Civilian Evacuation During War: Evidence from Ukraine*

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Abstract

In times of war, evacuating civilians from conflict zones is of critical importance for their survival and well-being. However, many people are hesitant to evacuate. Text-based nudges are a promising, yet unexplored, tool to increase willingness to evacuate. We conduct a controlled survey experiment in Ukraine in July of 2022—during the ongoing war against Russia. We varied the framing of, and information provided in, automated alert messages. Our findings suggest that providing individuals with an evacuation plan in the message is crucial. The specific framing of the message itself does not play a significant role in the perceived effectiveness of the messages. Observational data on actual evacuation behavior from the same sample of individuals supports this conclusion–finding that those who were offered evacuation assistance from people outside of their household were more likely to flee to safer areas.

JEL Classification: D78, D91, C91

Keywords: Evacuation, Russo-Ukrainian war, nudge, text-based alert

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1 Introduction

Each year, tens of thousands of people die due to armed conflicts (Roser, Hasell, Herre, & Macdonald, 2022). Many of these deaths are preventable by means of evacuation, that is by moving individuals from risky to safe zones. Against their best interests, many people are often reluctant to evacuate, even when authorities issue mandatory evacuation notices. In this paper, we experimentally test two categories of interventions designed to increase the life-saving uptake of evacuations. We conducted a between-subjects survey-experiment of 2,006 Ukrainians who resided in places directly exposed to combat during the Feb 24, 2022 Russian invasion of Ukraine. We asked these participants to evaluate the perceived effectiveness of different mandatory evacuation notices.

The first intervention category involved persuasive nudges. Nudges (in our case, soft interventions relying on message framing) are an increasingly popular policy instrument that can easily be adapted to evacuation notices. So far, nudges have been successfully applied to numerous settings ranging from COVID-19 to climate change (Hagmann, Ho, & Loewenstein, 2019; Tanaka, Nihonsugi, Ohtake, & Haruno, 2021; Patel, 2021; Allcott, 2011; Ghesla, Grieder, & Schubert, 2020; Dai et al., 2021; Liebe, Gewinner, & Diekmann, 2021). Nudges are frequently employed as a policy tool because they have been found to yield a meaningful impact in a cost-effective manner (Sunstein, 2022; Thaler & Sunstein, 2009; Madrian et al., 2017; Benartzi et al., 2017).[1] The second intervention category is the provision of information on how to participate in an evacuation planned by local government authorities. This pragmatic intervention was directly informed by the types of evacuations organized by local authorities in Ukraine during the early stages of the full-scale invasion.

These two categories of interventions are motivated by two broad hypotheses of why an individual may choose to shelter-in-place in the face of an imminent military incursion. The first hypothesis is that individuals may believe they can evacuate, but choose not to do so. The second is that individuals may prefer to evacuate, but do not believe that they can do so of their own accord.

[1] Recent meta-analyses focusing on the effectiveness of nudges yield mixed results. While Mertens, Herberz, Hahnel, and Brosch (2022) find that choice architecture interventions promote behavior change, no such effect is found by Maier et al. (2022) once publication bias is taken into account.

Of course, both hypotheses could be true simultaneously. The first intervention (framing nudges) was designed to address the first type of hesitancy to evacuate. These nudges relied on framing techniques that have been found to be effective at changing important economic behavior in other contexts.[2] The second type of intervention was designed to address the second type of hesitancy. By providing a plan of evacuation supported by the authorities, those who might otherwise feel trapped may choose to join an evacuation organized for them. Lastly, since both hypotheses could hold true simultaneously, our experiment cross-randomized the two types of interventions to test for interaction effects.

We find that providing an evacuation plan significantly improves the perceived effectiveness of an evacuation notice when under the threat of armed combat—increasing the evaluated effectiveness of evacuation messages by 5%-10%. However, we also found none of the framing treatments had any significant effect.[3] A natural interpretation of these results is that those who are experiencing the ongoing dangers of war are not naive about the risks or benefits associated with fleeing from danger, but not all who wish to evacuate believe they are capable.

A natural limitation of our survey-experiment is that the subjective assessment of an evacuation message's effectiveness does not necessarily equate to actual evacuation behavior. For this reason, we also study determinants of previous evacuation choices in response to the onset of the full-scale Russian invasion. Although we cannot test whether different evacuation message framing correlates with past choices,[4] we can regress past evacuation behavior on whether individuals were offered evacuation assistance by people outside of their households.[5] While this analysis is correlational rather than causal, we observe patterns of behavior that are similar to our main experimental findings. Just as including a plan and means of evacuation increases evaluated message effectiveness in the experiment, we find that being given evacuation information (e.g., best evac-

[2] In addition to a control evacuation message modeled after actual messages used by the local authorities, we designed four additional messages. Two of these messages manipulated the salience of the consequences of one's choice to either evacuate or not, and the other two messages, informed by previous work on reference-dependent loss aversion, manipulated the gain/loss frame of the evacuation messages.

[3] We also did not find any effects from interactions between treatment types.

[4] Actual evacuation notices at the start of the conflict did not mirror our experimental messages in their framing.

[5] Specifically, we asked if the survey participant was offered evacuation information or transport to a safer area by a friend, family member, employer, government agency, military, or another party outside of their household.

uation route) or being offered transportation by a third party is positively associated with actual choices to evacuate during the war. Notably, we also find similar patterns of heterogeneity across our experimental and observational results.[6]

Understanding how authorities can more effectively prompt individuals to evacuate conflict areas is important. Despite this, the challenges of conducting scientific research during ongoing conflicts or natural disasters have thus far precluded researchers from experimentally examining how to best motivate evacuations in times of crisis. The research most closely related to ours uses nudges to prompt evacuation behavior from a *hypothetical* natural disaster, showing that nudges that rely on social norms to encourage early evacuation increase intentions to evacuate and engage in preventive storage behavior (Ohtake, Sakata, & Matsuo, 2020). While there is a large literature on the individual determinants of evacuation from natural disasters (Stein, Dueñas-Osorio, & Subramanian, 2010; Charnkol & Tanaboriboon, 2006; Thiede & Brown, 2013; Ohtake, 2022), it remains unclear to what extent the findings from this literature carry over to evacuations from conflict zones, as there are potentially important differences between decisions made during wars and natural disasters. For instance, when a natural disaster occurs, people usually have the option to return to their communities and begin rebuilding several days or weeks after the occurrence (Meyers, 1991). The duration of displacement after war zone evacuation is much more uncertain. Therefore, sheltering in place is not advisable as it might lead to civilians being trapped in active combat zones or in territory permanently seized by invading forces. Furthermore, wars are the result of human activity. As such, the threat that wars pose is perceived differently from that of natural disasters (Goldmann & Galea, 2014). Not only is the type of danger different (the danger of dying in a flood may be perceived very differently from the danger of torture or rape), but civilians may also misjudge their agency in the event itself. Existing evidence on evacuations from war zones is either outdated or relies on small samples. Some studies focus on World War II (Crosby, 2021; Welshman, 1998). Others look at more recent events, such as the war in Lebanon, but reach

[6]Experimentally, we find that it is mostly females who do not have a personal plan of evacuation in place from their current place of residence that react to the provision of an evacuation plan by the local authorities (see Figure 4). In our observational data, we find that the offer of transport to a safer area robustly correlates with past evacuation behavior, driven mainly by females without a prior evacuation plan (see Figure 5).

only a limited amount of subjects (Gidron, Peleg, Jaffe, & Shenhar, 2010).

Currently, authorities have the opportunity to use text messages or apps to rapidly and consistently alert civilians of imminent or ongoing dangers due to conflict. Testing various message types can help increase the number of evacuees from dangerous areas. Our study provides evidence on the perceived effectiveness of text-based evacuation notices. Our data is unique in that it captures policy evaluations from those experiencing an ongoing armed conflict—rather than ex-post opinions. Furthermore, it provides us with the opportunity to examine the determinants of real evacuation decisions among the same sample of individuals. This gives policymakers a tool that can be used to save lives at this moment. The findings are immediately applicable in Ukraine as the war is still ongoing, moreover further evacuations are likely to be necessary this winter due to the mass mobilization of the Russian army and the damage to the country's heating and energy infrastructure. The findings may also be applied in many of the other approximately 50 active conflicts and wars worldwide (Roser et al., 2022).

2 Experiment and Survey

Our survey-experiment was conducted on July 26-28, 2022, five months after Russia launched its the full-scale invasion of Ukraine. From February to July of 2022, ground forces battled in seven out of ten surveyed oblasts (Zhytomyr, Zaporizhzhya, Kyiv, Mykolaiv, Sumy, Kharkiv, Chernihiv). The three other regions (Kyiv city, Dnipro and Odesa oblasts) bordered oblasts where Russian and Ukrainian forces battled for territory. These three oblasts were also constantly shelled as they are important military and civilian hubs. Russian troops advanced as far as the Kyiv suburbs—mere kilometers from the city center. At end of July 2022, about 20% of Ukrainian territory was occupied by the Russian military, and about 4% was already de-occupied.

In our sample, 82% of respondents (both those who did and did not evacuate) agreed that they faced the risk of being injured or killed as a result of their home being hit by a missile. About 40% of our sample reported evacuating from their place of residence at the start of the war, and

at least 50% of those who stayed at home reported that they considered evacuation as an option. Thus, the majority of respondents found themselves in situations which they considered to be life threatening.

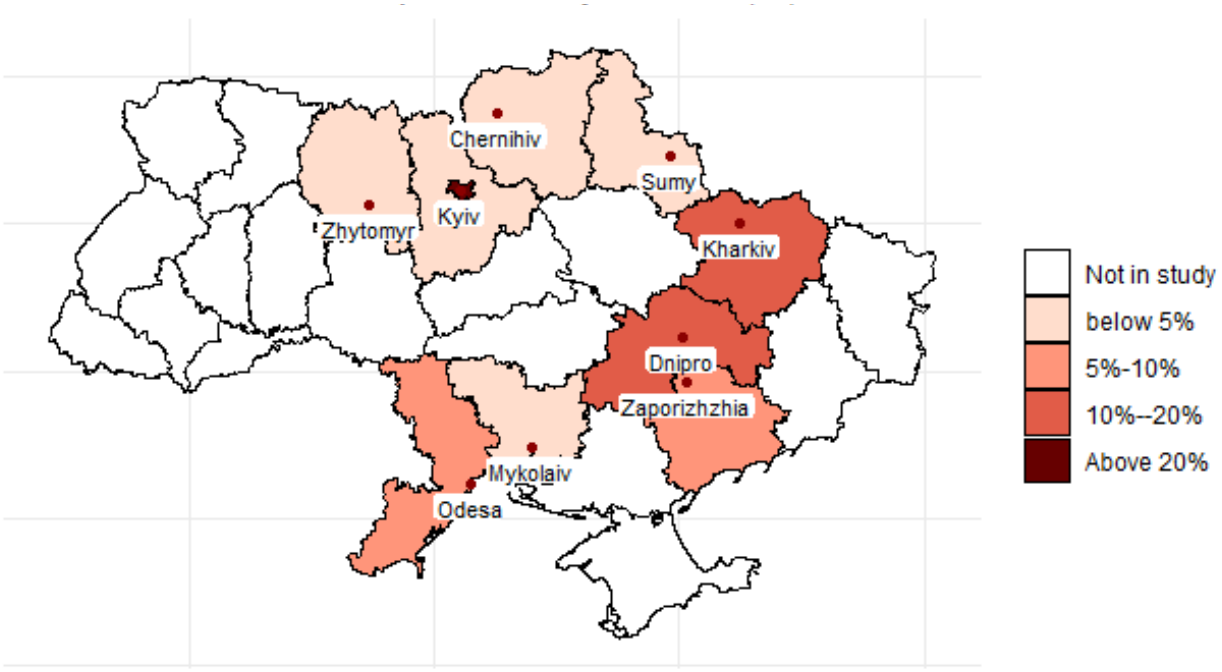
It is important to note that during the three days of the survey, the situation in Ukraine was relatively stable. There were no significant events on the battlefield (neither positive nor negative for Ukraine), nor acute cases of shelling or bombing in cities behind the frontline. Therefore, it is unlikely that the specific timing of when participants took our survey within this three-day period influenced participants' perceptions of the need to evacuate, and, thereby, responses to our experiment.

Section 2.1 provides details about the sample and the data collection (parts of that section are inspired by the data section in Dechezleprêtre et al., 2022). Sections 2.2-2.4 discuss our experiment's endpoints, treatments, and preregistration.

