Ukrainians) also allows for a more informed and resilient approach to the conflict.

The narratives were rich in content and detail, but they need to be filtered down to the essential points that could be used as bases for intervention design. The points that seemed most relevant to DisInfoResist's aim of resilience building include the following observations: (1) avoiding contact with war-related news sources may be counterproductive, as having some orientation about current developments is helpful in assessing credibility of sources and reliability of content; (2) it is important not to share or promote dubious posts; instead, it is worth doing some double-checking across credible sources to verify information rather than to accept it at face value; (3) experiencing strong negative emotions inhibits rationality and proportion, so without a coping strategy of incorporating the negative experience into meaningful narratives, one can be pushed into panic or mental health crisis; (4) it is important not to rush to judgment, blaming and scapegoating, as this can escalate into hate speech.

4. Piloting remedial actions through workshops and interventions

To design and perform adequate interventions with teenagers, the DisInfoResist team not only had to acquire a bottom-up understanding of a variety of teenage media practices in the context of Russian-Ukrainian conflict coverage, but also had to be trained to understand war-related disinformation mechanisms themselves in a structured way. To that end the MA students were given a theoretical overview and a practical workshop developed by an expert researcher of fake news.²⁸ Also, to be able to competently verify whether a piece of news on the war in Ukraine is false, the team consulted a large dataset of fake news in various languages and across various media related to the Ukrainian-Russian conflict that was compiled by the experts and activists of VoxUkraine. The reports, lists of fake narratives and media sources that are pushing them are available online as *Propaganda Diary*²⁹ and can be used both for routine fact-checking, and for more in-depth understanding of mechanics of disinformation campaigns. That is why, by using this resource, DisInfoResist analyze and assess whether any fake news could be found in teenagers' narrative auto-ethnographies and to expose them in an intervention.

One example of such issue that was addressed in the intervention was the notion of Ukrainian separate national identity,³⁰ which was taken up by the Ukrainian-born DisInfoResist student participant and the school history teacher. The overview of Ukrainian history that is largely missing from Polish curriculum, presented from the point of view of a Ukrainian could make a strong case for the understanding why Ukrainians are not a Russian tribe, why they are resisting the Russian invasion, and why giving up territory and making peace on Russian terms is not acceptable to many Ukrainians.

For most teenagers taking part in a focus group discussion analyzing media tricks used to draw attention and sensationalize the coverage, or putting in some effort to write an auto-ethnographic narrative with self-reflections on their own emotions, habits and media consumption practices must have been an opportunity to confront a stressful topic and compare different adaptive pathways that they could use to come to terms with an alienating and anxiety-ridden topic. Also on the basis of the insights drawn from the analysis of oral histories, focus groups and narratives (found in the concluding paragraphs of sections 3.1., 3.2. and 3.3.), it was possible to get an overview of the typical media reception patterns and to assess young people's needs and competence gaps. Thanks to the involvement of school teachers it was possible to develop and pilot some interventions aimed to strengthen critical literacy, resilient media consumption and language awareness. The intervention was piloted for two groups of approximately 20 pupils in a partner school in June 2024. The activities in a 90-minute session for each group included:

- a practical workshop where participants would identify the linguistic mechanisms through which media sensationalized the war coverage, based on a corpus of authentic headlines from online versions of two Polish tabloids collected in CORECON research project;
- a Kahoot quiz to check the level of teens' ability to differentiate between fake news and true information related to the war, with subsequent discussion on the cases that were problematic and with references to *Propaganda Diary* repository;
- an online role-playing game developed by media education specialists that shows how disinformation campaigns tend to be organized. The player is advised by a bot on the subsequent steps how to impersonate, misinform, and troll other media users—this reveals some of the traps that media users are likely to fall into when disinformation campaigns are coordinated by malicious agents. The game is available in multiple languages <https://www.getbadnews.com/books/polish/>;
- a tailor-made board game that teaches responsible media use under critical circumstances by awarding points to players with dispositions to media literacy, fact-checking and civic engagement and eliminating players that chose to use media only for entertainment.

