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Red lines versus negotiables: how exposure to wartime violence influences support for peace settlements in Ukraine

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Abstract

What shapes attitudes toward wartime negotiation? Does exposure to violence lead citizens to take a hard-line approach to any peace settlements? Or does it make them more open to peace to make the violence stop? To answer these questions, we conducted a series of surveys and survey experiments in Ukraine in July 2022 and May 2023. First, using a series of survey experiments, we show that Ukrainians are flexible on certain issues, but others are considered red lines and not up for negotiation. Second, in the short-term, we find that exposure to violence does not turn Ukrainians against negotiations with Russia, in some cases, it makes them more amenable. Finally, over a longer duration of the war, we find that support for a negotiated solution drops. Our evidence suggests this drop is linked to exposure to violence and to beliefs about the war's future course.

Keywords: experimental research; international conflict; public opinion; survey methodology

1. Introduction

One of the most contentious questions since the beginning of Russia's war against Ukraine has been whether Ukraine should be open to negotiations with Russia to end the war, or whether it should seek victory by military means (Charap and Radchenko, 2024). Supporters of negotiations highlight the need to avoid further escalation and minimize casualties (Reuters, 2022), whereas opponents suggest that Russia is not serious about negotiating and will use any talks to improve its military positions and restart its aggression (Sasse, 2022). In Davos, Switzerland in January 2024, Ukrainian President Volodymyr Zelensky released his 10-point peace plan including the removal of all Russian soldiers from Ukrainian territory, and credible investigation of Russian war crimes—both nonstarters for Russia (Keaten, 2024). The question of negotiations has also led to divisions within NATO: Since assuming office in 2025, President Trump and his administration have clashed with NATO allies over support for Ukraine and contours of a hypothetical peace deal, and pressured Ukraine to negotiate with Russia (Reuters, 2025).

This raises important questions: would Ukraine and the Ukrainian people support a negotiated peace settlement, and how does exposure to violence and the course of the war shape these attitudes? What kind of settlements would a public living through the violence of a foreign invasion be willing to accept? How does exposure to violence and displacement influence these attitudes? These questions are not just specific to the war in Ukraine, but relevant to many other contexts of conflicts and lie at the core of the study of war.

There are divergent findings on the effect of war on the public's willingness to give concessions for peace. On the one hand, much of the strategic bargaining literature suggests that belligerents use military force to inflict pain and extract concessions from their opponents (Schelling, 1966; Smith and Stam, 2004). This approach implies that the continuation of hostilities and exposure of larger segments of the Ukrainian population to violence might lead them to be more supportive of concessions to Russia in order to avoid further violence. Indeed, some empirical studies from the civil war context find that civilians who were exposed to violence are more willing to compromise with the perpetrators (Tellez, 2019; Hazlett, 2020).

An alternative view suggests that while there are certain topics or issues on which individuals will engage in cost-benefit reasoning ("negotiables"), there are also others considered as "red lines." Compromising over these is viewed as selling out the in-group, even in the face of violence (Ginges et al., 2007). Indeed, other empirical studies find that experiencing violence not only fails to increase support for concessions but may also harden attitudes and increase willingness to vote for hawkish parties (Canetti-Nisim et al., 2009; Hersh, 2013; Getmansky and Zeitzoff, 2014; Hirsch-Hoefler et al., 2016; Canetti, 2017; Kupatadze and Zeitzoff, 2021). A particularly important distinction that few have explored is that protracted exposure—not just short-term exposure—may harden individuals against peace as a way of coping with the distress from the conflict (Hirsch-Hoefler et al., 2016; Canetti, 2017).

Building on this alternative view, we argue that exposure to violence has different effects on public attitudes toward negotiations in the short term versus the long term. In the short term, exposure to violence makes individuals somewhat more supportive of concessions on several issues among them those considered to be red lines (e.g., independence of Luhansk People's Republic [LNR]/Donetsk People's Republic [DNR]).

However, as the war drags on, individuals become less willing to concede including on issues they were initially somewhat more inclined to compromise on at the beginning of the conflict (e.g., LNR/DNR referendum). We discuss several possible explanations for this change. In particular, we show that individuals who report having family and friends killed are becoming less supportive of an agreement. In addition, we discuss how individual optimism about the course of war is linked to lower support for an agreement. To the extent that some individuals become more optimistic as the war continues, this can also explain some of the decline in support for an agreement and entrenchment on some of the core issues.

To test our theory, we examine the Ukrainian public opinion in the context of the 2022 Russian invasion of Ukraine for two primary reasons. First, Ukrainians are currently living through one of the largest and most intense conflicts in Europe since the end of World War II. Second, this conflict provides an important opportunity to take an innovative sampling and survey experimental approach. Specifically, we employ both online Internet panels and mobile phone sampling frames, each comprising approximately 2,000 and 3,000 respondents, respectively, and incorporate both self-reported and observational exposure to violence. To understand the short- and long-term effects of exposure to violence, we conduct our survey in three waves: the first two are administered in July of 2022, two weeks apart, followed by a third wave conducted ten months after the initial surveys in May of 2023.

This innovative approach offers several advantages. First, combining mobile phone survey and online panels enables us to pose identical questions to different respondent groups, including those who fled Ukraine during the war. This helps reduce sample selection bias, ensuring we capture diverse perspectives on negotiation issues compared to those who remained. Second, by triangulating self-reported measures of violence exposure with observational data, we enhance confidence

in the validity of our findings. Last, fielding multiple survey waves allows us to explore how changes in exposure to violence during war influence views on negotiations.

We use online panel and nationally representative telephone surveys to measure how individuals' exposure to violence affects their willingness to compromise. However, since our theory suggests that this willingness is also a function of the specific issues at stake, we need to understand which issues people consider as "negotiables" versus "red lines." To do that, we conducted a "poison pill" survey experiment, a method commonly used to investigate the effects of priming on behavior (Bargh et al., 1996). In this experiment, survey respondents were presented with a hypothetical peace agreement with Russia. We examine several components of a possible political agreement, including the territorial dimensions such as the status of different regions of Donbas and the Crimea, the political aspects of Ukraine's future relationship with the EU, the future status of Ukraine's President, and general attitudes toward peace and Russia. Randomly included within this hypothetical peace agreement was a "poison pill": a specific issue Ukrainians needed to compromise on (e.g., Zelensky has to step down as leader of Ukraine) for the proposed peace agreement to be signed and end the war.

Our findings confirm that the public tends to perceive certain issues as red lines while considering others negotiable. Specifically, Ukrainians are willing to entertain the idea of allowing the separatist regions in Donbas to vote on their status regarding Russia or Ukraine. However, recognizing Crimea as part of Russia and pledging not to join the EU are viewed as non-starters for negotiations.

Our second key finding reveals that exposure to violence has varying effects on public attitudes toward negotiations in the short term versus the long term. In the short term, exposure to violence does not harden Ukrainians' attitudes. In fact, among those exposed to gunfire, forced into bomb shelters, or witnessed injuries from the conflict, it can increase openness to negotiations with Russia on several issues (e.g., LNR/DNR independence, reduction of Ukraine's army size, and not joining the EU). However, over the long term, overall support for a negotiated solution declines, especially among individuals who report having lost friends or family members. We also discuss how optimism about Ukraine's ability to resist Russian advances can reduce support for a negotiated settlement. Therefore, alongside exposure to violence, beliefs about the future course of the war—whether optimistic or pessimistic—can play a crucial role in shaping the public's support for a negotiated agreement.

We make two main contributions. Substantively, we provide the first evidence of how the course of war and ongoing exposure to wartime violence shapes the development of "red lines" among the population, thereby advancing the literature on conflict resolution. Specifically, our research contributes to understanding when parties in conflict decide to negotiate rather than continue fighting (Slantchev, 2003; Fearon, 2007; Leventoğlu and Slantchev, 2007; Goemans and Fey, 2009; Powell, 2012).

Our work also relates to recent studies that examine public attitudes in Ukraine toward negotiation (Bartusevičius et al., 2023; Dill et al., 2024). However, our study significantly expands on these previous studies. First, we examine negotiation preferences concerning a wider range of critical political issues (e.g., demands for Zelensky's resignation, the downsizing of the Ukrainian army or the official language policies in Ukraine). Second, instead of only looking at attitudes at discrete points in time, we employ repeated measurements over a longer time horizon. This approach enables us to capture substantial shifts in attitudes and exposure to violence as the conflict evolves.

Methodologically, we demonstrate high correlations between individuals' self-reported exposure to violence and media-reported violence. These findings suggest that common survey concerns such as survivorship bias and recall bias may be less significant when studying conflict-affected populations during rather than after the conflict. These results validate prior research suggesting that real-time sampling during conflict yields more precise insights into how violence shapes attitudes and behaviors. Additionally, our findings suggest that observational micro-level data may be a viable alternative for measuring exposure to violence when other survey methods are impractical due to cost or safety concerns.

2. Public support for settlement in political conflicts

There are two competing theories on how violence influences the public support for settlement in political conflict. One group of scholars argues that exposure to violence hardens the public's willingness to compromise. For instance, studies of terrorism in the U.S. and Israel have found that exposure to violence increases hardline attitudes, and opposition to compromise (Hersh, 2013; Getmansky and Zeitzoff, 2014). Many of these studies argue that exposure to violence or terrorism, primes stress, anger, or anxiety, and that these in turn foment more hawkish security attitudes as a way of managing the emotions and stress from victimization (Hirsch-Hoefler et al., 2016; Kupatadze and Zeitzoff, 2021). Additional research suggests a more nuanced perspective. It finds that civilians who become victims are *less* likely to support a counterinsurgency effort after being victimized (Lyall, 2009). Fabbe et al. (2024) show that victimization can turn civilians against all sides in conflict without becoming politically indifferent. Moreover, civilians may assign blame differently depending on the identities of the victim and the perpetrator (Condra and Shapiro, 2012; Lyall et al., 2013).

Another group of scholars finds that people exposed to even extreme wartime violence may be open to negotiation. Kreiman and Masullo (2020) shows that in the context of the 2016 Colombian peace referendum between the Colombian government and the Revolutionary Armed Forces of Colombia (FARC), individuals victimized by the FARC were more likely to support the agreement, viewing this agreement as a means to enhance their own security. Hazlett (2020) connects this to the idea of war weariness, and uses evidence from the War in Darfur to show that some civilians who get victimized—rather than being hardened—are war weary, and favor peace and compromise.