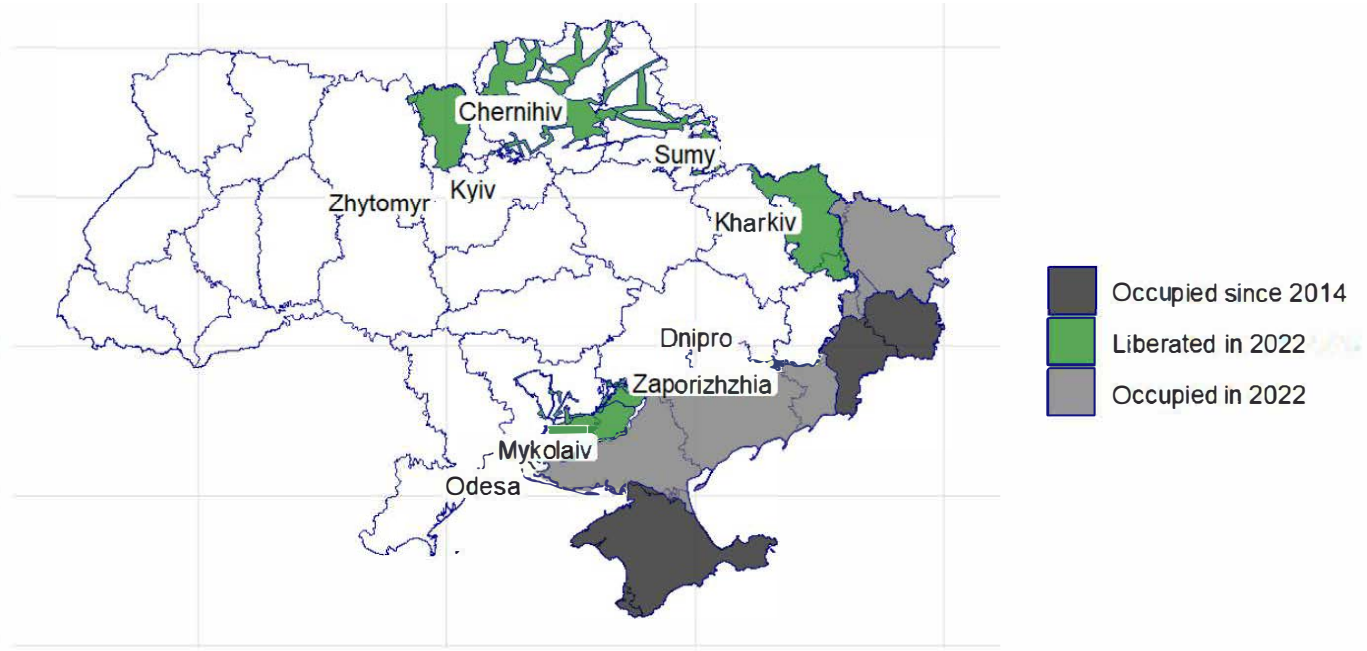
2.1 Sample and Survey Overview

The survey was conducted by Gradus, a survey company specializing in recruiting subjects within Ukraine. The company maintains a panel of about 50,000 people from urban areas, aged 18 years or more, most of whom were active on the platform prior to the war. For this study, we decided to focus on the regions that were directly affected by the war. These regions and the share of respondents in our survey by region are shown in Figure 1a. We did not survey residents of the war-affected oblasts Donetsk, Luhansk, and Kherson, since they were almost completely occupied at the time the study was conducted. Figure 1b shows the territory in Ukraine that has been occupied (and partly already liberated again), illustrating the relevance of the chosen oblasts (own graph based on data from DeepStateMap).

The survey company aimed at preserving the age, gender and territorial structure of the Ukrainian pre-war population in these regions for the sample. Table 1 shows demographic characteristics in our sample and in the general population in the ten oblasts that are part of our study. The target region's share in the total Ukrainian population was 45%. 77.8% of this population lived in urban



(a) Share of respondents by region of residence at the onset of the full-scale invasion



(b) Occupied and liberated Ukrainian territories

Figure 1: Surveyed regions with share of respondents (panel a) and overview of occupied territory in Ukraine (panel b)

settlements and 75% of them were between 18 and 60 years old.

Table 1: Sample Composition

	Our sample	Population
Male	38.9%	48.2%
Age		
18-24	6.8%	10.5%
25-34	29.0%	22.6%
35-44	36.3%	29.6%
45-54	21.6%	23.7%
55-60	6.3%	13.5%
Regions		
East	14.3%	15.0%
North	42.9%	42.4%
South	23.7%	24.8%
Center	18.1%	17.9%
N	2,006	8,455,931

Notes: This table compares our sample to the population of the ten oblasts in which the survey was carried out (the age group is restricted to those between 18 and 60 years). Source of the population data: State Statistics Service of Ukraine (data from January 1, 2022).

Gradus' survey platform allowed us to poll respondents who had continuously stayed in their home city since February 24, as well as those who chose to evacuate. We also obtained information on the whereabouts of respondents at the time of the survey (including those who evacuated abroad), approximate dates for when they left their homes, and (if relevant) the date that they returned home from the evacuation. Therefore, we managed to collect a sample that covers the entire range of evacuation experiences of the Ukrainian population.

Participants engaged in the survey via a mobile app. Gradus subjects are paid a monthly undisclosed cash reward, deposited into the subjects' mobile phone accounts.[7] Observations with particularly low response times (so-called speeders) were automatically excluded from the study by the survey company. Respondents completed the survey either in Ukrainian or Russian (based on their app settings).[8] The study consists of two parts: a survey that asked a set of questions pertaining to

[7]Other survey firms, like Dynata and Respondi, reportedly employ similar methods.

[8]The translations from Ukrainian to Russian and back were made by native speakers, who could assure that the

subjects' wartime experiences and a between-subjects survey-experiment that presented one of ten different evacuation messages for evaluation.

The non-experimental part of our study focused on past evacuation decisions. We gathered data on whether individuals had evacuated from their residences following the full-scale invasion that began on February 24, 2022. Participants could indicate that they had evacuated and remained displaced from their homes, had evacuated but since returned home, or had evacuated with their family but returned home without their spouse or children. Additionally, we asked subjects who had evacuated whether they remained in Ukraine or went abroad, and we collected data on socio-demographic characteristics, risk perceptions associated with the war, and wartime experiences. Figure 2 shows the share of respondents who had evacuated at some point during the war, including those who evacuated and later returned.

Figure 2: Share of respondents who had evacuated at some point by July 2022

Of particular interest to this study are questions about whether any third party either provided information on how to evacuate (e.g., the best route of evacuation) or offered transportation away

translations were accurate and that there was no difference in context between the two versions.

from their place of permanent residence.[9,10] These questions parallel the *Provided Plan* treatment in our message experiment. Therefore, we are able to test if either the provision of information or the offer of a means of evacuation is predictive of actual evacuation decisions during war.

The experiment took place at the end of a survey. Subjects were randomly assigned to each treatment on a uniform individual-level basis. A total of $N = 2006$ subjects took part, with 61% females and an average age of 39 years. The vast majority of participants (84%) reported not having had an evacuation plan or an emergency bag prepared before the onset of the war, although many (67%) indicated they have at least one of these now. 51% of participants answered the survey in Ukrainian and 49% in Russian.

Table 2 shows summary statistics per treatment. More details on the survey can be found in Appendix B. The entire set of survey questions and answer possibilities is contained in Appendix F (including information on which of the answer options were randomized; in brief, we chose randomized answer options for answers for which there is no natural ordering).

Table 2: Summary Statistics by Treatment

	All	Control	Plan	Gain	Gain Plan	Loss Life	Loss Life Plan	Loss Liv. Cond.	Loss Liv. Cond. Plan	Opp. Cost	Opp. Cost Plan
N	2006	214	201	200	201	200	207	203	197	192	191
Female (%)	0.61	0.52	0.64	0.69	0.66	0.60	0.63	0.61	0.57	0.61	0.58
	(0.49)	(0.50)	(0.48)	(0.46)	(0.48)	(0.49)	(0.48)	(0.49)	(0.50)	(0.49)	(0.49)
Age	38.54	39.83	39.30	37.31	38.09	38.37	35.36	37.05	39.22	40.45	40.62
	(9.63)	(9.12)	(10.12)	(10.02)	(9.37)	(9.85)	(9.53)	(9.00)	(9.51)	(9.63)	(8.96)
College $\geq$ (%)	0.67	0.77	0.62	0.62	0.64	0.65	0.61	0.65	0.66	0.76	0.72
	(0.47)	(0.42)	(0.49)	(0.49)	(0.48)	(0.48)	(0.49)	(0.48)	(0.47)	(0.43)	(0.45)
N. of Children	2.35	2.21	2.59	2.22	2.40	2.29	2.40	2.25	2.38	2.38	2.22
	(0.63)	(0.58)	(0.80)	(0.44)	(0.52)	(0.47)	(0.70)	(0.71)	(0.72)	(0.77)	(0.44)
Owns car (%)	0.51	0.46	0.57	0.53	0.53	0.55	0.55	0.49	0.51	0.47	0.42
	(0.50)	(0.50)	(0.50)	(0.50)	(0.50)	(0.50)	(0.50)	(0.50)	(0.50)	(0.50)	(0.50)
Had a plan (%)	0.16	0.16	0.16	0.14	0.15	0.17	0.18	0.19	0.16	0.15	0.09
	(0.36)	(0.37)	(0.37)	(0.34)	(0.36)	(0.37)	(0.39)	(0.39)	(0.37)	(0.35)	(0.29)
Has a plan (%)	0.67	0.63	0.69	0.66	0.65	0.68	0.65	0.65	0.68	0.73	0.67
	(0.47)	(0.48)	(0.46)	(0.47)	(0.48)	(0.47)	(0.48)	(0.48)	(0.47)	(0.44)	(0.47)

Notes: Female: 0 if male, 1 if female. Age is the mean of years. College $\geq$: 0 if subject had no college education, 1 otherwise. N. of children: number of children. Owns a car: 0 if the respondent did not own a car at the time of evacuation, 1 otherwise. Had a plan: 0 if the respondent did not have an own evacuation plan before the oubreak of the war, 1 otherwise. Has a plan: 0 if the respondent did not have an own evacuation plan at the time of the survey, 1 otherwise. Standard deviations are shown in parentheses.

[9] In our sample, 96 respondents had evacuated abroad, and 47 of them had not yet returned to their city of residence.

[10] Specifically, we asked if any of the following parties outside of their household offered them assistance: 1) family or friends, 2) volunteers, 3) random people whom I met, 4) representatives of authorities, 5) military, 6) employer, 7) other.

2.2 Primary Experimental Endpoint

For the primary experimental outcome, participants used a 10-point scale to evaluate how effective they believed a given evacuation message would be at convincing residents of their city to evacuate (0 – not all effective, 10 – extremely effective). This scale remained the same across participants. We opted for this question format to mitigate concerns related to social desirability biases (Finch, 1987).

This type of approach is widely used in experiments, especially within the social norms literature (Bicchieri, Lindemans, & Jiang, 2014). We consider the contemplative nature of the question unlikely to influence our conclusions, as previous research shows a strong relationship between evacuation intention and actual evacuation behavior (Thompson, Garfin, & Silver, 2017; Kang, Lindell, & Prater, 2007). A primacy bias (i.e., the tendency of participants to pick early answers in the list of answer options) seems unlikely to occur for a scale from 0 to 10. Furthermore, it would only influence levels of the outcome variable and not the treatment differences, which is our focus in the analysis of the experimental data.

2.3 Treatments

The experiment employed a 2×5 factorial between-subjects design. Respondents were uniformly distributed across treatments. That is, respondents were randomized to one of ten different treatments. Each participant took part in only one treatment—i.e., they evaluated exactly one evacuation message.

Treatment differences consist of the type of message displayed. One dimension varies the framing of the message (*Control*, *Gain of Life*, *Loss of Life*, *Deteriorating Living Conditions*, *Military Effectiveness*). The second dimension varies whether the message includes information about how to join and follow an evacuation plan provided by the authorities (*Provided Plan*).

Our treatments were informed by previous experimental literature on priming effects and information provision. *Control* and *Control + Provided Plan* messages are adapted from real-world evacuation messages that were sent to the local population in targeted regions. The *Control* mes-

sage provides a standard evacuation order stating that, due to the armed aggression by Russia, the situation in their city has become critically dangerous and that they should leave as soon as possible. The only difference between the *Control* and *Control + Provided Plan* treatments is that the second contains a simple evacuation plan provided by the authorities. The other message frames (*Gain of Life*, *Loss of Life*, etc.) rely on widely recognized facts about the war and do not convey new information. However, by emphasizing specific risks or benefits associated with (not) evacuating, they prime individuals to focus on particular concerns, such as saving lives or deteriorating living conditions.

An individual's actual evacuation decision is not only driven by her or his desire to evacuate. Other drivers include the availability of the resources needed to evacuate and the knowledge of possible evacuation means and routes. Consequently, the provided plan treatment arm tests what margin of individuals may be persuaded to evacuate by providing specific evacuation instructions. In particular, the provided plan stated free buses would be available at a pre-specified location and that evacuees could confirm their places on these buses ahead of time by phone. Furthermore, providing a concrete and actionable plan might have a direct effect on intended choices. Previous literature suggests that prompting intentions and performing hypothetical evaluations can positively influence the completion of a variety of behaviors, such as getting vaccinated, voting, and undergoing cancer screenings (Milkman, Beshears, Choi, Laibson, & Madrian, 2011; Rogers, Milkman, John, & Norton, 2015; Sheeran & Orbell, 2000).[11] The inclusion of this plan (treatment arm *Provided Plan*) was cross-randomized across all of the message frames. By cross-randomizing the message frame and the inclusion of a plan, we can discern the individual and interactive effects of our treatments. While our message-frame treatments primarily manipulate the salience of the potential consequences of one's evacuation decision, our *Provided Plan* treatments provide new information with actionable details. Therefore, our design builds on previous work on priming and information provision (for an overview, see Cohn & Maréchal, 2016; Haaland, Roth, & Wohlfart, 2023).

[11] For instance, Nickerson and Rogers (2010) find that the use of prompts significantly increased voter turnout during the 2008 presidential elections compared to simple encouragement calls and self-prediction.

The *Gain of Life* and *Loss of Life* treatments are based on research that shows framing events as gains or losses differentially affect people's behavior. In particular, the literature indicates that losses loom larger than gains, a phenomenon referred to as reference-dependent loss aversion (Kahneman & Tversky, 1979; Tversky & Kahneman, 1991; Benartzi & Thaler, 1995; Ariely, Huber, & Wertenbroch, 2005; Post, Van den Assem, Baltussen, & Thaler, 2008; Kahneman & Tversky, 2013; Ruggeri et al., 2020). Literature on loss aversion documents that individuals may accept the risk of incurring a more severe but less certain loss in order to avoid a smaller but more certain loss. In the case of evacuation, this could lead individuals to accept the greater and uncertain risks of staying in place to avoid the smaller but more certain losses of being displaced from home. Nonetheless, previous research also demonstrates that individuals are willing to accept more uncertain or riskier alternatives when endowed with a default option that already carries risk (Sprenger, 2015). Understanding this challenge, messages in the *Gain of Life* and *Loss of Life* treatments convey that there is, in fact, more certainty of life by evacuating. The *Gain of Life* treatment emphasizes that with evacuation there is less uncertainty over whether one's family and oneself will survive the conflict. Correspondingly, the *Loss of Life* treatment stresses the greater uncertainty of survival by staying in place, emphasizing how civilians are being killed and wounded in conflict zones on a daily basis.

