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Virtual exposure to war in Ukraine: thoughts and emotions of Italian adolescents with emotional difficulties

Cavallini M.C.^{1*} , Tirelli V.¹ , Derba F.¹ ¹Centro Tice, Italy

ABSTRACT

Background: From the date of the outbreak of the conflict in Ukraine, news of war and its atrocities have pervaded social media. Young people have been immersed for several weeks to a continuous stream of news, true and false, about the progress of the war, with the possibility of viewing often vivid and unfiltered videos and images. Past studies have indicated how media exposure to catastrophic events was associated with negative outcomes for people's psychological health, with consequences such as post-traumatic stress disorder, anxiety and depressive symptoms. It is therefore relevant, in terms of prevention and structuring awareness interventions, to know what were the most frequent thoughts and emotions of young people in a country outside the conflict, such as Italy.

Methods: The present study analyzed interviews of thirteen adolescents with different psychological functioning (high- functioning autism, ADHD, specific learning disorders, anxiety symptoms) with respect to the war and the impact the news had on their emotions and thoughts.

Results: Negative judgments about the war and the possibility of escalation were the thoughts most frequently reported by young people, along with emotions of fear, uncertainty, and anxiety.

Conclusions: Results provide a basis for studying adolescents' cognitive and emotional reactions and implementing supportive interventions.

Keywords: Adolescence, War, Emotions, New media, virtual exposure.

* Corresponding author: Cavallini Maria Clara

E-mail address: clara.cavallini@centrotice.it

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Introduction

The early months of 2022 have been marked by several complex events: from the Covid-19 pandemic and the still ongoing restrictions, to the numerous protests against mandatory vaccination, to the Russian invasion of Ukraine and the subsequent outbreak of conflict in Europe. The development of communication technology has allowed us to experience all of these events from our own homes, and in the specific case of the war in Ukraine, Instagram and Tik-Tok have become real means of information and awareness of the situation. In addition, increasing competition among media sources has fueled the trend of using increasingly vivid images to attract viewers (Lubens & Holman, 2017), leading to multimedia displays of potentially disturbing images. The current version of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) explicitly excludes indirect exposure to trauma through media as a potential inciting event for post-traumatic stress disorder (PTSD; American Psychiatric Association, 2013), suggesting that consumption of these media does not constitute traumatic exposure. Some evidence, however, may indicate that this exclusion may be unwarranted: associations between television exposure to tragic events and trauma-related symptoms have been found, for example, in studies of children after the 1990 Gulf War (Cantor et al., 1993) or the 1995 Oklahoma City bombings (Pfefferbaum, 2001).

Research conducted after the September 11, 2001 terrorist attacks also showed a relationship between exposure to disaster-related media content and symptoms of post-traumatic stress (Schlenger et al., 2002; Silver et al., 2002; Torabi & Seo, 2004). It is important to note that 2022 is the third year of the COVID-19 pandemic, a time when much of the people's mental health has been deeply affected by the pandemic: it is estimated to have added another 76.2 million anxiety disorders and 49.4 million major depressive disorders worldwide (Santomauro et al., 2021). Moreover, the study by Dyar and colleagues (2022) suggests how young people exposed to more news about Covid-19 experience depressive and anxious emotions to a greater extent and use alcohol and cannabis more frequently to cope with stress. Witnessing stories of catastrophic events through the media can also prolong the state of stress and encourage ruminative thinking (Holman et al., 2014). Compared to children, who are often supported by their parents when surfing online (Padilla-Walker et al., 2012), the adolescent population may also be at higher risk of being exposed to violent or complex online contents. Moreover, we wanted to analyze reactions to war in a sample of neurodivergent adolescents: neurodivergent people do, in fact, seem to show generally higher levels of anxiety (Bishop et al., 2019; Novita et al., 2016), intolerance of uncertainty (Jenkinson et al., 2020) and have shown lower levels of adaptation following the pandemic (Capp et al., 2022). These studies show how the global

situation can impact the psychological health of adolescents, emphasizing the importance of understanding their thoughts and emotions. In particular, a 2022 study (Skwirczynska et al.) that assessed the impact of war on Polish students, suggests how the thought of a potential armed attack in Poland had a significant impact on the anxiety felt by participants, underlining how much it is the thoughts and the interpretation of events, rather than the events in themselves, that can generate different emotional reactions.

Our goal was to delve into what thoughts and emotions are prevalent among Italian adolescents toward war, especially among neurodivergent ones who were already undergoing psychological support for managing school commitments or improving emotional regulation.