Scholars suggest that measurement issues might explain the mixed findings in previous literature. The first issue concerns the failure to differentiate between values or points that the public will not compromise on (i.e., red lines or sacred values) and points that they are willing to negotiate over (i.e., negotiables). Research from psychology and international relations suggests that moral values play an important role in shaping attitudes toward peace and security (Kertzer et al., 2014). In particular, certain values, beliefs, or positions are believed to be sacred (Tetlock, 2003; Atran and Axelrod, 2008). Unlike negotiable beliefs, sacred values are viewed through a deontological lens and are seen as moral imperatives rather than bargaining chips (Ginges et al., 2007; Ginges, 2019).

The second issue is that measuring public opinion during conflict poses challenges. Most previous studies linking conflict exposure and victimization occur after the conflicts have ended (Bauer et al., 2016). This timing can introduce various biases into estimates. For example, population composition may change post-conflict due to movements or fatalities (survivorship bias). Additionally, respondents may inaccurately recall past events (recall bias). Even in surveys conducted during conflicts, the mode of sampling and contact can favor individuals with varying degrees of conflict exposure, potentially biasing the results (sampling bias) (Johnson et al., 2008; Jewell et al., 2018).

3. Dynamics of negotiation preferences in conflict contexts

Our theory on the effects of exposure to violence posits that exposure to violence influences public attitudes toward negotiations differently in the short term compared to the long term. This variation hinges not merely on willingness to negotiate but on the specific issues individuals are willing to bargain over.

Our theory is grounded in two key points. First, we distinguish between a general willingness to negotiate and the specific stance individuals take on different negotiation points. Simply being in favor of negotiation does not imply a uniform willingness to adopt more conciliatory positions across all issues. In other words, individuals may support negotiation in principle, but may still strongly oppose some of the concessions. For example, individuals may support peace talks as a means to end hostilities but may strongly oppose concessions on territorial sovereignty or fundamental political rights. Thus, their willingness to negotiate does not translate into agreement on all aspects of the negotiation

agenda. We therefore expect individuals to vary with respect to their support for concessions across different issues (*Hypothesis 1*).

> *H1 (Variation in Support for Concessions Hypothesis): H1A: People will have principled views on support for negotiating in general. H1B: But even among those who support negotiation in principle, there will be rank-ordering of concessions—with certain concessions being more or less acceptable.*

The second part of our theory concerns the distinction between sacred values—red lines that individuals are unwilling to negotiate over—and negotiable points where flexibility is possible (Ginges et al., 2007). Individuals hold principled views on peace settlements, which include a rank ordering of provisions they find acceptable versus unacceptable. For instance, sovereignty over certain territories or core national identity might be considered sacred values, non-negotiable under any circumstances (Dill et al., 2024). Conversely, issues like economic reparations, border adjustments, or resource-sharing agreements may be negotiable, where individuals might be more willing to compromise based on strategic or pragmatic considerations. This hierarchical ranking reflects a nuanced approach to negotiation dynamics, where different elements of a peace agreement carry varying degrees of importance and resistance to compromise.

We argue that in the short term, exposure to violence tends to make individuals more supportive of concessions (*Hypothesis 2*).[1] The direct experience of conflict profoundly impacts individuals by heightening their sense of vulnerability and urgency for peace. Witnessing the devastating effects of conflict on communities fosters a strong desire to alleviate suffering and restore stability quickly. Moreover, the practical realities of living in a conflict zone—such as disruptions to daily life, economic hardships, and loss of livelihoods—often drive people to seek pragmatic solutions through negotiation. These experiences will lead individuals to prioritize negotiations and compromise on certain issues in exchange for immediate relief and the prospect of rebuilding shattered lives.

> *H2 (Short-term Concession Effect of Violence Exposure Hypothesis): Exposure to violence is more likely to increase public support for concessions.*

As conflicts persist over time, individuals often become more steadfast in their positions on issues they might have been more willing to negotiate earlier in the conflict (*Hypothesis 3*). Prolonged exposure to violence and hardship can reinforce individuals' commitment to their initial stances as they endure the cumulative impact of conflict on their lives and communities. Moreover, as the conflict deepens, issues that were initially considered up for negotiations may become increasingly intertwined with core values, identity, or survival, making compromise appear more difficult or less desirable. In the context of the Syrian civil war, for instance, control over strategic cities like Aleppo was initially on the table for potential ceasefires or peace talks. However, as the conflict prolonged and various factions entrenched their positions, control over Aleppo became symbolically and strategically significant, intertwined with broader geopolitical and sectarian interests, making compromise increasingly difficult and less desirable (Scherling, 2021). Furthermore, prolonged conflict can breed mistrust and resentment, further solidifying opposing positions and reducing the willingness to engage in concessions.

> *H3 (Long-term Entrenchment Effect of Violence Exposure Hypothesis): Prolonged exposure to violence tends to harden public attitudes over time, reducing willingness to make concessions on previously reconcilable matters.*

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[1] We acknowledge that this may be mediated through emotions, cognitive appraisals, or threat perceptions (Canetti et al., 2013; Getmansky et al., 2018; Kupatadze and Zeitzoff, 2021).

4. 2022 Russian invasion of Ukraine

The large-scale Russian invasion of Ukraine is one of the most important geopolitical events in recent years. It precipitated Europe's largest refugee crisis since World War II, displacing over one-quarter of Ukraine's population—15.8 million people—of whom about 6.5 million have become refugees by fleeing the country (United Nations High Commissioner for Refugees, 2024). In addition to the fierce fighting between Ukraine and Russia, the conflict has also served as a proxy battle involving major powers—the U.S. and European Union opposing Russia, with China playing a secondary role.

Peace negotiations between Ukraine and Russia have been ongoing throughout the conflict (Charap and Radchenko, 2024). While there has been considerable debate about potential terms for a negotiated settlement, less attention has been paid to the parameters that Ukrainians themselves would find acceptable. Any peace deal negotiated by Ukraine would likely need to be ratified via a public referendum, and Ukrainian politicians are cognizant of not agreeing to an unpopular settlement. For instance, President Zelensky has emphasized the need for any compromises with Russia to be subject to a referendum (Wood, 2022). Against the backdrop of intense combat and reports of atrocities and war crimes allegedly committed by Russian forces against Ukrainians in occupied towns like Irpin and Bucha, understanding how exposure to wartime violence influences Ukrainian public opinion toward any peace settlement is both crucial and timely.

We begin by providing a brief overview of the events in Ukraine from Russia's invasion on February 24, 2022, through to May 1, 2023, which marks the beginning of our survey's last wave. We next discuss the types of violence experienced by Ukrainians as a result of these events and their attitudes toward Russia in general, as well as their preferences regarding a peace settlement prior to May 1, 2023.

4.1. Conflict background

On February 24, 2022, the Russian forces started their invasion of Ukraine by land, sea, and air. Russian troops moved across the Ukrainian border from the north advancing on the Ukrainian capital of Kyiv, the northeast advancing on the Ukraine's second largest city of Kharkiv, and the east from the occupied territories of Donbas; they also landed in the southern city port of Odesa and fanned out from the Crimea into the directions of Kherson and Mariupol hoping to establish a land bridge between the Crimea and Donbas (Dijkstra et al., 2022). To support ground operations, the Kremlin also used its air power to bombard Ukrainian cities and towns, primarily aiming at military and critical infrastructure objects all over Ukraine but sometimes hitting residential neighborhoods in densely populated urban areas (Wetzel, 2022). As a result of the violence, after 100 days of the conflict, nearly 7 million Ukrainians had fled the country (United Nations High Commissioner for Refugees, 2022b).

Vladimir Putin hoped to overthrow the Ukrainian government in a matter of a few days. But Russian forces met significant resistance and had to pull back after a few weeks of fighting. When retreating, the Russian forces were credibly implicated in atrocities and war crimes against Ukrainian civilians (Gall and Berehulak, 2022). Air, missile, and artillery strikes of civilian areas also intensified.[2] Splitting its troops across many different fronts, Russian progress ground to a halt in April. As a result, the Kremlin changed its strategy and redeployed its troops to concentrate on a narrower target—Donbas. Seizing eastern Ukraine became Russia's new main objective in the war (Gibbons-Neff, 2022). Despite that, the Kremlin continued bombing major Ukrainian cities and towns from the Belarusian airspace, the warships in the Black Sea, and the aircraft flying over the Caspian Sea, hitting civilian infrastructure and residential neighborhoods (Santora Mark, 2022).

In late August 2022, Ukraine launched a counteroffensive against Russian forces in the south, breaching Russia's initial defense line near Kherson. By early September, Ukrainian forces had made

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[2]According to the UN data, far more Ukrainian civilians were killed or injured during March than in any other month of the war (Office of the United Nations High Commissioner for Human Rights, 2022).

substantial territorial gains, reclaiming parts of Kharkiv oblast and advancing toward Luhansk. However, by mid-November of 2022, Ukrainian forces encountered their second stalemate, which persisted until April 2023. As of May 2023, Russia maintained control over approximately eighteen percent of Ukrainian territory, primarily in the east and southeast of Ukraine (Daalder, 2023).

4.2. Exposure to violence as a result of war

The summary of the events above suggests that there is a significant variation in the exposure to violence among civilians. This ranges from individuals who have only experienced violence through media accounts to those who have been direct victims of torture, rape, and other forms of violence (United Nations High Commissioner for Refugees, 2022a). In the western regions of Ukraine, civilians did not witness on-the-ground combat directly; some of them fell victim to aerial bombardment that destroyed their homes and claimed lives of their loved ones. In contrast, many citizens of the northeastern, eastern, and southern Ukraine, where the most intense fighting occurred, either fled these areas or endured severe acts of violence (Kortava, 2022). Two cities, Irpin and Bucha, gained particular notoriety as sites of massacres committed by invading Russian soldiers. These incidents included the execution of civilians, cases of rape, and torture during Russia's brief occupation of these two localities just outside of Kyiv (Bezpiatchuk, 2022). Witnesses and investigators discovered mass graves containing several hundred Ukrainian civilians, bearing evidence of torture and abuse (Kullab, 2024).