The *Deteriorating Living Conditions* and *Military Effectiveness* treatments are grounded in previous evidence showing that behavior is influenced by making the consequences of one's actions more salient (Carey et al., 2019). The main idea is that the effectiveness of the messages may be increased by bringing the specific consequences of the decision not to evacuate to the front of one's mind. The *Deteriorating Living Conditions* message states that if individuals decide to stay, their situation could rapidly degrade and they may lose access to food, water, and medicine. The *Military Effectiveness* message states that evacuating civilians spares resources for the military and allows them to do their jobs more effectively. The specific content of all messages is reported in Appendix A.

2.4 Pre-registration

The experiment was pre-registered (https://aspredicted.org/5PH_J1J). The pre-registration specifies a target number of observations in the experiment (2000), which closely aligns with the actual number received from the survey company (2006). As often the case, the number of observations was determined by budgetary constraints rather than by an ex-ante power analysis. However, as shown by the power analysis contained in Appendix C, this is a high-powered study. The pre-registration also spells out the main analysis of the experimental data, specifying the use of linear regressions with heteroskedasticity-robust error terms. In accordance with our pre-registration, the basic regression specification only includes treatment assignment. Further pre-registered regressions include interaction terms and additional demographic covariates. Given random treatment assignment, a causal interpretation of the treatment effects is justified. The pre-registration only specifies the main analysis of the experimental data (contained in Section 3.1), any additional analyses presented in this paper are done ex-post.

3 Results

3.1 Treatment Effects

We start by examining how framing impacts the perception of an evacuation message's effectiveness. The means of message evaluations per treatment are shown in Figure 3. Framing (*Control*, *Gain of Life*, *Loss of Life*, *Deteriorating Living Conditions*, *Military Effectiveness*) has no discernible treatment effect. Conversely, the provision of a plan has a positive and significant treatment effect (for all message frames except *Military Effectiveness*).

Table 3 presents the results of the following regression:

$$\begin{aligned} y_i = \alpha + \beta_1 D_{i,Provided\ Plan} + \beta_2 D_{i,Gain\ Life} + \beta_3 D_{i,Loss\ of\ Life} + \beta_4 D_{i,Living\ Condition} \\ + \beta_5 D_{i,Military\ Effectiveness} + \gamma X_i + \varepsilon_i. \end{aligned} \tag{1}$$

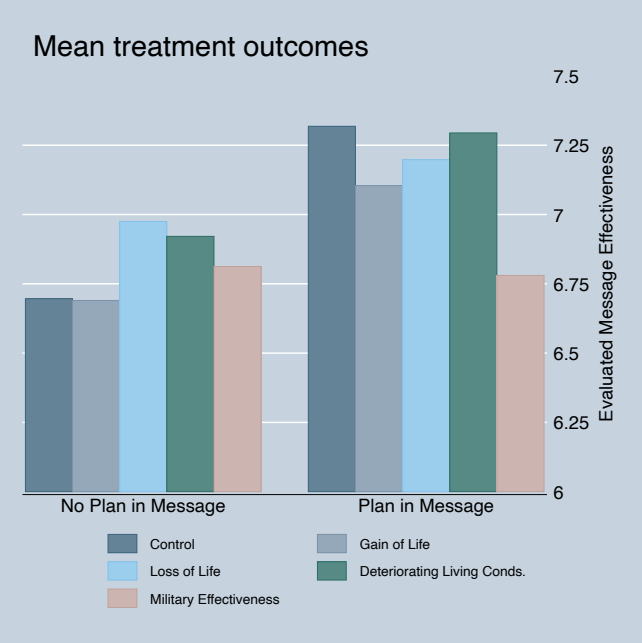


Figure 3: Experiment Treatment Effects

Table 3: Experiment Treatment Effects

	Message Evaluation (1)	Message Evaluation (2)
Provided Plan	0.33***	0.31***
	(0.11)	(0.11)
Gain Life	-0.11	-0.08
	(0.18)	(0.18)
Loss of Life	0.08	0.02
	(0.17)	(0.17)
Living Condition	0.10	0.21
	(0.17)	(0.17)
Military Effectiveness	-0.21	-0.08
	(0.18)	(0.18)
Constant	6.84***	6.36***
	(0.13)	(0.32)
Responses	2006	1867
Demog. Controls	No	Yes

Notes: Robust standard errors. Demographic controls are age, gender, number of children in household, marital status, oblast of residence, previous evacuation behavior, and education.

The outcome variable y_i is participant i's evaluation of the message's effectiveness. $D_{i,...}$ are dummy variables which equal one if participant i was shown a message with the respective framing or that included information on how to participate in evacuation organized by the authorities. X_i is a vector of demographic control variables (age, gender, marital status, oblast of residence, previous evacuation behavior, and education; in the main regression specification without demographic control variables, there is no vector X_i). ε_i is a heteroskedastic error term.

Table 3 shows that the effects inferred from the treatment means are corroborated in regression analyses. In column 1, we regress the evaluated effectiveness of the message shown by treatment assignment alone, while in column 2 we add controls for participant demographics. In both specifications, we find that the provision of an evacuation plan significantly improved the perceived effectiveness of the evacuation message. Conversely, different message frames do not impact participant responses. It should be noted that the two different treatment categories were designed to address two distinct types of evacuation hesitancy: preference-based vs. constraint-based. Given that both forms of hesitancy could coexist, the *Provided Plan* treatment arm was cross-randomized

with each of the message frames. As a secondary analysis, columns 4-6 of Table S3 in Appendix E replicate our primary regression specification, additionally incorporating interaction terms between the Provided Plan treatment dummy and each of the message frame dummy variables. We do not find compelling evidence of interaction effects between our treatments.

We see in Tables 3 and S3 that the magnitude of the *Provided Plan* treatment effect is between 0.31 and 0.65 (depending on the inclusion of additional covariates).[12] This magnitude is both significant and sizable. Given that mean evaluations in the treatments without a plan are around 6.5 on average, this magnitude corresponds to an improvement of approximately 5% to 10%. Should these evaluations mirror actual evacuation decisions, the authorities (or NGOs) could save many lives by providing an evacuation plan (as of July 2022, there were still an estimated 350,000 citizens remaining in the Ukrainian-controlled part of Donetsk Oblast[13]; Ebel, 2022). This seems consistent with the evidence from the natural disaster literature, which suggests that intentions to evacuate are strongly correlated with actual evacuation decisions (Thompson et al., 2017). In Section 3.3, we further investigate how the actual evacuation behavior of our survey's participants at the beginning of the war correlates with third-party offers of evacuation information and means of transportation. The observational data corroborates the treatment effects found in our message-evaluation experiment–showing that those who received third-party offers of transportation or information on how to best evacuate were more likely to do so.

The likelihood of detecting treatment effects in our experiment is close to one for any conventional effect size associated with the *Provided Plan* treatment arm. This probability is also close to one for high and medium effect sizes (0.8 and 0.5 standard deviations) in the framing treatment arms. The number of observations collected ensures 80% statistical power even for small effect sizes (0.2 standard deviations) in the framing treatment arms (details on the power analysis can be found in Appendix C). We also note that the effect of *Provided Plan* remains statistically signifi-

[12] Our most conservative treatment effect size comes from our regression with demographic controls but no treatment interactions (column 2 of Tables 3 and S3), and our least conservative estimate comes from our regression with treatment interactions but no demographic controls (column 6 of Table S3).

[13] This oblast is one of the most affected, 55% of its territory was occupied at the time of the survey. As the frontline went through the oblast, the territory after Ukrainian control was under constant shelling. In August 2022, the Ukrainian Government announced the mandatory evacuation of civilians from Donetsk oblast.

cant even after correcting for multiple testing. Insignificant coefficients remain insignificant after correcting for multiple testing. Details and a discussion of the correction for multiple testing can be found in Appendix D.

3.2 Experimental Heterogeneity Analysis

The previous section's results are heterogeneous across two important factors: gender and having a pre-existing evacuation plan—that is a planned route and method of evacuation at the time of the survey. First, we find that women (who often drive the evacuation decisions in households) react more strongly to the provision of an evacuation plan than men. Second, we find that while those who have a personal plan in place evaluate all messages to be more effective, there is no difference in their evaluations according to the inclusion of a plan provided by the authorities.

These results are shown in Figure 4 and Table 4. The figure shows the mean evaluations of message effectiveness by gender, having a personal evacuation plan already in place, and the inclusion of a plan provided by the authorities. The mean evaluations are aggregated across all message frames. Columns 1 and 2 of Table 4 show that, on average, women evaluate messages that include a plan from the authorities to be more effective by 0.5 points.[14] In contrast, in columns 3 and 4, we find no significant difference in the mean message evaluations according to the provision of a plan among men. We can see from Figure 4 that this holds true, even for those without a personal evacuation plan. Lastly, we find that both men and women with pre-existing plans rate all evacuation messages to be 0.7 points more effective on average. At the same time, in Appendix Table S4 we find a negative interaction between having one's own plan in place and being provided a plan by our treatments–suggesting plan provision is most effective among those who do not have their own.[15]

[14] Figure 4 suggests this effect is strongest among women who do not have their own evacuation plan in place, though the difference-in-differences is not statistically significant.

[15] Appendix Tables S4 and S5 examine the interaction effects of the Provided Plan treatment arm with gender and the presence of a personal evacuation plan. When interacting gender with the Provided Plan treatment, we find that the treatment effect loads primarily onto the interaction term. While we find consistently negative coefficients when interacting the presence of a personal evacuation plan with the Provided Plan treatment, this interaction is not statistically significant.

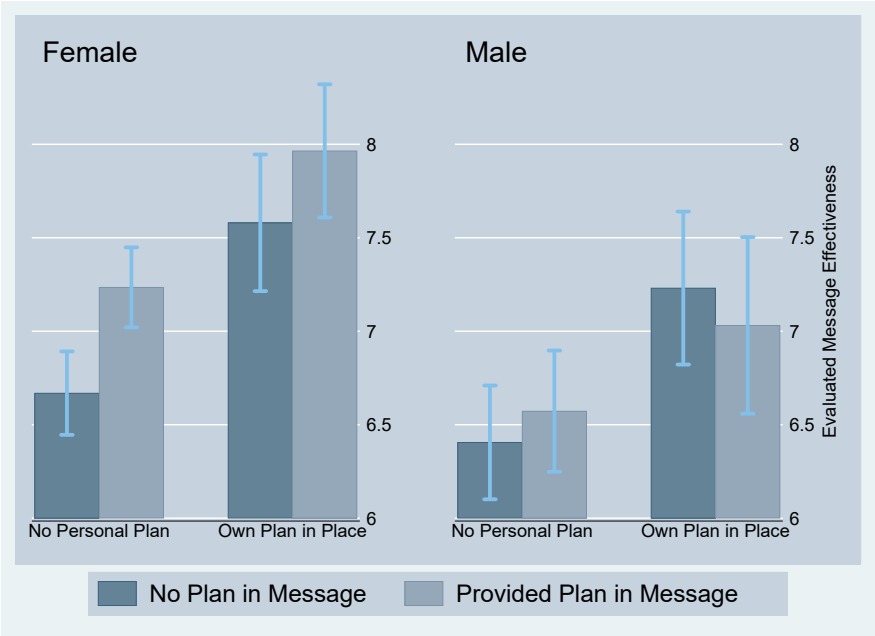


Figure 4: The Role of Evacuation Plans by Gender
Average evaluated message effectiveness separated by gender, the existence of a personal evacuation plan, and the *Provided Plan* treatment arm.

Table 4: Provided Plan By Gender

	Female Only		Male Only		Full Sample	
	Message Evaluation	Message Evaluation	Message Evaluation	Message Evaluation	Message Evaluation	Message Evaluation
	(1)	(2)	(3)	(4)	(5)	(6)
Provided Plan	0.52***	0.46***	0.04	0.08	0.34***	0.33***
	(0.13)	(0.14)	(0.18)	(0.19)	(0.11)	(0.11)
Own Plan in Place	0.82***	0.63***	0.65***	0.58***	0.68***	0.55***
	(0.15)	(0.16)	(0.19)	(0.20)	(0.12)	(0.12)
Constant	6.69***	6.44***	6.47***	6.52***	6.62***	6.58***
	(0.11)	(0.34)	(0.14)	(0.52)	(0.08)	(0.29)
Responses	1226	1150	780	717	2006	1867
Demog. Controls	No	Yes	No	Yes	No	Yes

Notes: Robust standard errors. Demographic controls are age, education, financial status, Oblast of residence, previous evacuation behavior, and education.

It is important to note that the findings on gender may not be directly causal, but rather due to other factors that we do not observe. For example, perhaps most evacuation efforts by government agencies up to that point in the war were targeted at women and families. In this case, participant's real-world experiences may have influenced how they interpreted an otherwise neutral survey question.

While military-age men in Ukraine faced restrictions on leaving the country, they were not confined to their regions of residence and could evacuate to other areas within Ukraine. In our sample, 36% of men and 41% of women reported having evacuated from their home cities, reflecting actual mobility. Therefore, both male and female samples remain policy-relevant despite international travel restrictions. Such a substantial difference in how men and women react to the provision of an evacuation plan is notable and worthy of investigation.

Finally, having one's own evacuation plan in place appears to be a powerful predictor of who is likely to follow an evacuation order. This result is expected, as those who actively prepare to evacuate are naturally going to be those who are most likely to do so. However, it is important to note the possibility that having an evacuation plan in place could independently encourage evacuation should it become necessary. After all, while it may be very difficult to persuade someone who does not want to evacuate in the middle of a crisis to change their mind, it may be easier to convince them to take the less costly step of making preparations in advance of a potential crisis.