The aim of the study is to provide the basis for structuring supportive interventions that could be useful to manage stress and anxiety following wars with high media impact.

Method

The aim of the study is to understand what the thoughts and emotions of young people with psychological vulnerabilities are toward the outbreak of war in Ukraine. The study received approval from the ethics committee of the psychological center at which it was conducted. The sample was chosen from users of a psychological service center in northern Italy. The inclusion criteria used in selecting the sample were:

- Being adolescents (between 13 and 19)
- Being active users on social networks (own at least one profile among Facebook, Instagram, Tiktok or Twitter)
- Attend the psychological center to work on learning or emotional difficulties
- Had been deemed ready to talk about their thoughts and emotions and the subject of war by their psychologist

Parents of all underage adolescents that fell within the criteria were informed about the objectives of the study and participants were selected from those whose parents had consented to their son or daughter's participation. Adolescents who were 18 years of age or older were asked individually if they wanted to take part in the study, without exerting pressure of some kind.

Parents of minors and the adolescents themselves were asked to sign the informed consent for before the interview. We chose to create a semi-structured interview in which adolescents' thoughts related to war could emerge spontaneously.

After an initial moment of general reflection on the war, we wanted to investigate the frequency of exposure to news about the conflict and the emotional manifestations, about the present and future, resulting from such exposure.

Given our objectives, the guiding questions were as follows:

- What are your general impressions with respect to the war in Ukraine?
- How often do you inform yourself or receive news about the conflict?
- What emotions have you felt and are you feeling about it?
- Following the outbreak of the war, what thoughts have you had with respect to the present and the future?

A total of 13 adolescents took part in the study. They were aged between 14 and 19 years ($M=16$, $SD= 1.33$, 38.4% female), from different high schools in northern Italy (4 from a technical institute, 7 from different scientific high schools, 2 from an art high school), and attended a psychological center dedicated to emotional or learning difficulties: six participants were diagnosed with a specific learning disorder (SLD), four were in service for anxiety symptoms, two were diagnosed with high-functioning autism, and two others were diagnosed with attention-deficit hyperactivity disorder (ADHD). Interviews were conducted in March and April 2022 by psychologist-researchers, recorded and analyzed using the thematic analysis technique with Nvivo 12 software.

The two researchers analyzed the parents' responses, identifying key themes from the interviews. After an initial reading conducted separately, they agreed on what were the main themes that emerged from the interviews.

The data were analyzed through an inductive, theoretical approach and an exploratory perspective, without the need to fit the data into pre-existing categories. Both the words used by the youth and the underlying meanings were deemed important.

Any disagreements between the two coders on the interpretation of the data were resolved with another careful reading.