4.3. Public preferences regarding a peace settlement

To understand whether and how this exposure to violence influences the Ukrainian public toward any potential peace settlement with Russia, we first need to understand which factors drove foreign policy preferences among Ukrainians prior to the conflict start and during the earlier stages of war taking place in Donbas (2014 and 2021). Research shows that older Ukrainians (Onuch and Arkwright, 2021), those who did not participate in the Revolution of Dignity (Euromaidan) (Pop-Eleches et al., 2022), and those who benefited from an economic relationship with Russia (Beesley, 2020) were more likely to prefer a warm relationship with Russia than with the EU countries. The War in Donbas further shaped these preferences. Rozenas and Zhukov (2019) show that Ukrainian citizens who lived in the territories controlled by the Russian separatists were more hesitant to express anti-Russian views due to the fear of retribution than those citizens who did not live in these territories. Additionally, citizens in Donetsk and Luhansk regions weighted the tactics employed by both Ukrainian government and separatists forces, with disapproval of civilian targeting varying based on attitudes toward the Ukrainian government (Lupu and Wallace, 2023).

The ongoing regional war, crises, and the subsequent full-scale Russian invasion further shaped public opinion in Ukraine. In the three years leading up to the invasion, there was a gradual decline in positive attitudes toward Russia. By May 2022, only two percent of the Ukrainians held a positive attitude toward Russia, mostly those residing in the East (Kyiv International Institute of Sociology, 2022).

Research shows that war experiences shored up civic identities and not ethno-linguistic or ethno-national identities among the Ukrainian public. Increasingly, citizens identify with the Ukrainian state and not with Ukrainian ethnicity and language while also aligning more with pro-democratic and pro-European positions (Onuch, 2022). In particular, the 2021-2022 survey results show that the Russian invasion of Ukraine resulted in greater support of joining the EU (+ 16%) and NATO (+ 5%) among Ukrainians (Howlett and Müller-Crepon., 2022). Regarding opinions on ending the conflict, there has been a growing reluctance to make concessions to Russia in exchange for peace. For instance, in May 2022, eighty-two percent of survey respondents expressed opposition to any territorial concessions. Even among the residents in the East and South who have experienced significant

fighting, the majority of respondents are against giving up any territories (Ilko Kucheriv Democratic Initiatives Foundation, 2022). By May 2023, a survey carried out by the National Democratic Institute (NDI) found that since the start of war support among Ukrainians joining NATO had surged from 65 to 85 percent, while belief in Russia's willingness to negotiate in good faith declined sharply from 59 to 33 percent (National Democratic Initiatives, 2023).

5. Research design

To test how violence exposure affects wartime attitudes in Ukraine, we fielded survey experiments using combined mobile phone and online sampling frames. While mobile phone coverage is high in Ukraine, conflict-related service interruptions and displacement can miss certain populations (Collier and Talmazan, 2022). Online panels (although they allow to track how shifts in exposure to violence affect attitudes) skew younger, more educated, and urban demographics. Combining phone surveys with online panels allows to minimize coverage bias.

Our study was conducted over three waves. The first two waves in July 2022—with a two-week interval between them—were used to gauge how short-term changes in violence affect attitudes. In Wave 1, we utilized both phone and online samples. In Wave 2, we used an online sample since it allowed us to recontact the respondents at a high rate and reduce attrition. In Wave 3 in May 2023, we fielded a phone survey to study the long-term effects of conflict.[3]

5.1. Wave 1 (July 1–July 12, 2022), mobile phone and online panel

The mobile phone sampling involved 3,016 respondents from areas under Ukrainian control (see Figure 1) and was carried out by the Kyiv International Institute of Sociology (KIIS), one of the most respected survey firms in Ukraine.[4] The online panel (see Figure 2) was fielded between 1 and 7 July, 2022 via the Kantar online survey panel and had 1,729 respondents.[5]

The Wave 1 mobile phone and online surveys used identical questions. Following questions on basic demographics and political attitudes, we asked respondents about their general willingness to negotiate with Russia. We then asked about their principles and attitudes toward negotiations with Russia through a set of questions, such as whether Ukraine should do whatever it takes to stop the violence, whether it needs to be strategically smart, or whether Russia cannot be trusted (Negotiating Principles). Following this, we asked respondents how much they would support or oppose the following components of any deal (Peace Components):

(1) Ukraine agreeing to not join NATO
(2) Western countries like the U.K. and U.S. providing military security guarantees to protect Ukraine military in the event of future conflicts

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[3]While our survey design sought to balance representativeness and logistical feasibility, we recognize that wartime conditions may still introduce important sources of bias into respondents' answers. In particular, individuals exposed to violence may experience heightened stress or symptoms of post-traumatic stress disorder (PTSD), which can influence recall and shape how attitudes are reported (Rubin et al., 2008). Furthermore, social desirability bias may affect responses, especially when questions relate to sensitive topics such as national loyalty, attitudes toward the enemy, or support for peace (Fisher, 1993). Although self-reported data remains essential for understanding personal and political attitudes during conflict, we sought to mitigate these limitations through methodological triangulation. The use of both panel and cross-sectional designs across multiple survey modes allowed us to cross-validate findings and assess changes over time. Future research might further improve validity by incorporating behavioral indicators or leveraging natural experiments to isolate causal effects of exposure to violence (Blattman and Annan, 2010). Despite these challenges, we believe our multi-method approach provides a robust framework for capturing the complex relationship between wartime experiences and political attitudes.

[4]The response rate using the American Association of Public Opinion Researchers (AAPOR) using RR1-2 was 8.8%, and AAPOR RR3-4 was 9.3%.

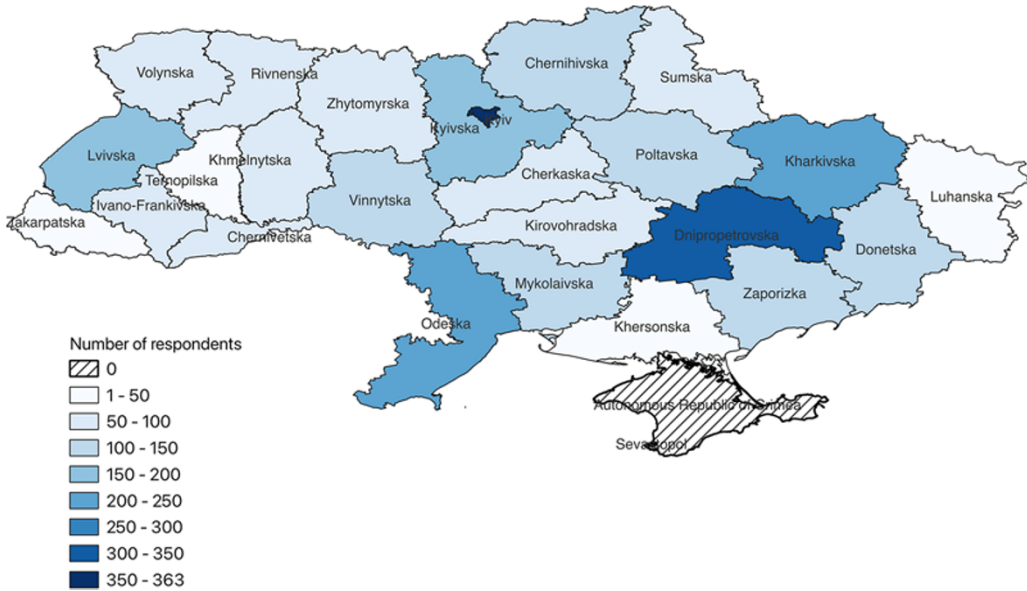[5]See https://www.kantar.com/locations/ukraine#_=
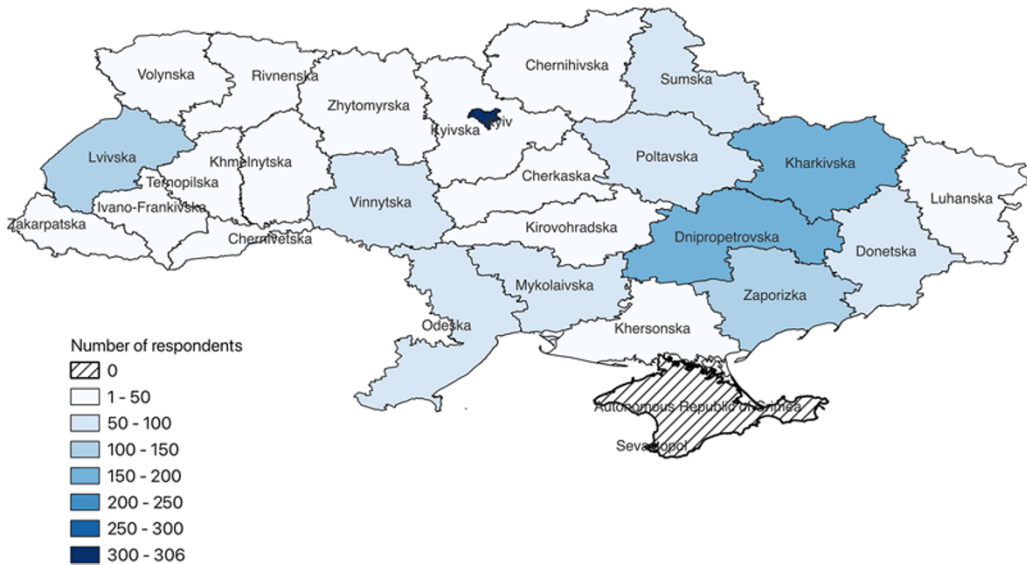
Figure 1. Telephone wave 1 map.

Figure 2. Online panel map.

(3) Russian language can be used as an official language in Ukraine where a majority of the population wants it
(4) Crimea recognized as part of Russia
(5) DNR and LNR recognized as independent states within all of the Donetsk and Luhansk oblasts
(6) Shrinking the size and strength of the Ukrainian military
(7) Letting people in the DNR and LNR zones decide in a vote whether they want to stay in Ukraine or join Russia

(8) Ukraine renounces joining the European Union
(9) Zelensky stepping down as president

We then presented respondents with our "poison pill" survey experiment about a hypothetical peace agreement with Russia. "Suppose the following peace agreement is agreed to with Russia: 1) Halt of all violence; 2) Russia removes its military to pre-war lines (pre-February 24, 2022); and 3) Russia recognizes that Ukraine is a legitimate, independent country." But within this hypothetical peace agreement, we randomly included one "poison pill" component (Poison Pill). "Now suppose a similar peace agreement is agreed to with Russia" and then we randomly presented respondents with one of the four poison pills shown below:

(1) But Zelensky has to step down as leader of Ukraine
(2) But Ukraine has to recognize Crimea as part of Russia
(3) But Ukraine has to let people in the LNR/DNR vote on whether they want to stay part of Ukraine or join Russia
(4) But Ukraine has to renounce ever joining the European Union

We then measured support for the hypothetical peace agreements.