3.3 Actual Evacuation Behavior

We next examine how externally provided evacuation plans influenced actual evacuation decisions in our sample. Due to the sudden nature of the full-scale invasion (72% of our sample did not expect that Russia would attack), the vast majority of evacuees at the onset of war evacuated themselves without help from government agencies.[16] Therefore, we examine the relationship between whether each survey participant evacuated from their place of residence at the beginning of

[16]Out of 2006 sample participants, only 44 reported that they have been offered transportation or given specific instructions on how to evacuate by the government or the military during the early stages of the full-scale invasion.

the war and whether that participant received either (1) an offer of transportation or (2) information on how to best evacuate by *any* parties outside of their household.[17] We focus on these two variables because they are the ones that are most closely related to the Provided Plan treatment in our experiment. Our Provided Plan treatment provided instructions on how to take part in a group evacuation organized by the authorities. This is to say that it provided instructions on how to use transportation that was being offered to them by a third party.

For this analysis, we use the following regression specification.

$$Evac_i = \alpha + \beta_1 D_{i,Recieved\ Help} + \beta_2 D_{i,Had\ Plan} + \beta_3 D_{i,Recieved\ Help} \times D_{i,Had\ Plan} + \gamma X_i + \varepsilon_i. \quad (2)$$

Here, $Evac_i$ is a binary variable that takes value one if the individual evacuated from their (previously) permanent place of residence due to the onset of the full-scale Russian invasion.[18] $D_{i,Had\ Plan}$ is a binary variable that takes value one if the individual had an evacuation plan in place before Feb 24, 2022, in anticipation of a potential invasion. $D_{i,Recieved\ Help}$ represents one of two binary variables. The first that takes value one if they received information on how to evacuate (e.g., which route to follow) from others. The second takes value one if they were offered transportation to a safer location by someone else. There could, of course, be complementarities or redundancies in the effect of having one's own evacuation plan in place and either receiving evacuation information or being offered transportation by others. Therefore, we also include the interaction term $D_{i,Recieved\ Help} \times D_{i,Had\ Plan}$. Lastly, X_i is a vector of demographic variables.

Table 5 presents the results of these regressions. We find that simply receiving information on how to evacuate from outside sources is associated with a 7%-16% higher likelihood of evacuating one's home. Additionally, we find that being offered transport to a safer location is associated with a 12%-18% higher likelihood of evacuation. These magnitudes are sizable and underline the importance of information on evacuation opportunities and on the provision of transport. Columns

[17] We record an individual as having received information on how to evacuate or having been offered a means of transportation if any persons outside of the household offered help—including family, friends, employers, neighbors, strangers, local authorities, the military, or other.

[18] The binary variable for evacuation takes value 1 if the individual evacuated and remained displaced at the time of the survey, evacuated but later returned home, or evacuated with members of their family but returned home alone.

Table 5: Past Evacuation Behavior

	Past Evacuation (1)	Past Evacuation (2)	Past Evacuation (3)	Past Evacuation (4)	Past Evacuation (5)	Past Evacuation (6)
Received Evac. Info from Others	0.14***	0.16***	0.07*			
	(0.04)	(0.04)	(0.04)			
Transport Offered by Others				0.12***	0.18***	0.14***
				(0.03)	(0.03)	(0.03)
Had Evac. Plan	0.22***	0.24***	0.19***	0.23***	0.30***	0.23***
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Evac. Info X Had Plan		-0.09	-0.05			
		(0.09)	(0.09)			
Transport X Had Plan					-0.35***	-0.23***
					(0.08)	(0.08)
Constant	0.35***	0.35***	0.14*	0.34***	0.33***	0.12
	(0.01)	(0.01)	(0.08)	(0.01)	(0.01)	(0.08)
Responses	1817	1817	1716	1817	1817	1716
Demog. Controls	No	No	Yes	No	No	Yes

Notes: Robust standard errors. Demographic controls are age, sex, education, financial status, oblast of residence, length of residency, household size, marital status, number of minor children in household, total number of people in the household, pet ownership, car ownership, whether they had been previously displaced and whether they have gathered materials to evacuate in case of Russian invasion. Missing demographic information is due to the fact that participants were allowed to decline to answer questions.

2 and 4 of Table 5 do not indicate significant interaction effects between having a pre-existing plan and receiving information from others. However, columns 5 and 6 reveal significant redundancy between having a pre-existing plan and being offered transportation following the invasion. This redundancy appears to undo the independent effect of having an evacuation plan in place prior to the invasion. Such an interaction effect is not surprising since people may prefer to travel in groups and plans that preceded Feb. 24, 2022 may not have correctly anticipated the realities of the conflict. Appendix Table S6 shows the results of regressions that control for the interactions of being offered transportation and receiving information from others as well as the interaction of having an evacuation plan in place with being offered transportation and receiving evacuation information. While the effect of only receiving information is sensitive to the inclusion of controls, we find that being offered transportation by others significantly increases (p-value < 0.01) the likelihood of evacuation by at least 10% across all specifications.[19]

[19]This effect remains robust to all previously mentioned interactions, as well as controlling for all demographic variables described in the notes of Tables 5 and S6.

3.3.1 Past Evacuation Heterogeneity Analysis

Given the evident significance of being offered transportation by an outside party in predicting evacuation behavior, we proceed to investigate whose behavior appears to have been most affected by the offer of transportation. Specifically, we replicate the heterogeneity analysis previously conducted on our experimental data, focusing on past evacuations as the outcome and the offer of transportation as the main independent variable. As is our experimental analysis, we condition this heterogeneity analysis on gender, while controlling for whether individuals had a pre-existing evacuation plan.

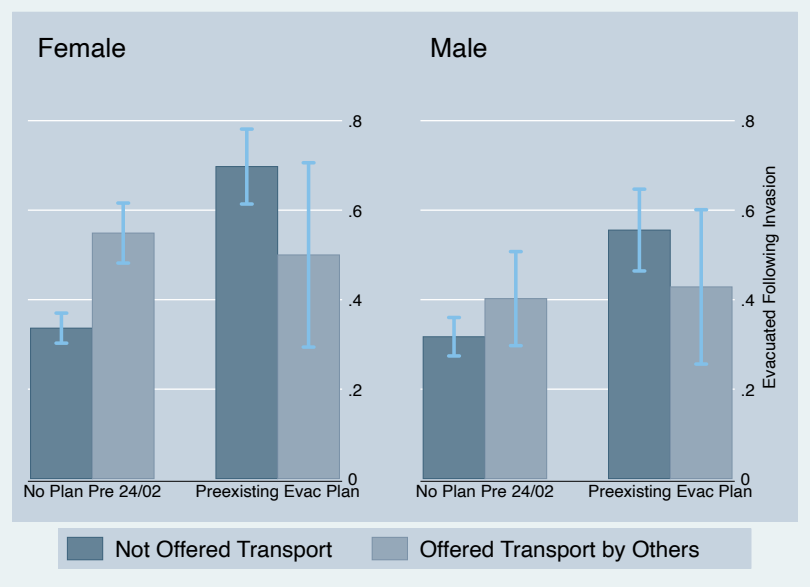


Figure 5: Past Evacuations by Gender and Offer of Transportation
Proportion of individuals who evacuated their homes separated by gender, the existence of a pre-war evacuation plan, and whether they were offered evacuation transportation by others.

Figure 5 shows the proportion of individuals who evacuated their places of permanent residence following the full-scale Russian invasion separated by gender, having a personal evacuation plan in place prior to the invasion, and whether the individual was offered transport to a safer location by others. Remarkably, the data pattern shown in Figure 5 bears a strong resemblance to that of Figure 4. Table 6 quantifies these results. Consistent with our experimental results, we find that being offered a mean of evacuation is associated with a 15-17% increase in actual evacuations among

Table 6: Effect of Offered Transportation by Gender

	Female Only		Male Only		Full Sample	
	Past Evacuation	Past Evacuation	Past Evacuation	Past Evacuation	Past Evacuation	Past Evacuation
	(1)	(2)	(3)	(4)	(5)	(6)
Transport Offered by Others	0.17***	0.15***	0.03	0.01	0.12***	0.10***
	(0.04)	(0.04)	(0.05)	(0.05)	(0.03)	(0.03)
Had Evac. Plan	0.29***	0.24***	0.19***	0.13***	0.23***	0.17***
	(0.04)	(0.04)	(0.05)	(0.05)	(0.03)	(0.03)
Constant	0.35***	0.15	0.33***	0.19	0.34***	0.17**
	(0.02)	(0.10)	(0.02)	(0.13)	(0.01)	(0.08)
Responses	1124	1060	693	656	1817	1716
Demog. Controls	No	Yes	No	Yes	No	Yes

Notes: Robust standard errors. Demographic controls are age, education, financial status, Oblast of residence, length of residency, household size, marital status, number of minor children in the household, total number of people in the household, pet ownership, car ownership, whether they had been previously displaced and whether they have gathered materials to evacuate in case of Russian invasion. Missing demographic information is due to the fact that participants were allowed to decline to answer questions.

women, but has shown no discernable influence on the evacuation decisions of men. Additionally, we note that those who had an evacuation plan before February 24th were considerably more likely to evacuate, even when controlling for their place of residence at the start of the conflict.[20]

Lastly, it is important to note that all of the preceding observational analysis is only correlational. While it is reassuring that the pattern of observed evacuations and experimental treatment effects follow a similar pattern, we can only establish a causal pathway for our main experimental results. It would be optimal to have a comprehensive causal pathway from the provision of an evacuation plan to household evacuation behavior. However, ethical and logistical constraints have precluded us from examining this effect in the original environment. Instead, what we are able to provide is (1) a causal pathway between the provision of a plan (means of evacuation by the authorities) and increased perceived effectiveness of evacuation messages, and (2) correlational evidence that being offered means of evacuation by third parties is linked to an increase in actual evacuation decisions.

[20]These same effects are further analyzed through interaction in Appendix Table S7. Interaction effects show that having an evacuation is associated with a higher likelihood to flee conflict zones, among those who did not have plans in place, only women were significantly more likely to evacuate after being offered transportation by another party.

3.4 Determinants of Having a Pre-existing Plan

Considering the significance of having a pre-existing evacuation plan in predicting the responsiveness to evacuation orders, in this section, we study the individual attributes that are associated with having a pre-existing evacuation plan. Table 7 presents the coefficients of a linear probability model examining the presence of pre-existing evacuation plans before the conflict's onset and current plans as of the survey date.

Table 7: Evacuation Plans: Past and Present

	Current Plan (1)	Current Plan (2)	Current Plan (3)	Previous Plan (4)	Previous Plan (5)	Previous Plan (6)
Female	-0.11***	-0.12***	-0.06	-0.09***	-0.10***	-0.11***
	(0.02)	(0.02)	(0.04)	(0.02)	(0.02)	(0.03)
Dependent Children	0.05**	0.04*	0.06	-0.02	-0.03*	-0.03
	(0.02)	(0.02)	(0.04)	(0.02)	(0.02)	(0.03)
Owns Vehicle	0.08***	0.07***	0.11***	0.06***	0.06***	0.05
	(0.02)	(0.02)	(0.04)	(0.02)	(0.02)	(0.03)
Disposable Income	0.07***	0.06***	0.07*	0.02	0.02	0.02
	(0.02)	(0.02)	(0.04)	(0.02)	(0.02)	(0.03)
Married	-0.01	-0.01	-0.01	0.01	0.03	0.03
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Higher Education	0.02	0.02	0.01	0.05***	0.04**	0.04**
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Female × Vehicle			-0.08*			0.02
			(0.05)			(0.04)
Female × Disp. Income			-0.01			-0.01
			(0.05)			(0.04)
Female × Children			-0.03			-0.01
			(0.04)			(0.04)
Constant	0.25***	0.32***	0.29***	0.14***	0.34***	0.34***
	(0.03)	(0.06)	(0.06)	(0.02)	(0.05)	(0.05)
Responses	1931	1840	1840	1893	1886	1886
Demog. Controls	No	Yes	Yes	No	Yes	Yes

Notes: Robust standard errors. Demographic controls are age oblast of residence, previous evacuation behavior for Current Plan regressions, and displacement from home (due to prior conflict), and oblast of residence for Previous Plan regressions.

Looking at those who have a current plan of evacuation, we find that the practical constraints of owning a car and having disposable income are strongly associated with having a personal evacuation plan—with absolute changes of 7% and 8% over the baseline of a 25% likelihood. We also find that having small children is associated with an increase in the likelihood of having a plan

of about 4% while being a woman diminishes it by 11%. Controlling for age, region of residence, and past evacuation choices has little effect on these estimates. The only notable interaction we find is that the difference between men and women in the likelihood of having a personal plan is driven by the fact that women who own a car are less likely to have a plan of evacuation compared to their male counterparts. Turning our attention to those who had contingency plans for evacuation in the event of hostilities, we find that gender and owning a vehicle are still significant predictors, together with having attended university, of whether someone was prepared to evacuate.[21]

While we cannot infer causality in the above analysis, the results in Table 7 imply that the factors influencing preparedness for evacuation prior to a crisis are not solely a function of unobservable characteristics. The observed correlations suggest that practical considerations, such as easy access to transportation, could be influential in the decision to evacuate. Taken at face value, the results could offer policymakers a tangible avenue to enhance preparedness for evacuation, thereby potentially increasing the number of individuals who would evacuate if the need should arise.

4 Discussion

The total body of experimental and observational evidence presents a unified message on how to improve evacuation messaging in the face of an imminent disaster, especially in the case of war or armed conflict. Across the spectrum of our results, a common theme emerges: messages that provide practical information on how to best transport oneself or one's family to safety appear to be the most effective.

First, our experimental evidence underlines the importance of providing a concrete plan of action if governmental organizations or NGOs want to increase the number of evacuees. At the same

[21] The oblast of residence also naturally played a role in whether individuals had plans prior to the full-scale invasion. Those who resided in areas thought to be more vulnerable were more likely to have plans in place. We also find that those who responded to the questionnaire in Ukrainian were more likely to have an evacuation plan at the beginning of the war compared to those who answered in Russian (58.84% vs. 41.16%; chi-square test, $p = 0.002$), but were just as likely to have one at the time of the survey (49.78% vs. 50.22%; chi-square test, $p = 0.173$).

time, the framing of the message itself has little impact. The latter part can be viewed as a reassuring finding for those who design the messages: they cannot make grave mistakes with the wording of their message. A plausible interpretation of these results is that those who face the threat of war are not naive about the potential dangers of sheltering in place, but not all those who would like to flee from danger have the ability or understanding to do so. As such, an important takeaway for those sending evacuation messages is to provide a concrete plan of evacuation whenever possible.