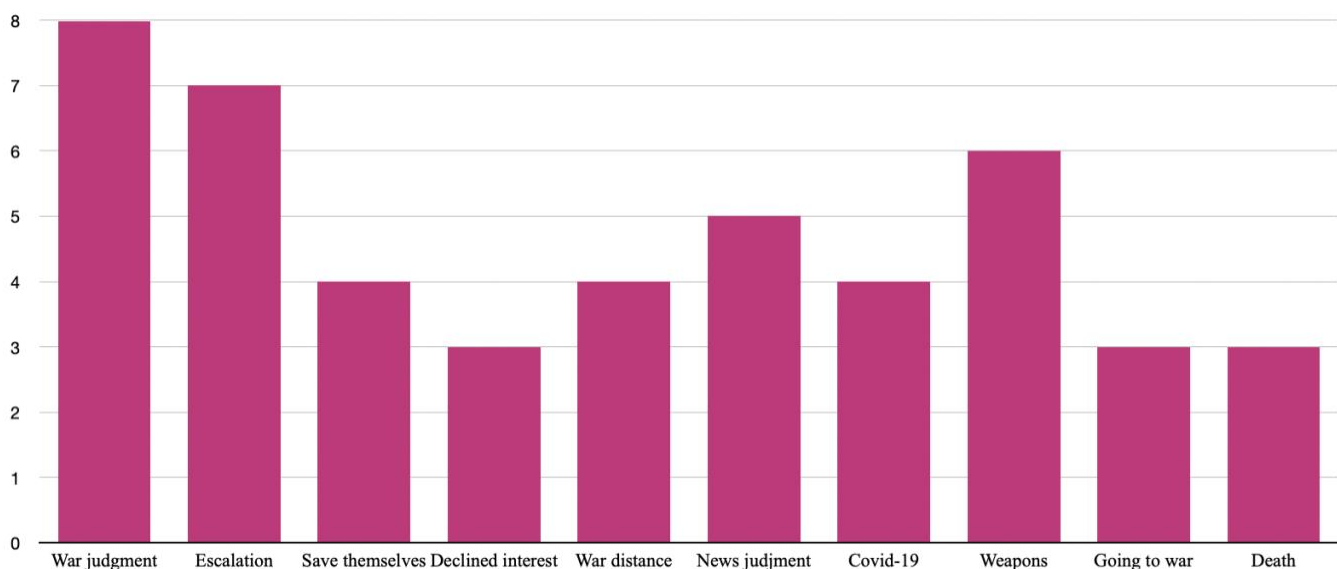
Results

The teenagers posed positively toward the interview, showing willingness to address their thoughts on such a hotly debated topic. Even with respect to their own emotions, they were able to

acknowledge and express them. We wanted to analyze thoughts (Chart 1) and emotions (Chart 2) separately for two reasons: (1) so that future studies can analyze which thought is more impactful in predicting emotions of anxiety and stress or conversely in predicting positive emotions such as hope, and (2) so that it would be possible to use this frequent thoughts and emotions to structure psychological support interventions for youth that have both a cognitive and an emotional component.

Thoughts

Chart 1: Frequency of teenagers' thoughts



Regarding the adolescents' thoughts, nine recurring themes emerged from the analysis of the interviews. Specifically, in order of frequency, the themes traced found were "Judgment on War," "Escalation," "Save Themselves," "Decline of Interest," "Distance/Nearness to Italy," "Judgments on News," "Covid-19," "Weapons," "Going to War," and "Death."

Negative judgment about war was the most recurrent theme among the young people surveyed. Eight out of thirteen young people expressed negative opinions about the conflict, its usefulness, and its consequences.

F., 18, explains, for example, *"After all the evolution there has been, all the days of remembrance and whatnot, you would hope that it would get into people's heads that war is wrong and all this*

stuff is wrong...but it didn't help."

G., 19, reports, *"I think starting a new war in 2022...that is, a new war like this..with weapons..is really absurd."*

E., 17, states, *"You read the history books and say, they won't be so stupid now to do such a thing again."*

Another recurring theme was related to the possibility of escalation: specifically, two respondents mentioned the word "escalation" and five mentioned the possibility of a world war. Still G., 19, for example, said, *"Reading certain news stories it always seems like there might be an escalation from the current situation."*

Some interviewees also cited thoughts and reflections they had on hypothetical ways to save themselves in case the conflict came to Italy.

J., 19, for example, reports, *"If it were to happen that things get complicated you might even think about leaving...(..) because we in the family all have citizenship in Argentina."*

N., 14, also states, *"My parents say that the war, if it were to happen here..., I mean, we would run away."*

Another 15-year-old student adds, *"I was grateful to live in the country, that is, in a dead country like mine what do you want to happen? I also understood the importance of having fields (to cultivate)."*

Another widely cited theme was the declining interest in war news. M, 17, for example, states, *"Let's say that the thought has been gradually waning also because of...it's ugly to say really, however, because of the normalcy of what was and what is happening,"* while D., 19, explains, *"I can't keep up with it as much anymore. Like a TV series, I watch it so much in the beginning and then I get bored."*

The issue of the conflict's distance from our country has been widely debated in different ways.

E., 17, recounts, *"I have a hard time focusing that we have a war not far from here. I still need time to understand."* F. 18 explains, *"I still have a sliver of hope, however, we are not that far away (...)* you know it's far away, but at the same time... sooner or later if it's that big, it will come here too."

Five respondents were critical of the news they read and stated that they had doubts with respect to its authenticity.

A., 18, for example, explains that according to her, *"there is full of fake videos, things put up just to make visualization,"* and V., 18, reports, *"I can't tell which are the fake ones and which are the real ones, and I don't really know who to believe."*

G., 18, and F., 15, also express their thoughts on the news they find online, *"I also think a lot of news is filtered or made on purpose for propaganda", "news can come right as well as it can come wrong."*

The experience of the ongoing Covid-19 pandemic was cited by four boys in relation to the war. F, 18, says for example, *"We are just coming out of a pandemic and you don't even think about the young people who are trying to build a future. You don't come out of the pandemic and start a war, no, come on."*

The topic of weapons was touched upon by six respondents. Two mentioned the word "weapons", M. 19, for example says, *"the idea of having soldiers preparing weapons, organizing something...is something that scares me,"* while G., 18, reports, *"starting a new war in 2022... that is, a new war like this..with weapons..it's really absurd."*

Others were more specific and referred to certain types of weapons, such as M., 17, who mentions the possible scenario of *"tanks in the square"* or F., 18, who reports, *"in zero time they can send missiles over the country"* or F., 19, who talks about the possibility of a nuclear war.