Finally, at the end of the survey, we also measured exposure to violence in several ways. We asked respondents how often they had experienced the following: 1) heard shelling, 2) heard bomb sirens, 3) heard gunfire, 4) been scared to leave the house, 5) had to go in a bomb shelter, and 6) seen people wounded or injured from the violence both in the *past week* and *since the war began on February 24, 2022*.[6]

5.2. Wave 2 (July 15–July 22, 2022), online panel

Our Wave 2 online survey was conducted via Kantar's online panel with 1,729 individuals who had participated in the Wave 1 online panel. To measure any longitudinal shifts in attitudes and exposure to violence, we asked the following questions from Wave 1: respondents' willingness to negotiate with Russia, individuals' principles and attitudes about negotiating with Russia (Negotiating Principles), and their support for different possible components of a hypothetical peace deal (Peace Components).

To measure exposure to violence between the two waves, we also asked respondents to answer those same exposure to violence questions as in Wave 1 but asked how often they experienced them in the *past two weeks*.

5.3. Wave 3 (May 26–June 5, 2023)

Our last survey was fielded by KIIS via telephone, using a similar sampling procedure to the Wave 1 phone survey (see sampled oblasts in Figure 3).

This survey focused on support for a possible peace agreement and the Poison Pill experiment, as well as questions on exposure to violence.

Table 1 shows which relevant variables are included in which survey wave. Ideally, utilizing all samples and questions across different waves would be optimal. However, due to the substantial costs involved in conducting surveys and survey experiments in conflict settings, we have chosen to include only essential variables in each wave. This approach enables us to effectively address our research questions while managing resources responsibly.

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[6]Due to potential concerns about social desirability bias, on the online panel survey we also asked a more indirect measure of exposure to violence. "For someone living in a similar community and neighborhood to your home community (the community you lived in before the war began), how often have they experienced the following since the war began on February 24, 2022?" We found that this was highly correlated with our direct measure. See the Online Appendix Section 3, where we show that our self-reported exposure to violence and observational measures of exposure to violence are correlated.
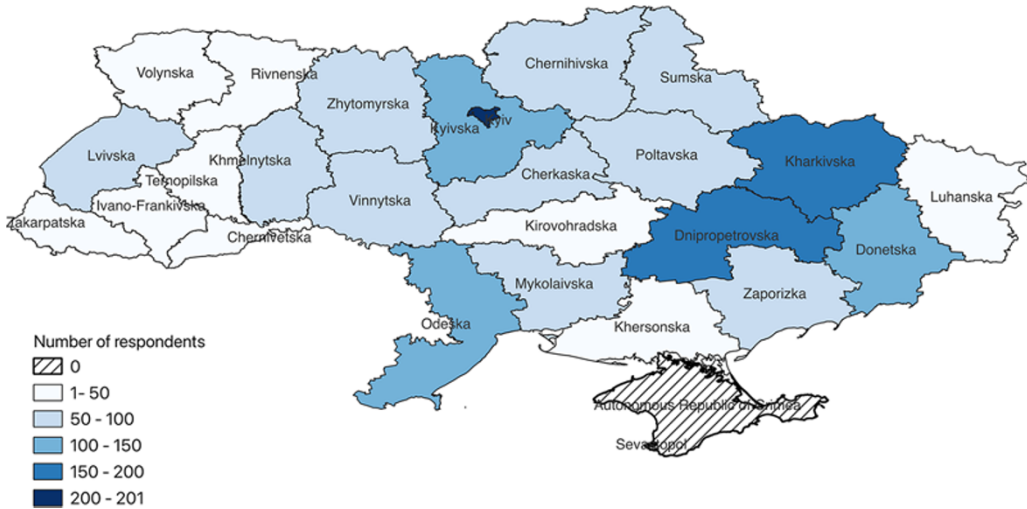
Figure 3. Telephone wave 3 map.

Table 1. Comparison of survey waves

	Online 1 N=1,729	Online 2 N=1,729 *July 2022*	Phone 1 N=3,016	Phone 2 N=2,013 *May-June 2023*
Negotiation Principles	✓	✓	✓	
Peace components	✓	✓	✓	
Exposure to violence	✓	✓	✓	gunfire + knowing killed/injured
Respondent knows people killed/injured	✓	✓	✓	
Poison pill	✓		✓	✓
Reasons for Ukraine's military success	✓	✓	✓	

The overview of the data and descriptive statistics are in the Online Appendix.

6. Findings

In this section, we present our main findings. First, we look at the poison pill experiment to see how territorial issues, domestic political arrangements, and the prospect of joining the EU constitute red lines, and preclude individuals from supporting a peace agreement (*H1*). We also examine positions on negotiating principles and peace components. We then analyze how short- and long-term violence (*H2* and *H3*, respectively) shape individuals' willingness to negotiate and compromise.

6.1. Which red lines cannot be crossed

In this subsection, we report the results of the "poison pill" experiment. Figure 4 shows the distribution of means and 95% confidence intervals over three survey samples across two survey waves (Wave 1 and Wave 3). The baseline (pre-treatment) support for an agreement with Russia is around 60% support in the first online and telephone waves in June 2022, and about 50% support in the third wave in May 2023. This baseline support is relatively low possibly for two reasons: First, some respondents may have opposed Russia withdrawing only to February 24, 2022 lines while maintaining control of Donbas and Crimea. Second, respondents who consider 2014 the war's start may have found the "pre-war" phrasing problematic. Other surveys report higher support (80%) for peace agreements restoring Ukraine's pre-2014 territory, including Donbas and Crimea (National Democratic
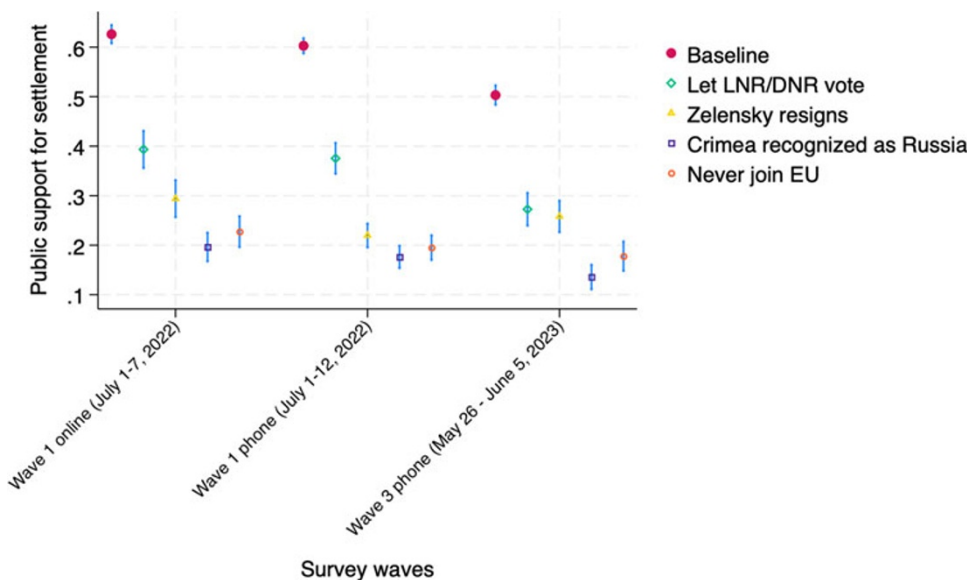
Figure 4. Experimental primes influence public support for settlements.
Notes: Baseline condition is observed for all respondents in the first online wave and telephone sample (Wave 1) and in the second telephone sample (Wave 3). Experimental arms split each pool into four randomized conditions with balanced group sizes. Mean and 95% confidence interval are reported for all conditions.

Initiatives, 2023). Support for the agreement drops in all treatment groups relative to the baseline suggesting that the items we include as poison pills indeed receive lower support.[7] We return to the question of long-term effects of war toward the end of this article.

Next, we examine the poison pills on support for an agreement focusing on percentage change from the baseline as shown in Figure 5. The poison pills vary in their effect on baseline support in line with *H1*. LNR/DNR vote has the least negative effect on support especially in the 2022 samples, whereas the other poison pills lead to a larger drop in support for an agreement, especially the recognition of Crimea as part of Russia and a Ukrainian pledge not to join the EU.[8]

This variation suggests that some issues constitute a stronger red line than others because fewer respondents are willing to compromise on them in order to reach a deal. In particular, at the beginning of the war, we identify LNR/DNR vote as a negotiable, i.e., a relatively weak red line. In contrast, the other poisonous pills constitute stronger red lines during the first two survey waves.[9] We interpret these findings as evidence that Ukrainians are strongly opposed to any concessions that would directly constrain Ukraine's political trajectory—whether by ceding territory to Russia (e.g., Crimea) or foreclosing the prospect of joining the European Union.

Moving on to the 2023 experiment (Wave 3), we find that the effect of LNR/DNR vote is now more negative, and it leads to a greater decline in support in terms of percentage change from the baseline. This suggests that as the war drags on, respondents harden their attitudes, especially on issues that

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[7] Figure A-9 in the Online Appendix demonstrates this erosion using a coefficient plot based on a regression of baseline support level on dummies of the survey wave, controlling for several respondent characteristics. These results also point to a decrease of about 10 percentage points in support for the agreement.

[8] This is consistent with the answers to the peace terms questions: voting by LNR/DNR on their future received more support than granting independence to LNR/DNR (see Figure A-4(b) in the Online Appendix).