Second, while our experimental evidence concerns the *perceived* effectiveness of evacuation messages, observational data on actual evacuations echo the results of our experiments. Although the relationship is only correlational, we find that individuals who were offered help by third parties outside of their household, particularly a means of transportation, were considerably more likely to evacuate.

Third, we find that having an evacuation plan in place increases both the perceived effectiveness of all messages in our experiment and the likelihood of having evacuated when the full-scale invasion began.[22] While these results are correlational, they align with existing literature on natural disaster evacuation suggesting that evacuation intentions and behavior are strongly correlated (For example, see Thompson et al., 2017). Given the significant role of having a plan in predicting beliefs and behavior, we examined the characteristics of individuals who had prepared evacuation plans both before the invasion and at the time of our study. The evidence, suggests it is not only selection on unobservable or immutable personal characteristics that determines who plans for evacuation prior to the arrival of a crisis. It appears that practical factors such as having access to a means of transportation or disposable income help explain this behavior. Therefore, it may be possible to increase necessary evacuations with the use of anticipatory planning that focuses on how to evacuate or how to access means of evacuation provided by local governments or organizations.

While our results can only provide a causal pathway between the provision of an evacuation plan and the perceived effectiveness of those messages, the collective body of evidence suggests the need for a comprehensive approach to evacuation messaging, including practical guidance

[22]These results hold while controlling for place of residence and many other demographic factors.

on how to prepare for evacuation. First, an early warning that the situation in the settlement is becoming increasingly dangerous should be disseminated. This preliminary message should instruct people to make their own personal evacuation plan if possible (along with guidance on what such a plan should entail). It should also advise those who do not have an independent mean of transportation to be prepared to be evacuated by the authorities (along with guidance on how such an evacuation would take place). This recommendation is also consistent with the literature on planning prompts (see Rogers et al., 2015). Should it become appropriate, the second step should instruct everyone who can evacuate independently to do so (ideally while the outward journey is still relatively safe). If the government (or an NGO) has an evacuation plan, the second wave of messages should prioritize informing individuals on how to participate in the authority's organized plan. It is important to note that such a strategy is not comprehensively tested by our research. Future research should seek to verify the prospective conclusions made above, which are mostly based on a mixture of causal and correlational evidence and the observation that the authority-provided plans and personal plans seem to target different strata of the population.

Lastly, we find significant differences in how men and women rate the provision of an evacuation plan from the authorities. Specifically, we find that women respond more positively to the provision of an evacuation plan. One explanation for this finding could be based on the fact that women tend to be more risk-averse than men (Croson & Gneezy, 2009; Charness & Gneezy, 2012). As the availability of an evacuation plan by the authorities could reduce the risks associated with evacuation, women can be expected to react more strongly. Another explanation for our finding could be based on the fact that men tend to be more overconfident than women (Lundeberg, Fox, & Punćcohaŕ, 1994; Niederle & Vesterlund, 2007). Thus, one may expect men to be less responsive to the authorities' evacuation plan since it would have relatively little impact on their confidence in their ability to evacuate. It is important to note, however, that we do not have the data necessary to truly understand the relationship between gender and evacuation messaging, and that that the results on gender are not necessarily causal. However, this information could still be relevant for policy considerations. Even if the gender effect is due to correlations with other factors rather

than being a causal effect, understanding which gender reacts more to the intervention could guide targeted policies. Our findings suggest that in case of limited ability to provide information to all people, targeting women is more effective in our specific context.

5 Conclusion

In this paper, we investigate two categories of interventions designed to improve the effectiveness of evacuation messaging: nudging preferences and practical guidance on how to participate in a plan of evacuation provided by the authorities. These two types of interventions were motivated by two overarching hypotheses on why an individual may choose to shelter in place in the face of an imminent military incursion. The first was that individuals believe they can evacuate but choose not to, and the second was that individuals may prefer to evacuate but do not believe that they can do so on their own. While we find that nudging on preferences does not have an effect on the perceived effectiveness of evacuation messaging, providing a plan of evacuation has a significant positive effect. Our experimental findings are corroborated by observational data on actual evacuations from the same participant sample. Consequently, we recommend a multi-step messaging strategy based on the cohesive picture portrayed by the results. However, it is important to note that our policy recommendations are prospective rather than authoritative, as we only established causality between the provision of a plan and perceived message effectiveness. Still, ours is the only causal evidence on evacuation messaging effectiveness in a war context of which we are aware, thus setting the stage for future policy-oriented research.

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Online Appendix for

"Civilian Evacuation During War:

Evidence from Ukraine"

A Message texts and outcome variable

The messages shown to participants in the different treatments are reproduced in English translation in Table S1. The question/instruction for the outcome variable above the presented message is as follows: "If you needed to make sure that the residents of your city evacuate due to the danger of hostilities, rate how effective the following message would be on a scale from 0 to 10, where 0 is completely ineffective (no one would leave) and 10 is very effective (almost everyone would leave)."

Table S1: Message texts in the experiment

Treatment	Message
Control	Due to the armed aggression by Russia, the situation around your city is very critical. We urge you to take a reasonable approach to the issue of evacuation from the danger zone. Leave as soon as possible!
Control + Provided Plan	Due to the armed aggression by Russia, the situation around your city is very critical. We urge you to take a reasonable approach to the issue of evacuation from the danger zone. Free buses will be waiting for you at $<$ ... $>$. Registration by phone $<$ ... $>$. At the destination, you will be provided with accommodation and medical assistance. Take with you documents, personal belongings and food for 2-3 days. Leave as soon as possible!
Gain of Life	Due to the armed aggression by Russia, the situation around your city is very critical We urge you to take a reasonable approach to the issue of evacuation from the danger zone. Save your own life, the lives of your children and relatives. Evacuation saves lives. Leave as soon as possible!
Gain of Life + Plan	Due to the armed aggression by Russia, the situation around your city is very critical. We urge you to take a reasonable approach to the issue of evacuation from the danger zone. Free buses will be waiting for you at $<$ ... $>$. Registration by phone $<$ ... $>$. At the destination, you will be provided with accommodation and medical assistance. Take with you documents, personal belongings and food for 2-3 days. Save your own life, the lives of your children and relatives. Evacuation saves lives. Leave as soon as possible!
Loss of Life	Due to the armed aggression by Russia, the situation around your city is very critical We urge you to take a reasonable approach to the issue of evacuation from the danger zone. Civilians are killed and wounded almost every day. Do not endanger yourself, your children and relatives. Leave as soon as possible!

Loss of Life + Provided Plan	Due to the armed aggression by Russia, the situation around your city is very critical. We urge you to take a reasonable approach to the issue of evacuation from the danger zone. Free buses will be waiting for you at < ... >. Registration by phone < ... >. At the destination, you will be provided with accommodation and medical assistance. Take with you documents, personal belongings and food for 2-3 days. Civilians are killed and wounded almost every day. Do not endanger yourself, your children and relatives. Leave as soon as possible!
Deteriorating Living Conditions	Due to the armed aggression by Russia, the situation around your city is very critical. We urge you to take a reasonable approach to the issue of evacuation from the danger zone. Infrastructure and life support facilities, residential buildings are being destroyed every day. You risk being left without water, gas, electricity. Delivering food, drinking water, medicines to the city is becoming more difficult and dangerous. Leave as soon as possible!
Deteriorating Living Conditions + Provided Plan	Due to the armed aggression by Russia, the situation around your city is very critical. We urge you to take a reasonable approach to the issue of evacuation from the danger zone. Free buses will be waiting for you at < ... >. Registration by phone < ... >. At the destination, you will be provided with accommodation and medical assistance. Take with you documents, personal belongings and food for 2-3 days. Infrastructure and life support facilities, residential buildings are being destroyed every day. You risk being left without water, gas, electricity. Delivering food, drinking water, medicines to the city is becoming more difficult and dangerous. Leave as soon as possible!
Military Effectiveness	Due to the armed aggression by Russia, the situation around your city is very critical. We urge you to take a reasonable approach to the issue of evacuation from the danger zone. The Armed Forces of Ukraine need all available resources to protect your city. By evacuating, you save the limited resources of the city for the military and enable them to do their job better. Leave as soon as possible!
Military Effectiveness + Provided Plan	Due to the armed aggression by Russia, the situation around your city is very critical. We urge you to take a reasonable approach to the issue of evacuation from the danger zone. Free buses will be waiting for you at < ... >. Registration by phone < ... >. At the destination, you will be provided with accommodation and medical assistance. Take with you documents, personal belongings and food for 2-3 days. The Armed Forces of Ukraine need all available resources to protect your city. By evacuating, you save the limited resources of the city for the military and enable them to do their job better. Leave as soon as possible!

B Survey details

The survey was implemented by Gradus, a survey company specialized in the recruitment of subjects within Ukraine. The company employed a panel of respondents which has not changed since the beginning of the war. The subjects take part in the survey through a mobile app. The survey could be completed in Ukrainian or Russian. It was carried out in July 2022. The survey contained questions on socio-demographic characteristics, risk perceptions, and evacuation behavior. In the following, we summarize the type of questions asked:

- **Socio-demographic characteristics**

  Place of residence before the full-fledged invasion, sex, age, marital status, family characteristics (number of children under and over 18, whether the children live in the same household, older parents living in the same city), pets, religion, income, and education.

- **Perception of risk and concerns**

  Subjects were asked to rate on a scale from Strongly Disagree to Strongly Agree a series of statements about the perceived risks and concerns relating to the evacuation. As an example, those that did not evacuate were asked to rate some of the potential concerns they might have had such as the road being too dangerous and how much did the lack of transportation or means influence their decisions. Those that did evacuate, were asked about the concerns that motivated them to leave such as being the victim of rape and facing various shortages (food, water, etc.).

- **Evacuation behavior**

  Whether they evacuated, did not evacuate or evacuated and then returned. Whether the subjects heard any official announcements inviting them to leave the city and by what means. How did they evacuate, on which date and which mode of transportation was used.

C Statistical power

Here we provide a brief and simple analysis of the statistical power of our experiment. We did not conduct this power analysis ex ante (as mentioned in the main text, the number of participants in the experiment was determined by budgetary considerations).

Figures S1 and S2 show the statistical power in dependence of the number of participants in the experiment. Both figures stem from Monte-Carlo simulations, which are described below. Figure S1 shows the probability that a large, a medium, and a small true treatment effect of the *Provided Plan* treatment dimension will be discovered in the analysis, where large, medium, and small are defined as 0.8, 0.5, and 0.2 times the standard deviation of the data generating process. Figure S2 shows the same for a treatment effect concerning one particular framing of the messages (e.g., the *Gain of Life* framing).

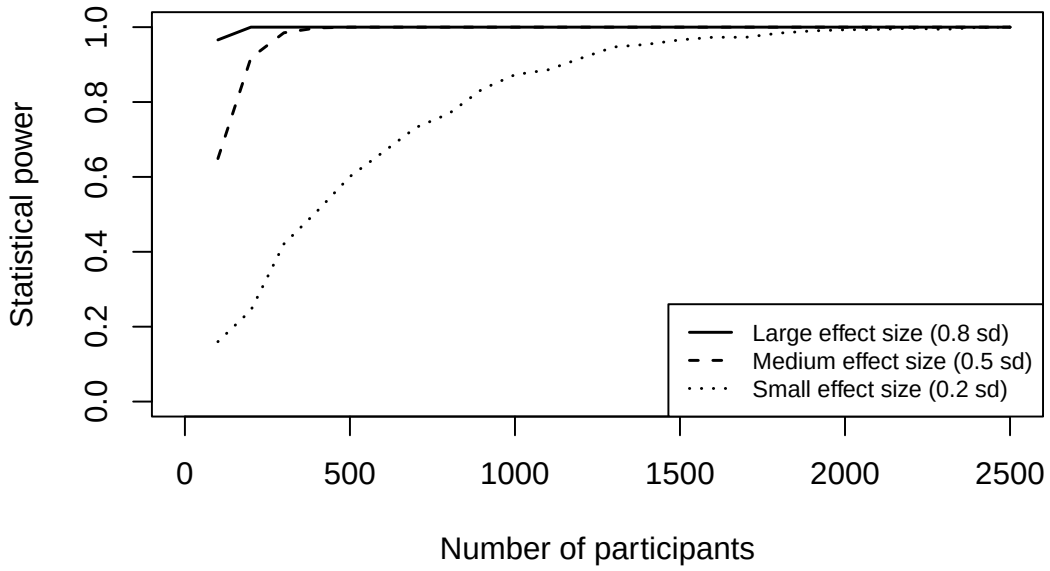

Figure S1: Statistical power, effect in the *Provided Plan* treatment dimension

The figures show that the statistical power of our experiment (with 2006 participants) is extremely high (close to one) for large, medium, or small true treatment effects, when the treatment effect pertains to the plan treatment dimension. When the treatment effect pertains to the framing

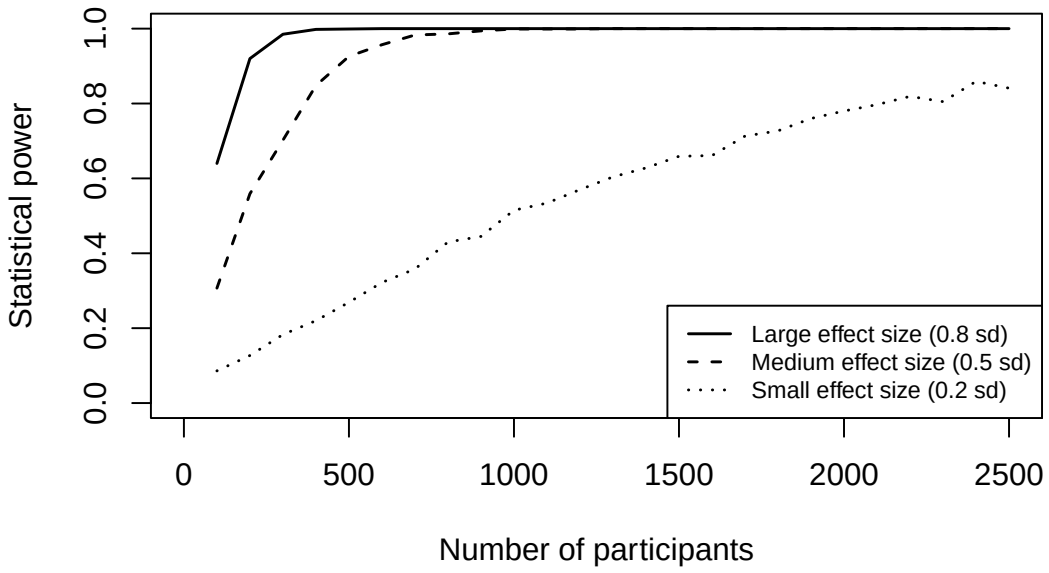

Figure S2: Statistical power, effect in the framing treatment dimension

treatment dimension, the statistical power is still close to one for large and medium true treatment effects, while the power is lower for small treatment effects (in that case, the statistical power is almost 80%, which is still reasonably high).