The topic of direct participation in the conflict was also mentioned by three boys.

N., 14, reports, *"My father had told me that when a war happened here, he would go to war. I almost started crying and said -no, no-"* while D., 19, states, *"I'm afraid I'll have to die."*

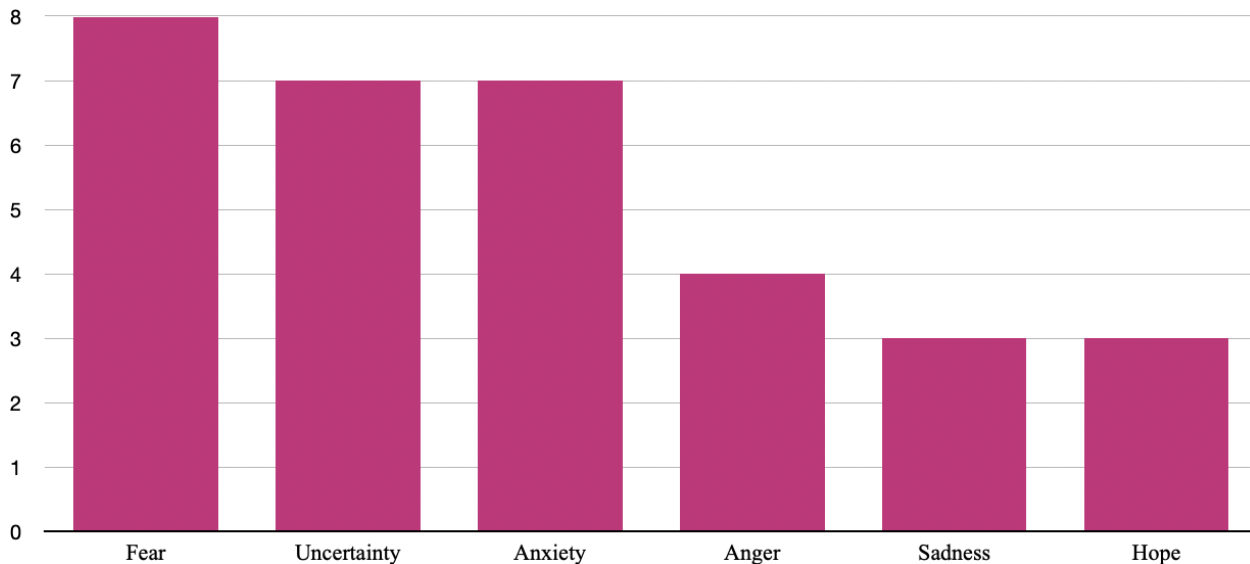
The very topic of death was mentioned by three teenagers.

A., 18, says, *"a lot of people will die, haven't enough died already?"*

M., 18, recounts, *"some of the aspects they described to us are really alarming, for example, one of the scenarios concerns the possible killing of Zelensky."*

Emotions and moods

Chart 2: Frequency of teenagers' emotions.



In total, six frequent emotions or moods were noted during the interview analysis: fear, uncertainty, anxiety, anger, sadness and hope.

The emotion most frequently mentioned by young people was fear, which was mentioned by eight out of thirteen respondents.

Respondents' fear was related to what might happen in the future and was often associated with the idea of Italy entering the war or images of weapons (missiles and bombs).

For example, one respondent cited the fear that if the war were to reach our country, he might be persecuted and *"caught as a pro-pacifist."* (M., 17). The state of uncertainty and confusion is the second most cited state of mind by respondents (7 people).

M., 18, for example, explains, *"I have often thought about what might happen, what the future events might be, however, a definite picture is never created in my mind,"* and F., 15, recounts, *"there is uncertainty, you don't understand anything, there is a lot of confusion (...) even about the future, we are at war, you can't know."*

The state of anxiety and worry was also mentioned by seven respondents, often associated with the moment of reading the news.