[9] Examining the distribution of answers to the principles for negotiation and terms of peace questions (Figure A-4 in the Online Appendix) also reveals a variation in preferences across the issues. In particular, territorial concessions (recognizing Crimea as part of Russia and accepting the independence of LNR/DNR) receive significantly lower support than some political concessions (e.g., recognizing Russian as official language and agreeing not to join NATO).
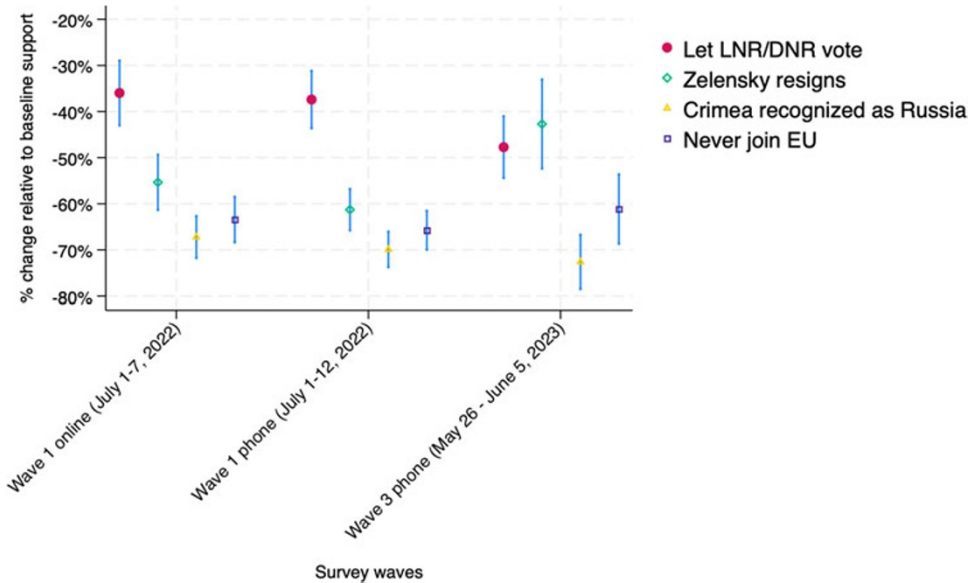
Figure 5. Percentage change in support for an agreement relative to the baseline.
Notes: This figure shows the mean percentage change in baseline support following the different poison pills and across the three samples and the 95% confidence interval.

they were more likely to compromise on at the beginning of the war. Zelensky's resignation on the other hand, while still a poison pill, now has a smaller effect on support than before. Other poison pills have a similar effect on change relative to baseline as before.

6.2. Short-term effects of exposure to violence on attitudes

How does exposure to violence affect attitudes toward principles of negotiation and components of peace in the short term (*H2*)? To answer this question, we use data from the two waves of our online panel.

Given the significant correlation between self-reported violence exposure and negotiation/peace responses (see Online Appendix), we use principal component analysis (PCA) to reduce dimensionality and identify underlying patterns (Abdi and Williams, 2010). We create principal components for violence, negotiation principles, and peace components. Using online panel data, we explore how changes in violence exposure between survey waves affect preferences toward negotiation and peace components.

Panel (a) in Figure 6 shows that PC of violence exposure has a positive but not statistically significant effect of .066 on willingness to negotiate with Russia (95% CI [-.012; .145], $p < .095$), corresponding to a 6.6 percentage point increase. The only significant effect of violence exposure PC is on respondents' views of whether negotiating with Russia is strategically smart for Ukraine.

Panel (b) in Figure 6 reveals that PC of violence exposure has a positive effect of .100 on willingness to consider peace components (95% CI [.056; .145], $p < 0.000$), corresponding to a 10 percentage point increase. Specifically, violence exposure PC significantly increases support for DNR/LNR independence, reducing Ukraine's army size, and rejecting EU membership. Effects on other components are not significant.

These results are in line with our *Hypothesis 2*: The short-term effect of exposure to violence increases support for concessions only on some of the issues, and these issues are red lines rather
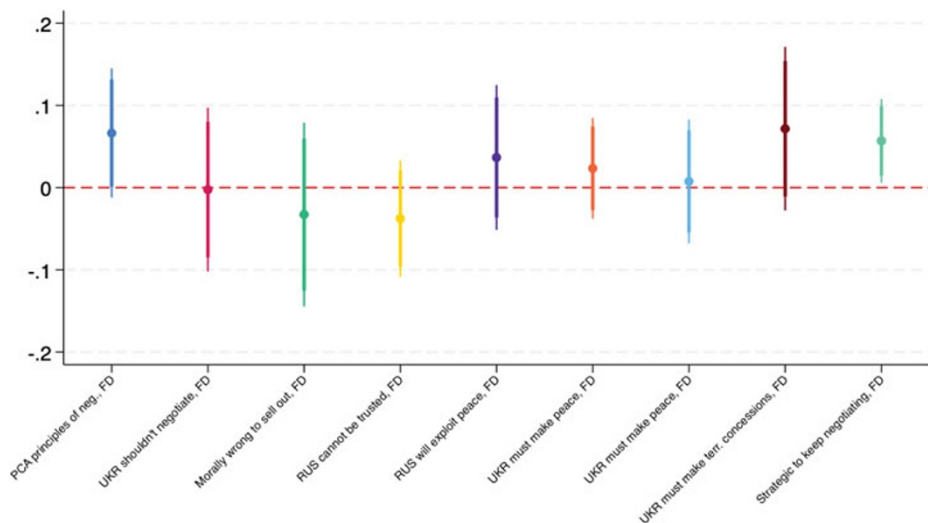
(a) Negotiating principles
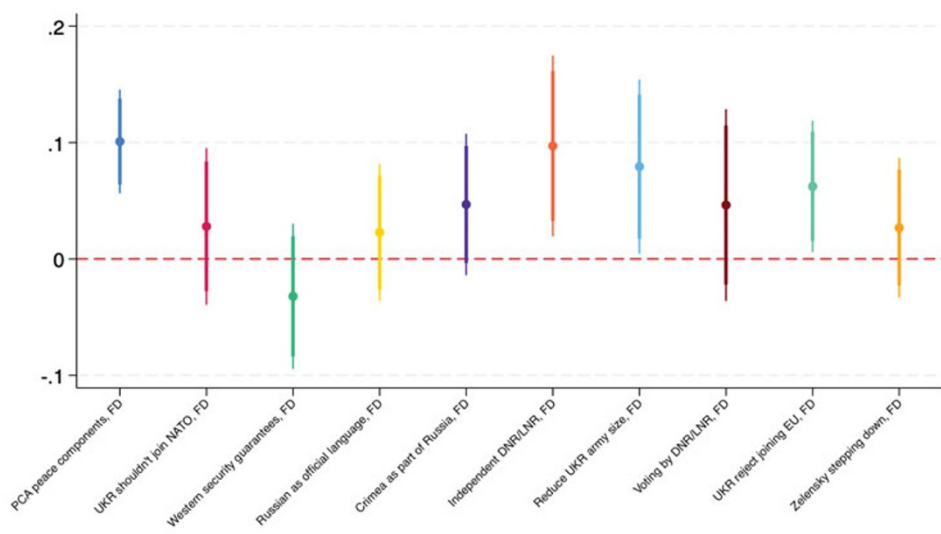
(b) Peace terms

Figure 6. First-difference estimates of relationship between violence exposure and attitudes, online panel. (a) Negotiating principles. (b) Peace terms.
Notes: Coefficient plots show relationship between the change in violence exposure between waves (first differences) and the change in respondent attitudes toward different principles of negotiation (Figure 6(a)) and peace terms (Figure 6(b)). Violence exposure is measured using the principal components (first) of self-reported exposure to violence. Principal components (first) of negotiation principles and peace terms are the outcomes of the first coefficient in the first and the second figure, respectively. Other coefficients show the relationship between principal component of violence exposure and different principles of negotiation and peace terms. Oblast-level fixed effects are included in each regression. These effects capture within-respondent, within-region variation (Correia, 2016). Standard errors are clustered by oblast. All variables are rescaled to lie between 0 and 1.

than negotiables. According to the poison pill experiment, Ukraine not joining the EU has low public support. The mean level of public support for DNR/LNR being recognized as independent states and reducing the size of the Ukrainian army are also low and hence should be considered as red lines as well (see Figure A-4b in the Online Appendix).

Our findings suggest that violence exposure somewhat increases willingness to consider certain peace components, particularly recognizing DNR/LNR independence, reducing Ukraine's army, and forgoing EU membership. Are these results geographically clustered or prevalent nationwide? We find no evidence of clustering. Appendix Figures A-11 and A-12 demonstrate that results are consistent across oblasts and robust to jackknife resampling (removing one region at a time).

Which types of violence drive the significant PC effects? Figures 7 and 8 present these results. Seeing wounded significantly affects all four attitudes. Hearing gunfire also increases support for three peace components: recognizing DNR/LNR independence (Figure 7(b)), reducing Ukraine's army (Figure 8(a)), and rejecting EU membership (Figure 8(b)). These findings demonstrate that different types of violence have varying effects on negotiation willingness, consistent with earlier research (Brett, 2007).

6.3. *What shifts attitudes toward negotiations in the long-term?*

A key question is whether these findings align with long-term sentiment toward peace negotiations. Figure 4 reveals that by May 2023, Ukrainians became less willing to compromise with Russia—support for an agreement declined by about 10 percentage points compared to the 2022 telephone survey.

There are two possible explanations. First, has exposure to violence hardened Ukrainians' attitudes, decreasing their willingness to settle (*Hypothesis 3*)? To test this explanation, we examine several measures of violence exposure (Figure 9). If exposure reduces support for an agreement, we would expect to see a negative correlation between measures of exposure and baseline support for an agreement. This is what we see when we measure exposure to violence using the number of people a respondent knows who were killed: Respondents who report knowing above median of the reported number are about 5.6 percentage points less likely to support an agreement with Russia than those who report knowing less than the median number of those reported by other respondents. We do not see a correlation between support for an agreement and exposure to violence measured as self-reported exposure to gunfire and the number of injured people that the respondent knows.[10]

A second explanation for the decline in agreement support relates to the timing of our follow-up survey. May 2023 marked the height of optimism about Ukraine's counter-offensive. Ukraine had withstood much of the Russian invasion and was preparing for a spring and early-summer counter-offensive. Ukrainian troops were training and maneuvering, while the military struck Russian logistics and ammunition depots.[11] Ukrainians may thus have been particularly optimistic about the war's trajectory and less willing to support a negotiated settlement at that time.