To obtain these graphs, we have proceeded as follows. First, we distributed the participants equally across all ten treatments. Then we simulated all outcome variables as continuous identically distributed and independent random variables with a normal distribution with mean 7 and standard deviation 2.5 (these numbers roughly correspond to average means and standard deviations in our experiment). In the treatments affected by the true treatment effect (either all *Provided Plan* treatments or the two treatments of one framing, e.g., *Gain of Life* and *Gain of Life + Provided Plan*), we added 0.8, 0.5, or 0.2 times the standard deviation of 2.5 to the outcomes. Thereafter, we rounded to integers and set negative numbers to zero and numbers greater than ten to ten (as our data consists of integers from 0 to 10).

We then conduct the main regression (excluding covariates) on the generated data set and check whether the corresponding regression coefficient is significant at the 5% level (and whether the

coefficient has the correct sign). This is done 1000 times for each simulated probability (the simulated probability is then the fraction of significant coefficients with the correct sign out of the 1000 simulations).

The effect size that we are referring to is the shift in the continuous variable as a fraction of the theoretical standard deviation of the continuous variable. We do so for simplicity: the effect size after simulating the variables, rounding, and censoring at zero and ten is in the simulated data less than the value for the continuous variable, while the empirical standard deviation is higher. Our estimates of the statistical power are thus (slightly) lower than what one would obtain when calculating with the rounded and censored data.

D Correction for multiple testing

Applying a correction for multiple testing is relatively straightforward for the pre-registered analysis of treatment effects. The main regression specification to test for treatment differences contains five treatment dummy variables (corresponding to five hypotheses). Using Bonferroni-Holm-adjusted significance levels α_1, ..., α_5 with a family-wise error rate of $\alpha = 0.05$ for the coefficient tests, instead of symmetrical and identical significance levels, $\alpha_1 = 0.05$, ..., $\alpha_5 = 0.05$ does not alter our conclusions. This is illustrated in Table S2 for the outcome of the regression in Table 3, column 1, (also the conclusions of the regression in Table 3, column 2, would not change when correcting for multiple testing).

Table S2: Bonferroni-Holm adjustments

Coefficient	*p*-value	Individual significance level	Null hypothesis rejected	Bonferroni-Holm-adjusted significance level	Null hypothesis rejected
Provided Plan	0.003	0.05	Yes	0.01	Yes
Military Effectiveness	0.252	0.05	No	0.02	No
Living Condition	0.532	0.05	No	[0.03]	No
Gain Life	0.554	0.05	No	[0.04]	No
Loss of Life	0.623	0.05	No	[0.05]	No

For the other analyses in the paper, it is not as straightforward to conduct a multiple-testing correction. We treat these other analyses as observed post-hoc correlations, as one would with any observational data set. Computations of multiple-testing corrections are not straightforwardly possible in such a case, because the number of hypotheses plays a key role for the exact computations (and as these hypotheses are not pre-registered, it is not clear what the number of hypotheses should be). Yet, we would like to note that if one wanted to apply a multiple-testing correction, our conclusions would often not be affected (for reasonable numbers of hypotheses in a family). The variables that we focus on in our discussion are often highly statistically significant—in these cases, the null hypotheses of the corresponding regression coefficient equaling zero would also be rejected when following the Bonferroni-Holm method. For instance, the *p*-value of the coefficient

of having had an own evacuation plan (Table 4) is smaller than 10^{-7} in all columns. No matter, whether one considers the multiple-testing procedure with 5, 10, 15 or another reasonable number of hypotheses in the family, the conclusions would not change. As it is not straightforward for these cases to provide a well-justified multiple-testing correction, we prefer to rely on the reader's understanding of significance levels and standard errors. Thus, in cases that are highly statistically significant (as indicated not only by stars but also by the relation of coefficient sizes to standard errors in the regression tables), one can safely assume that the coefficients would remain significant after correcting for multiple testing, while coefficients with lower levels of significance would most likely not remain significant after correcting for multiple testing.

E Data analysis

The (pre-registered) statistical analyses shown in Table 3 in the main text are reproduced in the first two columns of Table S3. The main regression (column 1) only contains treatment dummies. Column 2 shows the same analysis, with pre-registered control variables (age, gender, marital status, number of children, place of residence, and past evacuation decisions) added to the regression specification. Because there are missing values for some participants in the control variables, the number of observations differs between these two regressions. The third column in Table S3 shows the regression without control variables excluding all participants with missing values in the control variables. This allows for a comparison of the regressions with and without control variables with exactly the same participants (columns 2 and 3). Table S3, columns 4 to 6, shows the same regressions as in columns 1-3, including treatment interaction terms. The table shows that the regressions without control variables yield basically indistinguishable results when conducted on the full and on the restricted sample, so that differences to the regressions with control variables can be attributed to these control variables (and are not due to differences in the sample composition).

Table S4 shows regression results of treatment effects when including the existence of an own evacuation plan in the covariates (when interacting the provided plan treatment with having a personal evacuation plan in place, with and without treatment interactions). Table S5 shows the regressions with a focus on gender effects. Therefore, the interaction of gender with the evacuation plan in the message is included.

Table S6 shows regression results regarding past evacuation decisions, controlling for the interactions of being offered transportation and receiving information from others, as well as the interaction of having an evacuation plan in place with being offered transportation and receiving evacuation information. Table S7 shows interaction effects of gender, pre-existing evacuation plan and being offered transport.

Table S3: Treatment Effects with Treatment Interactions

	Message Evaluation	Message Evaluation	Message Evaluation	Message Evaluation	Message Evaluation	Message Evaluation
	(1)	(2)	(3)	(4)	(5)	(6)
Provided Plan	0.33***	0.31***	0.33***	0.62**	0.46*	0.65***
	(0.11)	(0.11)	(0.11)	(0.24)	(0.25)	(0.25)
Gain Life	-0.11	-0.08	-0.04	-0.01	-0.02	0.10
	(0.18)	(0.18)	(0.18)	(0.25)	(0.26)	(0.26)
Loss of Life	0.08	0.02	0.05	0.28	0.10	0.23
	(0.17)	(0.17)	(0.18)	(0.24)	(0.25)	(0.25)
Living Condition	0.10	0.21	0.13	0.22	0.23	0.28
	(0.17)	(0.17)	(0.17)	(0.23)	(0.23)	(0.24)
Military Effectiveness	-0.21	-0.08	-0.22	0.12	0.13	0.10
	(0.18)	(0.18)	(0.18)	(0.25)	(0.26)	(0.26)
Provided Plan × Gain Life				-0.21	-0.13	-0.30
				(0.36)	(0.36)	(0.36)
Provided Plan × Loss of Life				-0.40	-0.16	-0.36
				(0.34)	(0.35)	(0.35)
Provided Plan × Living Cond				-0.25	-0.04	-0.31
				(0.34)	(0.34)	(0.34)
Provided Plan × Military				-0.65*	-0.44	-0.64*
				(0.36)	(0.36)	(0.37)
Constant	6.84***	6.32***	6.86***	6.70***	6.25***	6.71***
	(0.13)	(0.32)	(0.14)	(0.17)	(0.35)	(0.18)
Responses	2006	1867	1867	2006	1867	1867
Demog. Controls	No	Yes	No	No	Yes	No

Notes: Robust standard errors. Demographic controls are age, gender, marital status, oblast of residence, previous evacuation behavior, number of children in household, and education. The discrepancy in responses is due to the fact that some respondents did not provide all demographic data. Columns 3 and 6 risk to those who provided demographic information but do not include them as covariates in the regression.

Table S4: All Treatment Effects with Heterogeneity through Own Plans

	Message Evaluation	Message Evaluation	Message Evaluation	Message Evaluation
	(1)	(2)	(3)	(4)
Provided Plan	0.43***	0.38***	0.73***	0.54**
	(0.13)	(0.13)	(0.25)	(0.26)
Gain Life	-0.10	-0.09	-0.00	-0.03
	(0.18)	(0.18)	(0.25)	(0.25)
Loss of Life	0.08	0.02	0.28	0.11
	(0.17)	(0.17)	(0.24)	(0.25)
Living Condition	0.10	0.20	0.23	0.23
	(0.17)	(0.17)	(0.23)	(0.23)
Military Effectiveness	-0.20	-0.09	0.11	0.12
	(0.18)	(0.18)	(0.25)	(0.26)
Own Plan in Place	0.84***	0.71***	0.83***	0.71***
	(0.17)	(0.17)	(0.17)	(0.17)
Provided Plan × Own Plan	-0.34	-0.19	-0.34	-0.20
	(0.24)	(0.25)	(0.24)	(0.25)
Provided Plan × Gain Life			-0.20	-0.11
			(0.35)	(0.36)
Provided Plan × Loss of Life			-0.40	-0.17
			(0.34)	(0.35)
Provided Plan × Living Cond			-0.27	-0.07
			(0.33)	(0.34)
Provided Plan × Military			-0.61*	-0.42
			(0.36)	(0.36)
Constant	6.60***	6.09***	6.45***	6.02***
	(0.14)	(0.33)	(0.18)	(0.35)
Responses	2006	1867	2006	1867
Demog. Controls	No	Yes	No	Yes

Notes: Robust standard errors in parentheses. Demographic controls are age, marital status, number of children in household, region of residence and past evacuation decisions. The discrepancy in responses is due to the fact that some respondents did not provide all demographic data.

Table S5: All Treatment Effects with Heterogeneity through Gender

	Message Evaluation	Message Evaluation	Message Evaluation	Message Evaluation
	(1)	(2)	(3)	(4)
Provided Plan	0.03	0.07	0.29	0.23
	(0.18)	(0.19)	(0.28)	(0.29)
Gain Life	-0.13	-0.07	-0.04	0.01
	(0.18)	(0.18)	(0.26)	(0.26)
Loss of Life	0.08	0.03	0.26	0.12
	(0.17)	(0.17)	(0.24)	(0.25)
Living Condition	0.12	0.23	0.21	0.25
	(0.17)	(0.17)	(0.23)	(0.23)
Military Effectiveness	-0.20	-0.07	0.10	0.15
	(0.18)	(0.18)	(0.25)	(0.26)
Female	0.20	0.22	0.19	0.21
	(0.16)	(0.16)	(0.16)	(0.17)
Provided Plan × Female	0.48**	0.39*	0.48**	0.40*
	(0.23)	(0.24)	(0.23)	(0.24)
Provided Plan × Gain Life			-0.19	-0.15
			(0.36)	(0.36)
Provided Plan × Loss of Life			-0.38	-0.17
			(0.34)	(0.35)
Provided Plan × Living Cond			-0.19	-0.05
			(0.33)	(0.34)
Provided Plan × Military			-0.60*	-0.44
			(0.36)	(0.36)
Constant	6.72***	6.50***	6.60***	6.43***
	(0.16)	(0.33)	(0.19)	(0.35)
Responses	2006	1867	2006	1867
Demog. Controls	No	Yes	No	Yes

Notes: Robust standard errors in parentheses. Demographic controls are age, marital status, number of children in household, region of residence and past evacuation decisions. The discrepancy in responses is due to the fact that some respondents did not provide all demographic data.

Table S6: Past Evacuations, Further Interaction Effects

	Past Evacuation (1)	Past Evacuation (2)	Past Evacuation (3)	Past Evacuation (4)	Past Evacuation (5)	Past Evacuation (6)
Received Evac. Info from Others	0.12***	0.19***	0.09*	0.11***	0.17***	0.08
	(0.04)	(0.05)	(0.05)	(0.04)	(0.05)	(0.05)
Transport Offered by Others	0.10***	0.13***	0.11***	0.10***	0.19***	0.15***
	(0.03)	(0.03)	(0.03)	(0.03)	(0.04)	(0.04)
Had Evac. Plan				0.22***	0.29***	0.23***
				(0.03)	(0.04)	(0.03)
Information X Transport		-0.16**	-0.11		-0.15**	-0.12
		(0.08)	(0.08)		(0.08)	(0.08)
Evac. Info X Had Plan					0.05	0.05
					(0.09)	(0.09)
Transport X Had Plan					-0.36***	-0.24***
					(0.08)	(0.08)
Constant	0.37***	0.36***	0.14*	0.33***	0.32***	0.12
	(0.01)	(0.01)	(0.08)	(0.01)	(0.01)	(0.08)
Responses	1842	1842	1735	1817	1817	1716
Demog. Controls	No	No	Yes	No	No	Yes

Notes: Robust standard errors. Demographic controls are age, sex, education, financial status, Oblast of residence, length of residency, household size, marital status, number of minor children in household, total number of people in the household, pet ownership, car ownership, whether they had been previously displaced and whether they have gathered materials to evacuate in case of Russian invasion. Participants were allowed to decline to answer question that they did not want to answer.