G., 18, for example, explains, *"when I read these news stories that can put some agitation, fear...there for maybe half an hour, an hour I feel this feeling of anxiety and anger,"* and V., 18 recounts, *"I always*

feel enough anxiety, more because you never know where they're going to go..." adding, "thoughts about the future I try to avoid them quite a bit because they make me even more anxious, as soon as they come into my mind...no no, away."

Other emotions often mentioned were anger (four people), hope (three people), and sadness (three people).

A, 18, for example, explains feeling *"anger toward Putin"*; in other discourses, anger was mentioned toward the war or Russia in general.

N, 14, explains *"what I felt initially was fear and sadness for those who were there in Ukraine"*; other boys mention the emotion of sadness, associated with that of anger.

A, 18, for example, recounts, *"At first I felt a lot of sadness, a lot of anger. In fact, I alternated between times when I didn't care, didn't want to know, pretended it was on another planet, and times when I tried to inform myself as much as possible."*

Another emotion mentioned was hope (two boys) *"I hope that eventually peace will come"* (N., 14), *"perspective on the future? of course there is a sliver of hope.."* (F., 18).

Discussion

In the society in which we live, the use of social media can make it feel as if the world goes from one catastrophe to another, and it is important not only to teach young people to follow reliable sources, but also to find appropriate ways to share their emotions. Specifically, the conflict between Russia and Ukraine is occurring in a context where information and communication technologies are increasingly being used. Exposure to the brutality of war is no longer confined to the geographic space in which it occurs: the speed and scale with which people are exposed to events in real time means that war expands to people's bedrooms, schools, and workplaces (Su et al., 2021).

People around the world can see vivid and often unfiltered images of potentially traumatic events 24 hours a day, 7 days a week. While such exposure can be useful in raising awareness or providing humanitarian aid, understanding whether and how images and news can affect the psychological state of young media users is an important empirical question with important implications for global public health (Leaning & Guha-Sapir, 2013).

We analyzed the thoughts and emotions of adolescents with psychological vulnerabilities (learning disabilities, emotional difficulties, ADHD, high-functioning autism) in relation to the dissemination

on social networks of news and content regarding the recent outbreak of the Russian-Ukrainian conflict.

The adolescents showed good knowledge of the conflict and were critical of both the war, especially in the immediate aftermath of the severe restrictions for the Covid-19 pandemic, and the news. Many of them reported feeling the emotions of anxiety, sadness, and fear in the moments immediately following the viewing of content and news about the war.

Many of the young people's thoughts concerned hypothetical scenarios about the future, with references to world war, Italy's involvement in the conflict, or the potential call to arms of their own or loved ones. In the scenarios imagined by the young people, some thoughts about weapons (atomic bomb, missiles, and tanks) appeared that were often talked about on the Internet and social networks. Thoughts concerning death, peculiar to the Ukrainian people, were also deemed relevant.

Findings on young Italians' thoughts about the war in Ukraine were also investigated in the study by Barchielli and colleagues (2022) in which they show different concerns reported by people of different age groups. In their study, while adults reported fearing rising food prices or being isolated, younger people reported similar thoughts to those found in our study: that they feared more the likelihood of dying and the likelihood that the COVID-19 pandemic would not end or would get worse because of the war. This suggests that the themes of death and pandemic in relation to the war are relevant to young people, regardless of psychological functioning characteristics.

Conclusion

Our study suggests that adolescents' interest in news of the war in Ukraine has generally declined as time has passed, as has the amount of content and news posted on social networks with respect to the war. Many participants, however, continue to express anxiety and sadness even months later the outbreak of the war. Such emotions can impact the overall functioning of young people, especially when experienced in the context of uncertainty and confusion that many of them say they experience. In a 2012 study (Berger et al.) a protective and functional factor in the emotional management of traumatic events was found to be mediation and the ability to share negative experiences and emotions with teachers. Knowing what young people's most frequent thoughts are in reference to war can suggest topics for professionals to address within pathways for raising awareness and sharing about potentially stressful events.

Limitations of the study include a small sample and the lack of follow-up data after a longer period of time. This limitation is due to the fact that many participants were at the end of their psychological

support intervention and suspended or discontinued attendance at the center after a short time. The fact that participants had different diagnoses and psychological issues may also be limiting, but paves the way for the possibility of exploring the impact of stressful news on more specific groups. Despite the limitations, this study provides preliminary indications of what issues might be addressed in future programs for managing the emotional complications of high media exposure wars in a population that presents specific characteristics of psychological vulnerability.

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