But throughout the summer and fall of 2023, the much-hyped Ukrainian counteroffensive ground to a halt. Russian air strikes continued to pound Kyiv and other major population centers, and

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[10]In the Online Appendix, Section 5, we also show results of regressions that add to our first difference models the PC of the respondents' exposure to different types of violence since the beginning of the war. These results are highly supportive of the explanation that long-term exposure hardens attitudes toward peace. The relationship between long-term violence exposure and components of peace is negative and significant for Crimea as part of Russia, voting by DNR/LNR, and Zelensky stepping down (Figure A-14b).

[11]Cotovio, Vasco Pleitgen, Frederik, and William Bonnett. "Unfazed by strikes, Ukrainians gear up for a counteroffensive." May 2023. *CNN*. See https://www.cnn.com/2023/05/30/europe/ukraine-counteroffensive-russia-preparations-intl/index.html. Hunder, Max. "Ukrainian troops gird for counteroffensive they hope will end war." May 2023. *Reuters*. See https://www.reuters.com/world/europe/ukrainian-troops-gird-counteroffensive-they-hope-will-end-war-2023-05-15/.
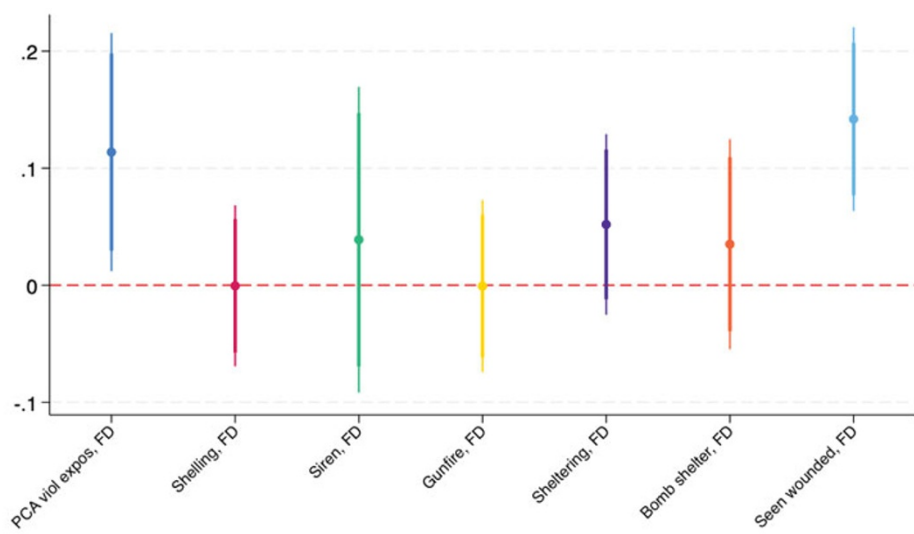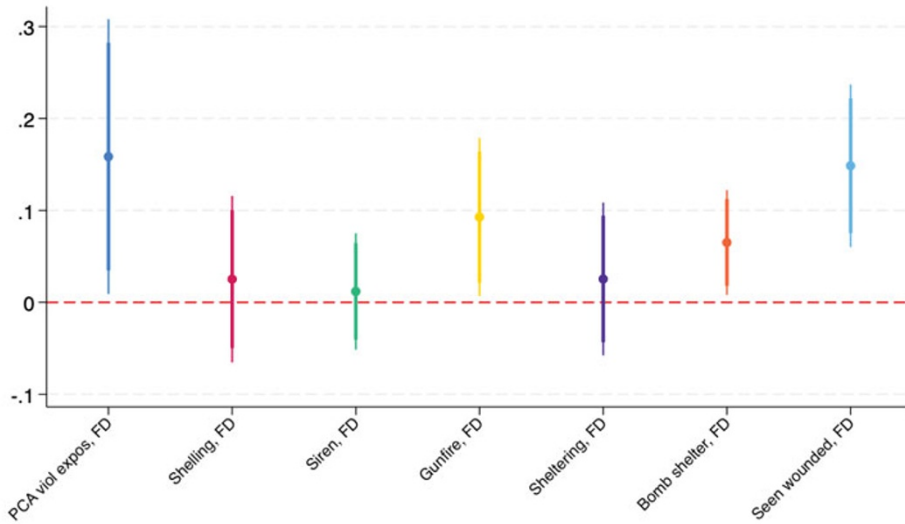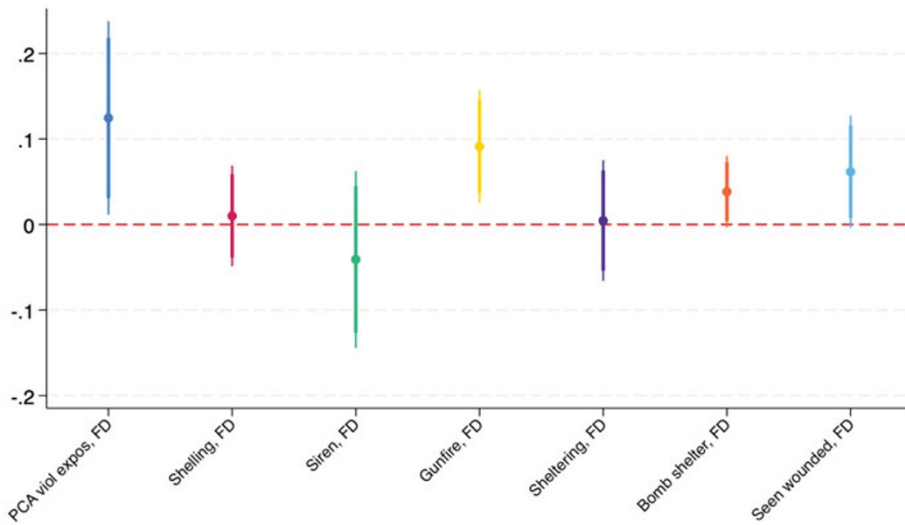
(a) Strategic to keep negotiating
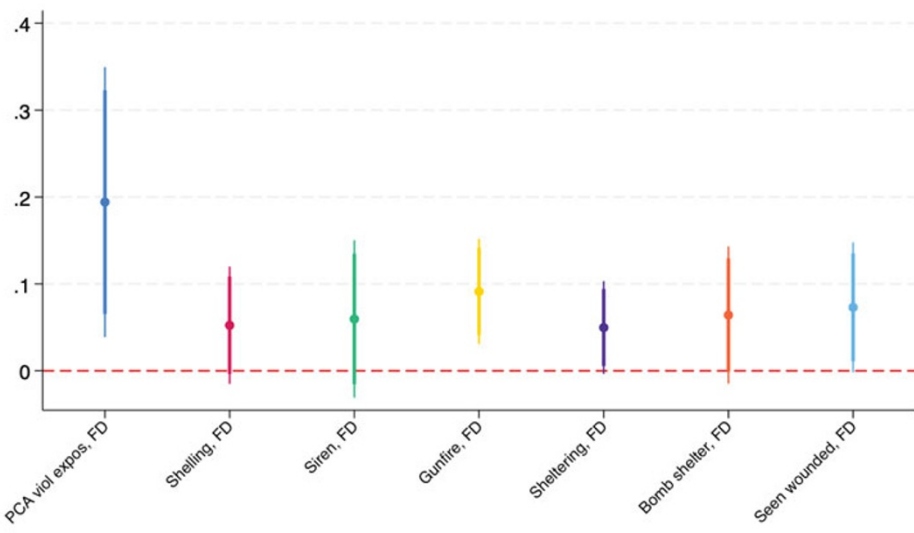
(b) Independent DNR/LNR

Figure 7. First-difference estimates of relationship between violence exposure and attitudes, online panel. (a) Strategic to keep negotiating. (b) Independent DNR/LNR.
Notes: Coefficient plots show relationship between change in violence between waves (first differences) and the change in respondent attitudes toward whether it is strategically smart to negotiate with Russia (Figure 7(a)) and independent DNR/LNR (Figure 7(b)). Principal components (first) of self-reported violence exposure is the first coefficient. Oblast-level fixed effects are included in each regression. These effects capture within-respondent, within-region variation (Correia, 2016). Standard errors are clustered by oblast. All variables are rescaled to lie between 0 and 1.

(a) Reduce UKR army size

(b) UKR reject joining EU

Figure 8. First-difference estimates of relationship between violence exposure and attitudes, online panel. (a) Reduce UKR army size. (b) UKR reject joining EU.
Notes: Coefficient plots show relationship between change in violence between waves (first differences) and the change in respondent attitudes toward Ukraine reducing its army size (Figure 8(a)) and Ukraine rejecting to join EU (Figure 8(b)). Principal components (first) of self-reported violence exposure is the first coefficient. Oblast-level fixed effects are included in each regression. These effects capture within-respondent, within-region variation (Correia, 2016). Standard errors are clustered by oblast. All variables are rescaled to lie between 0 and 1.
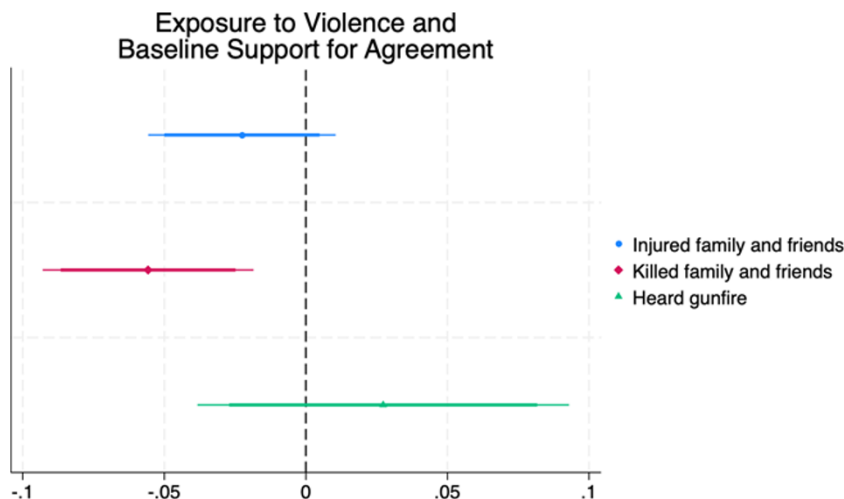
Figure 9. Exposure to violence and level of support for an agreement (May 2023 survey).
Notes: These are coefficient plots (95% confidence interval) based on a linear regression of support for an agreement with Russia on self-reported indicator of exposure to violence, controlling for age and fixed effects of respondent characteristics (gender, education, knowledge of Russian, and province dummy).