Table S7: Past Evacuations, Heterogeneity by Gender and Pre-Existing Plans

	No Evac Plan 24/02/22		Had Preexisting Plan		Full Sample	
	Past Evacuation (1)	Past Evacuation (2)	Past Evacuation (3)	Past Evacuation (4)	Past Evacuation (5)	Past Evacuation (6)
Had Evac. Plan					0.24***	0.14***
					(0.05)	(0.05)
Transport Offered by Others	0.09	0.03	-0.13	-0.04	0.09	0.03
	(0.06)	(0.06)	(0.10)	(0.10)	(0.06)	(0.06)
Female	0.02	0.01	0.14**	0.19***	0.02	0.01
	(0.03)	(0.03)	(0.06)	(0.06)	(0.03)	(0.03)
Transport X Female	0.13*	0.16**	-0.07	-0.11	0.13*	0.16**
	(0.07)	(0.07)	(0.14)	(0.15)	(0.07)	(0.07)
Transport X Had Plan					-0.21*	-0.08
					(0.11)	(0.11)
Had Plan X Female					0.12*	0.16**
					(0.07)	(0.06)
Plan X Transport Female					-0.20	-0.25
					(0.16)	(0.16)
Constant	0.32***	0.12	0.56***	0.38*	0.32***	0.14*
	(0.02)	(0.09)	(0.05)	(0.20)	(0.02)	(0.08)
Responses	1520	1435	297	281	1817	1716
Demog. Controls	No	Yes	No	Yes	No	Yes

Notes: Robust standard errors. Demographic controls are age, education, financial status, Oblast of residence, length of residency, household size, marital status, number of minor children in household, total number of people in the household, pet ownership, car ownership, whether they had been previously displaced and whether they have gathered materials to evacuate in case of Russian invasion. Participants were allowed to decline to answer question that they did not want to answer.

F Survey questions

The subsequent pages present the survey questions and answer possibilities, translated to English. It should be noted that the survey employed conditional questioning; thus, not all questions were visible to every respondent. For instance, only participants who answered that they had children when the full-scale war started were afterward presented a question asking for the age of their children. Partly, whole sections of the survey differed depending on earlier answers (e.g., a section of the survey is different for those who evacuated and those who did not evacuate). This is indicated wherever it is the case. Questions categorized as 'single' permitted only one answer choice, whereas 'multiple' questions allowed for multiple selections. Additionally, for questions marked with 'rotate' answer options appeared in random order to mitigate order bias.

Question ID	Type of questions/answers	Question	Additional comments to the question
Section for all respondents			
oblast	single	Please indicate the region in which you permanently lived before the start of the full-scale war between Russia and Ukraine:	
		dropdown list	
city	single	Please indicate the name of the settlement in which you permanently lived before the start of the full-scale war between Russia and Ukraine:	
		dropdown list	
a1	single	Were you in your place of permanent residence on February 23, on the eve of the start of a full-scale war?	
		Yes	
		No	
bye1	sorry	Dear survey participant! Thank you for your answers! Unfortunately, this target audience has already been recruited! Stay tuned for more research from Gradus.	
	ask if a1==2	name Panda-20.png	
a2	single	How long did you live in your place of permanent residence before the start of a full-scale war (February 24, 2022)?	
		Less than 6 months	
		From 6 months to 1 year	
		1-2 years	
		3-4 years	
		5-7 years old	
		8-12 years old	
		More than 12 years	
	dk	Difficult to answer	
bye123	sorry	Dear survey participant! Thank you for your answers! Unfortunately, this target audience has already been recruited! Stay tuned for more research from Gradus.	
	ask if any(a2,1,8)	name Panda-20.png	
occup	single	Which of the following categories best describes your employment status when full-scale war begins (February 24, 2022)?	
	rotate	Employee	
		Entrepreneur, business owner, farmer (with hired employees)	
		Self-employed, worked on his own without hired workers	
		student	
		Pensioner (by age, disability)	
		Temporarily unemployed	
		Housekeeping / housewife	
		Child care leave	
	other	Other	Please specify:
financial_status	single	How would you describe your family's financial situation when full-scale war begins (February 24, 2022)?	
		We didn't even have enough money for food	
		We had enough money for food, but it was difficult to buy clothes	
		We had enough money for food and clothes, and we could save some, but not enough to buy expensive things (such as a TV or a refrigerator)	
		We could afford to buy some expensive things like a TV or a refrigerator	
		We could afford anything we wanted	
	dk	I don't want to answer	
religion	single	What confession do you belong to?	
	rotate	of the Orthodox Church (without division into confessions)	
		of the Orthodox Church of Ukraine (Metropolitan Epiphany)	

		of the Ukrainian Orthodox Church (Kyiv Patriarchate)	
		of the Ukrainian Orthodox Church (Moscow Patriarchate)	
		Greek Catholic Church	
		Protestant Church	
		Roman Catholic Church	
		Jewish	
		Muslim	
	other	Other	Please specify:
	dk	To none (atheist, agnostic)	
	dk	Difficult to answer	
family_status_before	single	How would you describe your marital status as of February 24, 2022?	
		Married	
		Civil marriage (not officially registered)	
		Single	
		Divorced	
		Widow	
	dk	I don't want to answer	
family_status_now	single	How would you describe your current marital status?	
		Married	
		Civil marriage (not officially registered)	
		Single	
		Divorced	
		Widow	
	dk	I don't want to answer	
family_size_num	integer	How many people, including you, were living in your household when full-scale war began (February 24, 2022)?	Please write in numbers
		from: 1	
		to: 10	
fam_live	multiple	Which of your family members lived in the same city as you, BUT not in the same apartments/house as you, at the time of the outbreak of full-scale war (February 24, 2022)?	Select all that apply:
	ask if	Your children or grandchildren who are over 18 years old	
		Your children or grandchildren under 18 years of age	
		Your parents (at least one of your parents, yours or your partner's)	
		Other relatives with whom you maintain a close relationship	
	dk	There are no such relatives	
children	single	Did you have children when the full-scale war started (February 24, 2022)?	
		Yes	
		No	
	dk	I don't want to answer	
age_children	multiple	Please indicate how many children of various ages you had at the time the full-scale war began (February 24, 2022):	Select all that apply:
	ask if children==1 other	Up to 17 years old	Please indicate the number of children under 17 years of age:
	other	18 years or older	Please indicate the number of children over 18 years of age:
children_live	multiple	How many of your children lived with you on February 24? Please indicate the number according to the age of the children.	Select all that apply:
	ask if family_size_num>1 and children==1	Up to 17 years old	Please indicate the number of children under 17 years of age:
	other	18 years or older	Please indicate the number of children over 18 years of age:

pets	single	Did you have pets when the full-scale war started (February 24, 2022)?	
		Yes	
		No	
	dk	I don't want to answer	
what_pets	multiple	What pets were living with you at the time of the start of the full-scale war (February 24, 2022)?	Select all that apply:
	ask if pets==1	Cats	
		Dogs	
	other	Other animals	Please indicate which animals:
car	single	Did you / your family have a car as of February 24?	
		Yes	
		No	
	dk	I don't want to answer	
apartmnt_status	single	What was the status of the accomadation where you lived on a permanent basis before the start of full-scale war (February 24, 2022)?	
	rotate	a home that you owned without a mortgage	
		owned WITH a mortgage	
		rented	
		lived without paying rent	
	other	Other	Please specify:
	dk	It is difficult to answer / I do not want to answer	
lang_before	single	What language did you traditionally speak at home before the start of a full-scale war (February 24, 2022)?	
		Ukrainian	
		Russian	
	other	another language	Please specify:
	dk	It is difficult to answer / I do not want to answer	
lang_after	single	What language do you traditionally communicate in everyday life now?	
		Ukrainian	
		Russian	
	other	another language	Please specify:
	dk	It is difficult to answer / I do not want to answer	
ato1	single	Were you displaced from the ATO / OOS zone from 2014 until February 24, 2022?	
		Yes	
		No	
	dk	It is difficult to answer / I do not want to answer	
ato2	multiple	Were you in the ATO / OOS zone from 2014 until February 24, 2022?	Select all that apply:
		Yes, as a military member of the Armed Forces or volunteer battalions	
		Yes, as a volunteer	
		Yes, as a civilian	
	dk	No	
	dk	It is difficult to answer / I do not want to answer	
q1	single	In the days prior to the invasion, did you expect that Russia would invade Ukraine?	
		No	
		Rather not	
		Rather yes	
		yes	
	dk	Difficult to answer	
q2	multiple	Have you prepared and packed any of the following into a separate bag/backpack for quick evacuation before the full-scale invasion begins on February 24, 2022?	Select all that apply:
		Documents	
		Possible evacuation plan	

		Medicine	
		Food	
		Clothing	
		Cash	
	other	Other	Please specify:
	dk	didn't collect anything	
q3	single	Before the full-scale invasion begins on February 24, 2022, have you considered the possibility that you will have to leave your city due to hostilities?	
		No	
		Rather not	
		Rather yes	
		yes	
	dk	Difficult to answer	
q4	single	Did you have a previous possible evacuation plan before February 24?	
		Yes, I had a clear plan, where and how to leave	
		Yes, I had a tentative plan, where and how to leave	
		No, I had no plan, where and how to leave	
	dk	Difficult to answer	
q5	multiple	Were you a direct witness of military operations on the territory of your city after the start of a full-scale invasion on February 24, 2022?	Select all that apply:
		A missile or bomb hitting a building or causing destruction or fire	
		Firefight in the city, sounds of shots from small arms	
		Movement of military equipment (tank, armored personnel carrier, military truck, own or enemy army)	
		Injury or death of a person (not necessarily someone you know) as a result of shelling or bombing	
		Explosions in the distance or air defense work over the city	
		Heard or saw a military plane over the city	
	other	Other	Please specify:
	dk	I was not a direct witness in person, but I saw photos / videos of military actions *within walking distance* from my place of residence	
	dk	was not a witness	
	dk	There were no military operations in my city	
q6	single	How can you describe your participation in the decision to leave your city to a safer place or to stay?	
		I made a decision by myself	
		I took part in the decision-making process together with other people,	
		I did not take part in the decision-making at all	
	dk	Difficult to answer	
q7	multiple	Who exactly took part in the decision to leave your city to a safer place or to stay?	Select all that apply:
	ask if any(q6,2,3)	Husband / wife (partner / partner)	
		Parents, mine or partner	
		Adult children, mine or partner's	
	other	Others	Please specify:
	dk	Difficult to answer	
q8	single	Has anyone in your household left your city since the full-scale invasion began on February 24, 2022?	
	ask if	Yes	
		No	
	dk	It is difficult to answer / I do not want to answer	
q9	single	Do you now have an "emergency bag" and an evacuation plan?	
		Yes, and a "suitcase" and a plan	
		Only a "suitcase"	

		Just a plan	
	dk	I have nothing	
q10	single	What best describes your actions after the full-scale invasion began on February 24?	
		I did not leave the city for the purpose of evacuation	
		I left the city for evacuation (regardless of whether you returned or not)	
		I left town to evacuate family members and then came back	
		I left the city in to serve in the Armed Forces, territorial defence, etc	
	other	Other	Please specify:
	dk	It is difficult to answer / I do not want to answer	
Section for those who evacuated			
b1	single	Has evacuation been announced in the city of your permanent official residence?	
		Yes	
		No	
	dk	It's hard to answer / I don't know	
b2	single	Did you leave before the evacuation was officially announced or after?	
	ask if b1==1 and any(q10,2,3)	Before	
		After	
	dk	It is difficult to answer / I do not want to answer	
b3	multiple	From what source did you find out that evacuation was officially announced in your area?	Select all that apply:
	ask if b1==1	Television or radio	
		Read messages on the phone or on the computer (SMS, social networks, Internet sites, etc.)	
		Someone personally came or called	
		Loudspeakers, stationary or mobile, from cars	
		Accidentally from other people (in line, in shelter, on the street), etc	
	other	Other	Please specify:
	dk	It is difficult to answer / I do not want to answer	
s4	image	Let's talk about your first / only departure from the city with the evacuation purpose destination after the start of the full-scale invasion on February 24th.	
	ask if any(q10,2,3)	name does not exist.jpg	
s1	text	On what date (day, month, year) did you leave your settlement?	Please give the closest answer. If you find it difficult to answer, or you do not want to answer, write "01.01.01".
	ask if any(q10,2,3)		
	validators:date		
s2	single	What mode of transport did you use to leave the city during the evacuation?	
	rotate	Bus	
	ask if any(q10,2,3)	train	
		Own car	
		Another person's car	
		Bike	
		On foot	
	other	Other	Please specify:
	dk	It is difficult to answer / I do not want to answer	
s3	single	How many days in advance did you decide to leave?	
	ask if any(q10,2,3)	On the same day	
		1 day	
		2 days	

		3 days	
		4-7 days	
		More than 7 days	
	dk	It is difficult to answer / I do not want to answer	
s5	text	On what date (day, month, year) did you return to the city permanently after the first / only evacuation?	Please write in numbers in the format dd.mm.yyyy. If you haven't returned yet, enter today's date. If you find it difficult to answer, or you do not want to answer, write 01.01.01
	ask if any(q10,2,3)		
	validators: date		
s6	single	Where is the place where you lived for at least 7 days for the first time after visiting from your city?	
	ask if any(q10,2,3)	Within the region of my permanent residence	
		Within another region of Ukraine	
		Abroad	
	dk	It is difficult to answer / I do not want to answer	
s7	single	Where exactly in Ukraine is the place where you lived for at least 7 days for the first time after visiting from your city?	
	rotate	A settlement in Western Ukraine	
	ask if s6==2	A settlement in Northern Ukraine	
		A settlement in Eastern Ukraine	
		A settlement in Southern Ukraine	
		A settlement in Central Ukraine	
		Kyiv	
	dk	It is difficult to answer / I do not want to answer	
s8	single	Where exactly was the place abroad where you lived for at least 7 days for the first time after leaving your city?	
	ask if s6==3	Poland	
		Germany	
		Slovakia	
		Hungary	
		Romania	
		Moldova	
		Russia	
		Italy	
		Czech Republic	
		Austria	
		Lithuania	
		France	
		Netherlands	
		Latvia	
		Israel	
	other	Another country	Please specify:
	dk	It is difficult to answer / I do not want to answer	
s9	integer	How many days did it take to get to the place you indicated in the previous question (including overnight stays and stops)?	If you find it difficult to answer, or you do not want to answer, write "0".
	ask if any(q10,2,3)	up to: 150	
s10	single	Have you moved out with people who are not members of your family and do not live with you?	
	ask if any(q10,2,3)	Yes	
		No	
	dk	It is difficult to answer / I do not want to answer	
s11	single	Did anyone help you while you were away from the city of your permanent residence?	