The DisInfoResist team that conducted the interventions in cooperation with the school teachers noted high engagement and willingness to discuss the topic on the part of the pupils. The evaluation of the piloted intervention is pending.

28. See E. Ilis, "Researching Fake News: Understanding the Challenge," presentation given at the fake news workshop at the University of Opole, Opole, PL, April 8, 2024, <https://grants.ulbsibiu.ro/corecon/conferences-workshops/>.

29. See "Propaganda Diary," Vox Ukraine, accessed from February 2022 to June 2024, <https://russiandisinfo.voxukraine.org/en>.

30. Pavlova et al., "The War Between Ukraine and Russia," 327–349.



5. Conclusion

This paper reported on the design and results of implementation of a series of diagnostic studies and follow-up interventions devoted to building up resilience against disinformation regarding the Russian-Ukrainian conflict. The DisInfoResist project was conducted in early 2024 and targeted primarily Polish teenagers in partner schools. It assumed that in order to propose a series of tailored actions, a thorough diagnosis of needs and competence gaps should be undertaken first. Given the ongoing informational (hybrid) war, adequate resilience-enhancing interventions—workshops, games, multimodal presentations—need to be based on localized data. The insights, syntheses and inputs into intervention scenarios in DisInfoResist were collected through a thematic analysis of 20 oral histories, 2 focus group sessions, and 87 narrative auto-ethnographies. The subsequent piloted interventions addressed to a group of Polish secondary school students represented a way to allow them to form adaptive pathways in an alienating context of war media coverage and boost their resilience against war-related disinformation. The implemented pilot allowed teenagers to practice their critical media literacy competences via a variety of specifically tailored activities related to critical language awareness, responding to fake news, overcoming disengagement, recognizing sensationalist media practices and algorithmic patterns.

While it is beyond the scope of this article to evaluate the short-term and long-term learning outcomes of these interventions, it is worth sharing the insights from the incremental process of developing the bases for tailored media literacy interventions in a localized setting, in a co-creative manner with partner schools, and in alignment with current academic knowledge in the field of resilience. Following the evaluation and upscaling of the DisInfoResist project, broader recommendations could be proposed, even though it is clear that in the evolving media scape of war reporting there are multiple adaptive pathways to resilience against disinformation.

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Bibliography

- Bennett, W. L., and S. Livingston, eds. *The Disinformation Age*. Cambridge: Cambridge University Press, 2020.
- De Andrade Gama, I., and W. Mozgin. "Media Literacy and Its Role in Countering Hybrid Warfare (The Case of Ukraine)." *Future Human Image* 15 (2021): 4–13. <https://doi.org/10.29202/fhi/15/1>.
- Di Domenico, G., J. Sit, A. Ishizaka et al. "Fake News, Social Media and Marketing: A Systematic Review." *Journal of Business Research* 124 (2021): 329–341. <http://dx.doi.org/10.1016/j.jbusres.2020.11.037>.
- Feldstein, M. "Kissing Cousins: Journalism and Oral History." *Oral History Review* 31, no. 1 (2004): 1–22.
- Fletcher, D., and M. Sarkar. "Mental Fortitude Training: An Evidence-Based Approach to Developing Psychological Resilience for Sustained Success." *Journal of Sport Psychology In Action* 7, no. 3 (2016): 135–157.
- Guess, A. "A Digital Media Literacy Intervention Increases Discernment Between Mainstream and False News in the United States and India." *Proceedings of the National Academy of Sciences* 117, no. 27 (2020): 15536–15545.
- Hernon, P. "Disinformation and Misinformation Through the Internet: Findings of an Exploratory Study." *Government Information Quarterly* 12, no. 2 (1995): 133–139. [75](https://doi.org/10.1016/0740-</p></div><div data-bbox=)

624X(95)90052-7.