Ukrainian troops faced dug-in Russian defenses.[12] Data from a KIIS survey revealed that in May 2023, during the peak of optimism about the offensive, only 33% of Ukrainians supported negotiating with Russia. However, by November 2023, that figure had risen to 42%.[13] This trend extends beyond negotiations: Support for making territorial concessions for peace with Russia had nearly doubled from 10% in May 2023 to 19% in December.[14]

While we cannot directly compare the effects of optimism or pessimism about the war's course versus exposure to violence on determining support for negotiations in 2023, we can examine whether optimism about Ukraine's military strength is correlated with lower support for negotiating a deal with Russia based on 2022 surveys. To this end, we use a question repeated in the first online and the first telephone surveys, conducted in July 2022, about the extent to which different factors contributed to Ukraine's military success on a scale from 0 to 10 (see Figure A-8 in the Online Appendix). We focus on two factors: "Ukrainian soldiers" and "Russian army low quality." We use the difference between the two answers as a measure of military optimism. We regress the baseline support for an agreement with Russia on a binary indicator of whether a respondent is above the median of the military optimism measure. Figure 10 shows that individuals who are above the median military optimism are less willing to support an agreement with Russia. This is consistent with the argument that support for a negotiated solution is a function of individual assessment of the chances of prevailing militarily (Charap and Radchenko, 2024).

In sum, our findings suggest that both long-term exposure to violence and military optimism can decrease public support for a diplomatic solution. However, further research is necessary to fully untangle the separate influences of these two factors.

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[12]"Miscalculations, divisions marked offensive planning by U.S., Ukraine." December 2023. *The Washington Post.* See https://www.washingtonpost.com/world/2023/12/04/ukraine-counteroffensive-us-planning-russia-war/.

[13]"Opportunities and Challenges Facing Ukraine's Democratic Transition." November 2023. *National Democratic Institute.* See https://www.ndi.org/sites/default/files/November%202023%20wartime%20survey_public_ENG.pptx.pdf

[14]"Dynamics of readiness for territorial concessions to end the war as soon as possible." December 2023. *Kyiv International Institute of Sociology.* See https://kiis.com.ua/?lang=eng&cat=reports&id=1332&page=1
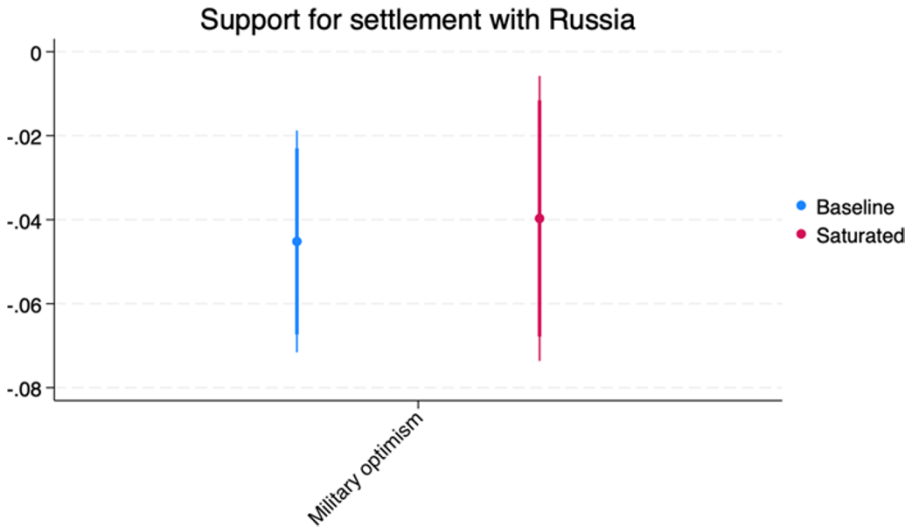
Figure 10. Military optimism and support for an agreement.
Notes: These are coefficient plots (95% confidence interval) based on a linear regression of support for an agreement with Russia on a binary indicator of being above the median of military optimism. The baseline model has no controls, whereas the saturated model controls for PC of violence exposure, age, and fixed effects of respondent characteristics (gender, education, knowledge of Russian, and province dummy).

7. Conclusion

How does wartime violence influence support for different possible peace settlements? To answer this question, we conducted a series of surveys and survey experiments in Ukraine in July 2022 and in May 2023. Using a survey experiment, we show that Ukrainians display flexibility on certain issues while viewing others as non-negotiable "red lines." For example, respondents are open to allowing the separatist regions in Donbas to vote on their status regarding Russia or Ukraine. In contrast, recognizing the Crimea as part of Russia or agreeing to never join the EU are widely considered red lines and unacceptable for negotiation.

Our findings also distinguish between short-term and long-term effects of violence exposure. Through a panel survey, we observed that short-term exposure to violence initially made Ukrainians somewhat more inclined toward negotiating with Russia. However, in a follow-up survey conducted ten months later, we found that Ukrainian attitudes toward any peace settlement with Russia had hardened. We suggest that this shift was influenced by both prolonged exposure to violence, which solidified negative attitudes, and fluctuating optimism about Ukraine's military prospects.

Our research demonstrates that the Ukrainian public maintains principled attitudes regarding negotiations while also revealing the significant impact of short-term and long-term exposure to violence on shifting public opinion. This first evidence of how the progression of conflict and ongoing exposure to war shapes the development of unyielding preferences among the population has three important implications for the literature on public opinion, war, and resolve.

First and foremost, we highlight the importance of distinguishing between "negotiables" and "red lines" in response to exposure to violence. Treating all issues uniformly under a broad willingness-to-negotiate framework can potentially yield misleading conclusions. Therefore, we believe that studies of public opinion in other cases of conflict should first aim to clarify which issues are considered as red lines and which are considered as negotiables by the public. Our results also imply that all else being equal, the longer a conflict lasts, the harder it becomes to end it due to a hardening of public attitudes as a result of long-term exposure to violence. This provides a potential explanation for the intractability of some conflicts, such as the Israel-Palestine conflict or the long duration of

some other conflicts, such as the conflict between Colombia and FARC rebels. At the same time, our theory and findings suggest that even in long-lasting conflicts, short-term spikes in violence may provide a window of opportunity for the resolution of the conflict due to a short-term softening of public attitudes.

Second, we underscore the significance of studying real-time public opinion dynamics alongside the evolution of the conflict. Analyzing public sentiment at isolated moments may overlook crucial shifts in attitudes and perceptions over time. Last, high correlations between individuals' self-reported exposure to violence and media-reported violence suggest that issues like survivorship bias and recall bias may be less pronounced when studying conflict-affected populations during rather than after the conflict. This indicates that real-time sampling during conflict provides more accurate insights into how violence influences attitudes and behaviors. Furthermore, these results suggest that using observational micro-level data is a viable alternative for measuring public exposure to violence when other methods are impractical due to cost or safety concerns.

Our results also suggest several considerations for policymakers engaged in conflict resolution. Understanding the delineations between negotiable and non-negotiable issues among the public is pivotal for crafting effective diplomatic strategies. Moreover, recognizing the varied impact of violence exposure on public sentiment over time highlights the need for nuanced approaches that adapt to evolving attitudes and perceptions amidst ongoing conflict. By acknowledging these dynamics, policymakers can better align negotiation efforts with the prevailing sentiments and priorities of the conflict-affected population, ultimately fostering conditions conducive to lasting peace and stability.

References

Abdi H and Williams LJ (2010) Principal component analysis. *Wiley Interdisciplinary Reviews: Computational Statistics* **2**, 433–459.

Atran S and Axelrod R (2008) Reframing sacred values. *Negotiation Journal* **24**, 221–246.

Bargh JA, Chen M and Burrows L (1996) Automaticity of social behavior: direct effects of trait construct and stereotype activation on action. *Journal of Personality and Social Psychology* **71**, 230.

Bartusevičius H, Van Leeuwen F, Mazepus H, Laustsen L and Forø Tollefsen A (2023) Russia's attacks on civilians strengthen Ukrainian resistance. *PNAS Nexus* **2**, pgad386.

Bauer M, Blattman C, Chytilová J, Henrich J, Miguel E and Mitts T (2016) Can war foster cooperation?. *Journal of Economic Perspectives* **30**, 249–74.

Beesley C (2020) Foreign policy preferences in Ukraine: trade and ethnolinguistic identity. *International Studies Quarterly* **64**, 35–44.

Bezpiatchuk Z (2022) Irpin: Russia's reign of terror in a quiet neighbourhood near Kyiv. *BBC*. https://www.bbc.com/news/world-europe-61667500.

Blattman C and Annan J (2010) The consequences of child soldiering. *The Review of Economics and Statistics* **92**, 882–898.

Brett JM (2007) *Negotiating Globally: How to Negotiate Deals, Resolve Disputes, and Make Decisions Across Cultural Boundaries*. San Francisco: John Wiley & Sons.

Canetti D (2017) Emotional distress, conflict ideology, and radicalization. *PS: Political Science & Politics* **50**, 940–943.

Canetti D, Hall BJ, Rapaport C and Wayne C (2013) Exposure to political violence and political extremism. *European Psychologist* **18**, 263–272.

Canetti-Nisim D, Halperin E, Sharvit K and Hobfoll SE (2009) A new stress-based model of political extremism: Personal exposure to terrorism, psychological distress, and exclusionist political attitudes. *Journal of Conflict Resolution* **53**, 363–389.

Charap S and Radchenko S (2024) The talks that could have ended the war in Ukraine. *Foreign Affairs* April 16. https://www.foreignaffairs.com/ukraine/talks-could-have-ended-war-ukraine.

Collier K and Talmazan Y (2022) Ukraine facing major regional internet outages as Russian invasion continues. *NBC News*. https://www.nbcnews.com/tech/tech-news/ukraine-facing-major-regional-internet-outages-russian-invasion-contin-rcna18973.

Condra LN and Shapiro JN (2012) Who takes the blame? The strategic effects of collateral damage. *American Journal of Political science* **56**, 167–187.