- IJntema, R. C., W. B. Schaufeli, and Y. D. Burger. "Resilience Mechanisms at Work: The Psychological Immunity-Psychological Elasticity (PI-PE) Model of Psychological Resilience." *Current Psychology* 42 (2023): 4719–4731. <https://doi.org/10.1007/s12144-021-01813-5>.
- Ilis, E. "Researching Fake News: Understanding the Challenge." Presentation Given At The Fake News Workshop At The University Of Opole, Opole, PL, April 8, 2024. <https://grants.ulbsibiu.ro/corecon/conferences-workshops/>.
- Kot, S., A. Mozolevska, O. Polishchuk et al. "The Discursive Power of Digital Popular Art During the Russo-Ukrainian War: Re/Shaping Visual Narratives." *Arts* 13, no. 1 (2024): 38. <https://doi.org/10.3390/arts13010038>.
- Kubin, E., and C. Von Sikorski. "The Role of (Social) Media in Political Polarization: A Systematic Review." *Annals of International Communication Association* 45, no. 3 (2021): 188–206.
- Leavy, P. *Oral History: Understanding Qualitative Research*. Oxford: Oxford University Press, 2011.
- Maclean, K., M. Cuthill, and H. Ross. "Six Attributes of Social Resilience." *Journal Of Environmental Planning And Management* 57, no. 1 (2014): 144–156.
- Malecki, W. P., H. Bilandzic, and P. Sorokowski. "Media Experiences During the Ukraine War and Their Relationships with Distress, Anxiety and Resilience." *Journal of Psychiatric Research* 165 (2023): 273–281.
- Molek-Kozakowska, K. "Towards A Pragma-Linguistic Framework for the Study of Sensationalism in News Headlines." *Discourse & Communication* 7, no. 2 (2013): 173–197. <https://doi.org/10.1177/1750481312471668>.
- Mousoulidou, M., L. Taxitari, and A. Christodoulou. "Social Media News Headlines and Their Influence on Well-Being: Emotional States, Emotion Regulation, and Resilience." *European Journal of Investigation in Health, Psychology and Education* 14, no. 6 (2024): 1647–1665.
- Neimeyer, R. A. "Re-Storying Loss: Fostering Growth in The Post-Traumatic Narrative." In *Handbook of Posttraumatic Growth: Research and Practice*, edited by L. G. Calhoun and R. G. Tedeschi. Lawrence Erlbaum Associates, 2006.
- Pavlova, O., I. Kuchynska, V. Gorbalsinski et al. "The War Between Ukraine and Russia as a Historical and Civilizational Aspect." *Trames* 27, no. 4 (2023): 327–349. <https://doi.org/10.3176/tr.2023.4.01>.
- Pennycook, G., and D. G. Rand. "The Psychology of Fake News." *Trends in Cognitive Sciences* 25, no. 5 (2021): 388–402.
- Rutter, M. "Resilience as a Dynamic Concept." *Development and Psychopathology* 24, no. 2 (2012): 335–344.
- Schäfer, S. "Incidental News Exposure in a Digital Media Environment: A Scoping Review of Recent Research." *Annals of the International Communication Association* 47, no. 2 (2023): 242–260.
- Stokes, J. *How to Do Media and Cultural Studies*. Los Angeles: Sage Publications, 2012.
- Simin Maria Terian. "What Is Fake News: A New Definition." *Transilvania*, no. 11–12 (2021): 112–120.
- Tymoshchuk, N. M. "Euphemisms in Modern Political Discourse: Joseph Biden's Speeches in the War in Ukraine." *Alfred Nobel University Journal Of Philology* 26, no. 2 (2023): 210–224. <https://doi.org/10.32342/2523-4463-2023-2-26/2-13>.
- Van Dijk, T. "Discourse and Manipulation." *Discourse And Society* 17, no. 3 (2006): 359–383.
- Vox Ukraine. "Propaganda Diary." Accessed from February 2022 to June 2024. <https://russiandisinfo.voxukraine.org/en>.
- Wilson, T. D. *Redirect: The Surprising New Science of Psychological Change*. New York: Back Bay Books, 2011.
- Zhang, X., and A. A. Ghorbani. "An Overview of Online Fake News: Characterization, Detection, and Discussion." *Information Processing and Management* 57, no. 2 (2020): 102025.