Correia S (2016) Linear models with high-dimensional fixed effects: an efficient and feasible estimator. *Technical report. Working Paper.*

Daalder I (2023) Stalemate best describes the state of war in Ukraine. *Politico*. https://www.politico.eu/article/stalemate-best-describes-the-state-of-war-in-ukraine/.

Dijkstra H, Cavelty MD, Jenne N and Reykers Y (2022) War in Ukraine *Contemporary Security Policy* **43**, 464–465.

Dill J, Howlett M and Müller-Crepon C (2024) At any cost: How Ukrainians think about self-defense against Russia. *American Journal of Political Science* **68**, 1460–1478.

Fabbe K, Hazlett C and Sinmazdemir T (2024) Threat perceptions, loyalties and attitudes towards peace: the effects of civilian victimization among Syrian refugees in Turkey. *Conflict Management and Peace Science* **41**, 263–288.

Fearon JD (2007) Fighting rather than Bargaining Annual Meeting of the American Political Science Association. August 30-September 2, 2007, Chicago.

Fisher RJ (1993) Social desirability bias and the validity of indirect questioning. *Journal of Consumer Research* **20**, 303–315.

Gall C and Berehulak D (2022) 'Such bad guys will come': how one Russian brigade terrorized Bucha. *International New York Times*.

Getmansky A, Sinmazdemir T and Zeitzoff T (2018) Refugees, xenophobia, and domestic conflict: evidence from a survey experiment in Turkey. *Journal of Peace Research* **55**, 491–507.

Getmansky A and Zeitzoff T (2014) Terrorism and voting: The effect of rocket threat on voting in Israeli elections. *American Political Science Review* **108**, 588–604.

Gibbons-Neff T *et al.* (2022) More cautious, Russia embarks on new phase of Ukraine war. *New York Times*. https://www.nytimes.com/2022/04/19/world/ukraine-russia-donbas-offensive.html.

Ginges J, Atran S, Medin D and Shikaki K (2007) Sacred bounds on rational resolution of violent political conflict. *Proceedings of the National Academy of Sciences*. **104**, 7357–7360.

Ginges J (2019) The moral logic of political violence. *Trends in Cognitive Sciences* **23**, 1–3.

Goemans HE and Fey M (2009) Risky but rational: War as an institutionally induced gamble. *The Journal of Politics* **71**, 35–54.

Hazlett C (2020) Angry or weary? How violence impacts attitudes toward peace among Darfurian refugees. *Journal of Conflict Resolution* **64**, 844–870.

Hersh ED (2013) Long-term effect of September 11 on the political behavior of victims' families and neighbors. *Proceedings of the National Academy of Sciences*. **110**, 20959–20963.

Hirsch-Hoefler S, Canetti D, Rapaport C and Hobfoll SE (2016) Conflict will harden your heart: exposure to violence, psychological distress, and peace barriers in Israel and Palestine. *British Journal of Political Science* **46**, 845–859.

Howlett M and Müller-Crepon C (2022) Changing Ukrainian opinions on security and EU revealed by wartime poll. Available at: https://www.politics.ox.ac.uk/news/changing-ukrainian-opinions-security-and-eu-revealed-wartime-poll. (accessed 7 December 2022).

Ilko Kucheriv Democratic Initiatives Foundation (2022) How the War Changed the Way Ukrainians Think About Friends, Enemies, and the Country's Strategic Goals. Available at: https://dif.org.ua/en/article/how-the-war-changed-the-way-ukrainians-think-about-friends-enemies-and-the-countrys-strategic-goals. (accessed 7 December 2022).

Jewell NP, Spagat M and Jewell BL (2018) Accounting for civilian casualties: from the past to the future. *Social Science History* **42**, 379–410.

Johnson NF, Spagat M, Gourley S, Onnela J-P and Reinert G (2008) Bias in epidemiological studies of conflict mortality. *Journal of Peace Research* **45**, 653–663.

Keaten J (2024) More countries join talks on Ukraine leader's peace formula. But Russia is absent and war grinds on. *Associated Press*. https://apnews.com/article/zelenskyy-davos-yermak-ukraine-switzerland-afb8bb146cd22f6a7d79fcdf177d0786.

Kertzer JD, Powers KE, Rathbun BC and Iyer R (2014) Moral support: How moral values shape foreign policy attitudes. *The Journal of Politics* **76**, 825–840.

Kortava D (2022) In the Filtration Camps. *New Yorker*. https://www.newyorker.com/magazine/2022/10/10/inside-russias-filtration-camps-in-eastern-ukraine.

Kreiman G and Masullo J (2020) Who shot the bullets? Exposure to violence and attitudes toward peace: evidence from the 2016 Colombian referendum. *Latin American Politics and Society* **62**, 24–49.

Kullab S (2024) 2 years after the horrors at Bucha, some families struggle to come to terms with atrocities. *PBC*. https://www.pbs.org/newshour/world/2-years-after-the-horrors-at-bucha-some-families-struggle-to-come-to-terms-with-atrocities.

Kupatadze A and Zeitzoff T (2021) In the shadow of conflict: how emotions, threat perceptions and victimization influence foreign policy attitudes. *British Journal of Political Science* **51**, 181–202.

Kyiv International Institute of Sociology (2022) Dynamics of the population's attitude to Russia and the emotional background due to the war. Available at: https://www.kiis.com.ua/?lang=eng&cat=reports&id=1112&page=8:. (accessed 7 December 2022).

Leventoğlu B and Slantchev BL (2007) The armed peace: a punctuated equilibrium theory of war. *American Journal of Political Science* **51**, 755–771.

Lupu Y and Wallace GPR (2023) Targeting and public opinion: An experimental analysis in Ukraine. *Journal of Conflict Resolution* **67**, 951–978.

Lyall J, Blair G and Imai K (2013) Explaining support for combatants during wartime: a survey experiment in Afghanistan. *American Political Science review* **107**, 679–705.

Lyall J (2009) Does indiscriminate violence incite insurgent attacks? Evidence from Chechnya. *Journal of Conflict Resolution* **53**, 331–362.

Mark S et al. (2022) Russia Unleashes a Missile Barrage, While Inching Ahead in Eastern Ukraine. *New York Times*. https://www.nytimes.com/2022/06/25/world/europe/russia-missiles-ukraine-putin-lukashenko.html.

National Democratic Initiatives (2023) Support for NATO Rises in latest NDI Ukraine poll. Available at: https://www.ndi.org/publications/support-nato-rises-latest-ndi-ukraine-poll. (accessed 7 December 2023).

Office of the United Nations High Commissioner for Human Rights (2022) "Ukraine: Civilian casualty update 14 November 2022." Available at: https://www.ohchr.org/en/news/2022/11/ukraine-civilian-casualty-update-14-november-2022. (accessed 12 December 2022).

Onuch O and Arkwright C (2021) Ukrainian youth and Ukraine in Europe: a cohort analysis of the drivers of attitudes toward the EU. *Demokratizatsiya: The Journal of Post-Soviet Democratization* **29**, 409–448.

Onuch O (2022) Why Ukrainians are rallying around democracy. *Journal of Democracy* **33**, 37–46.

Pop-Eleches G, Robertson G and Rosenfeld B (2022) Protest participation and attitude change: evidence from Ukraine's Euromaidan revolution. *The Journal of Politics* **84**, 625–638, https://doi.org/10.1086/716302.

Powell R (2012) Persistent fighting and shifting power. *American Journal of Political Science* **56**, 620–637.

Reuters (2025) Three weeks that changed the world: How Trump turned against Ukraine and Europe. *Reuters*. https://www.reuters.com/investigations/3-weeks-that-changed-world-how-trump-turned-against-ukraine-europe-2025-03-10/.

Reuters (2022) Kissinger calls for negotiated peace in Ukraine, Kyiv dismisses proposal. *VOA* December 29. https://www.voanews.com/a/kissinger-calls-for-negotiated-peace-in-ukraine-kyiv-dismisses-proposal/6881679.html.

Rozenas A and Zhukov YM (2019) Mass repression and political loyalty: evidence from Stalin's 'terror by hunger'. *American Political Science Review* **113**, 569–583.

Rubin DC, Berntsen D and Bohni MK (2008) A memory-based model of posttraumatic stress disorder: evaluating basic assumptions underlying the PTSD diagnosis. *Psychological review* **115**, 985.

Sasse G (2022) The risks of negotiating an end to the war in Ukraine. *Strategic Europe, Carnegie Europe* December 6. https://carnegieendowment.org/europe/strategic-europe/2012/12/the-risks-of-negotiating-an-end-to-the-war-in-ukraine?lang=en.

Schelling TC (1966) *Arms and Influence*. New Haven: Yale University Press.

Scherling J (2021) A tale of two cities: a comparative study of media narratives of the battles for Aleppo and Mosul. *Media, War & Conflict* **14**, 191–220.

Slantchev BL (2003) The principle of convergence in wartime negotiations. *American Political Science Review* **97**, 621–632.

Smith A and Stam AC (2004) Bargaining and the Nature of War. *Journal of Conflict Resolution* **48**, 783–813.

Tellez JF (2019) Worlds apart: Conflict exposure and preferences for peace. *Journal of Conflict Resolution* **63**, 1053–1076.

Tetlock PE (2003) Thinking the unthinkable: Sacred values and taboo cognitions. *Trends in Cognitive sciences* **7**, 320–324.

United Nations High Commissioner for Refugees (2022a) A/77/533: Independent international commission of inquiry on Ukraine - Note by the secretary-general. Available at: https://www.ohchr.org/en/documents/reports/a77533-independent-international-commission-inquiry-ukraine-note-secretary. (accessed 7 December 2024).

United Nations High Commissioner for Refugees (2022b) Where we are now: 100 days of crisis in Ukraine. Available at: https://www.unrefugees.org/news/where-we-are-now-100-days-of-crisis-in-ukraine. (accessed 7 December 2022).

United Nations High Commissioner for Refugees (2024) Ukraine Situation. Available at: https://data.unhcr.org/en/situations/ukraine. (accessed 7 December 2024).

Wetzel T (2022) Ukraine air war examined: a glimpse at the future of air warfare. *Atlantic Council, August* 30.

Wood P (2022) Volodymyr Zelensky says compromises with Russia will require nationwide referendum. *Inews* March 21. https://inews.co.uk/news/president-zelensky-ukraine-compromises-russia-nationwide-referendum-1531168.