	ask if any(q10,2,3)	Yes	
		No	
	dk	It is difficult to answer / I do not want to answer	
s12	multiple	Who exactly helped you when you leave the city of your permanent residence?	Select all that apply:
	ask if s11==1	Family members / friends / neighbors / acquaintances	
	rotate	Volunteers	
		Random people whom I met during the evacuation	
		Representatives of authorities	
		Military	
		Employer	
	other	Other	Please specify:
	dk	It is difficult to answer / I do not want to answer	
s13	multiple	How did family members / friends / neighbors / acquaintances help you when leaving the city of your permanent residence?	Select all that apply:
	ask if s12==1	Provided information (for example, suggested route)	
	rotate	provided transportation / gave a ride in their own vehicle	
		provided a shelter	
		provided food during the evacuation	
		gave money	
	other	Other	Please specify:
	dk	It is difficult to answer / I do not want to answer	
s14	multiple	How did the volunteers help you when you left the city of your permanent residence?	
	ask if s12==2	Provided information (for example, suggested route)	
	rotate	provided transportation / gave a ride in their own vehicle	
		provided a shelter	
		provided food during the evacuation	
		gave money	
	other	Other	Please specify:
	dk	It is difficult to answer / I do not want to answer	
s15	multiple	How did the random people you met during the evacuation help you when leaving the city of your permanent residence?	
	ask if s12==3	Provided information (for example, suggested route)	
	rotate	provided transportation / gave a ride in their own vehicle	
		provided a shelter	
		provided food during the evacuation	
		gave money	
	other	Other	Please specify:
	dk	It is difficult to answer / I do not want to answer	
s16	multiple	How did the representatives of the authorities help you when you left the city of your permanent residence?	
	ask if s12==4	Provided information (for example, suggested route)	
	rotate	provided transportation / gave a ride in their own vehicle	
		provided a shelter	
		provided food during the evacuation	
		gave money	
	other	Other	Please specify:
	dk	It is difficult to answer / I do not want to answer	
s17	multiple	How did the military help you when you were living in the city of your permanent residence?	
	ask if s12==5	Provided information (for example, suggested route)	
	rotate	provided transportation / gave a ride in their own vehicle	
		provided a shelter	
		provided food during the evacuation	
		gave money	
	other	Other	Please specify:
	dk	It is difficult to answer / I do not want to answer	

s18	multiple	How did the employer help you when leaving the city of your permanent residence?	
	ask if s12==6	Provided information (for example, suggested route)	
	rotate	provided transportation / gave a ride in their own vehicle	
		provided a shelter	
		provided food during the evacuation	
		gave money	
	other	Other	Please specify:
	dk	It is difficult to answer / I do not want to answer	
s19_1	single	Estimate how much you agree with the statement: "Before I left the city, I was worried that I could not find housing"?	
	ask if any(q10,2,3)	strongly disagree	
	rotate blocks s19_1-	rather disagree	
		rather agree	
		strongly agree	
	dk	Difficult to answer	
s19_2	single	Rate how much you agree with the statement: "Before I left the city, I was worried that I might not have enough money"?	
	ask if any(q10,2,3)	strongly disagree	
		rather disagree	
		rather agree	
		strongly agree	
	dk	Difficult to answer	
s19_3	single	Rate how much you agree with the statement: "Before leaving the city, I was worried that I could not find transport to leave"?	
	ask if any(q10,2,3)	strongly disagree	
		rather disagree	
		rather agree	
		strongly agree	
	dk	Difficult to answer	
s19_4	single	Estimate how much you agree with the statement: "Before leaving the city, I was worried that the road would be very difficult and tiring"?	
	ask if any(q10,2,3)	strongly disagree	
		rather disagree	
		rather agree	
		strongly agree	
	dk	Difficult to answer	
s19_5	single	Rate how much you agree with the statement: "Before I left the city, I was worried that it would be very difficult for me or one of my companions to reach the road because of the health condition"?	
	ask if any(q10,2,3)	strongly disagree	
		rather disagree	
		rather agree	
		strongly agree	
	dk	Difficult to answer	
s19_6	single	Rate how much you agree with the statement: "Before leaving the city, I was worried that the road might be dangerous (for example, there might be shelling)"?	
	ask if any(q10,2,3)	strongly disagree	
		rather disagree	
		rather agree	
		strongly agree	
	dk	Difficult to answer	
s20_1	single	Estimate how much you agree with the statement: "If I stayed in the city, I or someone from my relatives could be killed or seriously injured"?	
	ask if any(q10,2,3)	strongly disagree	
	rotate blocks s20_1-	rather disagree	

		rather agree	
		strongly agree	
	dk	Difficult to answer	
s20_2	single	Rate how much you agree with the statement: "If I had stayed in the city, illegal actions (violence, rape, robbery) could have been committed against me or my family"?	
	ask if any(q10,2,3)	strongly disagree	
		rather disagree	
		rather agree	
		strongly agree	
	dk	Difficult to answer	
s20_3	single	Rate to what extent you agree with the statement: "If I stayed in the city, I would face problems with food / drinking water / medicine"?	
	ask if any(q10,2,3)	strongly disagree	
		rather disagree	
		rather agree	
		strongly agree	
	dk	Difficult to answer	
s20_4	single	Rate to what extent you agree with the statement: "If I stayed in the city, I would face the problems of lack of electricity / cold water / gas"?	
	ask if any(q10,2,3)	strongly disagree	
		rather disagree	
		rather agree	
		strongly agree	
	dk	Difficult to answer	
s20_5	single	Rate to what extent you agree with the statement: "If I stayed in the city, I could be under occupation due to the transfer of the city of my permanent residence under the control of the Russian army/army of the DPR/LNR"?	
	ask if any(q10,2,3)	strongly disagree	
		rather disagree	
		rather agree	
		strongly agree	
	dk	Difficult to answer	
s20_6	single	Rate how strongly you agree with the statement: "If I had stayed in the city, I could have been injured or killed as a result of the destruction / damage of my house"?	
	ask if any(q10,2,3)	strongly disagree	
		rather disagree	
		rather agree	
		strongly agree	
	dk	Difficult to answer	
s21	single	How many people from your immediate circle (friends, relatives, neighbors) evacuated before you evacuated?	
	ask if any(q10,2,3)	Almost no one	
		Less than a half	
		About a half	
		More than a half	
		Almost all	
	dk	Difficult to answer	
intro1	image	Now we ask you to evaluate, how important certain reasons were for making the decision regarding your departure from the city. Please rate your personal experience of evacuation from the city.	
	ask if any(q10,2,3)	name does not exist.jpg	
s22_1	single	How important was the reason: "There appeared an opportunity to join those who left by personal transport" in your decision to leave the city?	
	ask if any(q10,2,3)	The reason is NOT important at all	

	rotate blocks s22_1-	the reason is rather NOT important	
		the reason is rather important	
		the reason is very important	
	dk	Difficult to answer	
s22_2	single	How important was the reason: "There appeared an opportunity to leave by evacuation train or bus" in your decision to leave the city?	
	ask if any(q10,2,3)	The reason is NOT important at all	
		the reason is rather NOT important	
		the reason is rather important	
		the reason is very important	
	dk	Difficult to answer	
s22_3	single	How important was the reason: "I was offered a safe place to live outside my city" in your decision to leave the city?	
	ask if any(q10,2,3)	The reason is NOT important at all	
		the reason is rather NOT important	
		the reason is rather important	
		the reason is very important	
	dk	Difficult to answer	
s22_4	single	How important was the reason: "The opening of the "green corridor" for evacuation was announced" in your decision to leave the city?	
	ask if any(q10,2,3)	The reason is NOT important at all	
		the reason is rather NOT important	
		the reason is rather important	
		the reason is very important	
	dk	Difficult to answer	
s22_5	single	How important was the reason: "There appeared an opportunity to buy fuel for the car" in your decision to leave the city?	
	ask if any(q10,2,3)	The reason is NOT important at all	
		the reason is rather NOT important	
		the reason is rather important	
		the reason is very important	
	dk	Difficult to answer	
s23	single	When you left your city, when did you think you could come back?	
	ask if any(q10,2,3)	In less than a week	
		From a week to a month	
		From a month to three	
		From three months to a year	
		More than a year	
	dk	Difficult to answer	
s24	single	Have you considered that you (your entire family) may never return to your city of permanent residence?	
	ask if any(q10,2,3)	Yes	
		No	
	dk	It is difficult to answer / I do not want to answer	
s25	single	Did you return to your city after the evacuation?	
	ask if any(q10,2,3)	Yes	
		No	
	dk	It is difficult to answer / I do not want to answer	
Section for those who evacuated and returned			

s26	text	On what date did you return to your city of permanent residence after the start of the war? Please try to enter the closest date.	Please write in numbers in the format dd.mm.yyyy. Please give the closest answer. If you find it difficult to answer, or you do not want to answer, write "01.01.01".
	validators: date		
	ask if s25==1		
s27_1	single	Rate to what extent you agree with the statement: "I decided to return to my city because I felt that the danger has passed"?	
	ask if s25==1	strongly disagree	
	rotate blocks s27_1-	rather disagree	
		rather agree	
		strongly agree	
	dk	Difficult to answer	
s27_2	single	Rate to what extent you agree with the statement: "I decided to move to my city because I needed to help my loved ones"?	
	ask if s25==1	strongly disagree	
		rather disagree	
		rather agree	
		strongly agree	
	dk	Difficult to answer	
s27_3	single	Rate how much you agree with the statement: "I decided to return to my city because I had to return to my work"?	
	ask if s25==1	strongly disagree	
		rather disagree	
		rather agree	
		strongly agree	
	dk	Difficult to answer	
s27_4	single	Estimate how much you agree with the statement: "I decided to return to my city because I decided to join military forces"?	
	ask if s25==1	strongly disagree	
		rather disagree	
		rather agree	
		strongly agree	
	dk	Difficult to answer	
s27_41	single	Estimate how much you agree with the statement: "I decided to return to my city because I decided to volunteer there"?	
	ask if s25==1	strongly disagree	
		rather disagree	
		rather agree	
		strongly agree	
	dk	Difficult to answer	
s27_5	single	Rate to what extent you agree with the statement: "I decided to return to my city because I planned from the very beginning to take my family and return"?	
	ask if s25==1	strongly disagree	
		rather disagree	
		rather agree	
		strongly agree	
	dk	Difficult to answer	
Section for those who did not evacuate			
p1	single	Did you consider leving the city for the evacuation after the start of the full-scale invasion on February 24?	

	ask if q10==1	I never considered leaving the city to evacuate	
		I considered this possibility	
	dk	Difficult to answer	
p2_1	single	Estimate how much you agree with the statement: "I didn't evacuate because I didn't know where I would live"?	
	ask if q10==1	strongly disagree	
		rather disagree	
		rather agree	
		strongly agree	
	dk	Difficult to answer	
p2_2	single	Estimate how much you agree with the statement: "I didn't evacuate because I didn't have the financial ability"?	
	ask if q10==1	strongly disagree	
		rather disagree	
		rather agree	
		strongly agree	
	dk	Difficult to answer	
p2_3	single	Rate how much you agree with the statement: "I didn't evacuate because I didn't have transport"?	
	ask if q10==1	strongly disagree	
		rather disagree	
		rather agree	
		strongly agree	
	dk	Difficult to answer	
p2_4	single	Estimate how much you agree with the statement: "I didn't evacuate because I was worried that the road would be difficult and tiring"?	
	ask if q10==1	strongly disagree	
		rather disagree	
		rather agree	
		strongly agree	
	dk	Difficult to answer	
p2_5	single	Rate to what extent you agree with the statement: "I did not evacuate because I was worried that it would be very difficult for me or one of my companions to reach the road due to the health condition"?	
	ask if q10==1	strongly disagree	
		rather disagree	
		rather agree	
		strongly agree	
	dk	Difficult to answer	
p2_6	single	Rate how much you agree with the statement: "I didn't evacuate because I was worried that the road might be dangerous (for example, there might be shelling)"?	
	ask if q10==1	strongly disagree	
		rather disagree	
		rather agree	
		strongly agree	
	dk	Difficult to answer	
p3_1	single	Rate how much you agree with the statement: "There was a possibility that in the city in which I stayed, I or someone from my relatives could be killed or seriously injured"?	
	ask if q10==1	strongly disagree	
		rather disagree	
		rather agree	
		strongly agree	
	dk	Difficult to answer	
p3_2	single	Rate how much you agree with the statement: "There was a possibility that in the city in which I stayed the illegal actions (violence, rape, robbery) could have been committed against me or my family"?	

	ask if q10==1	I do not agree at all	
		Rather, I do not agree	
		I rather agree	
		I completely agree	
	dk	Difficult to answer	
p3_3	single	Rate how much you agree with the statement: "There was a possibility that the city where I stayed could run out of food / drinking water / medicine"?	
	ask if q10==1	I do not agree at all	
		Rather, I do not agree	
		I rather agree	
		I completely agree	
	dk	Difficult to answer	
p3_4	single	Rate how much you agree with the statement: "There was a possibility that the electricity / water / gas could disappear in the city in which I stayed"?	
	ask if q10==1	I do not agree at all	
		Rather, I do not agree	
		I rather agree	
		I completely agree	
	dk	Difficult to answer	
p3_5	single	Rate how much you agree with the statement: "There was a possibility that the city in which I stayed could come under the control of the Russian army / the army of the DPR / LPR (was or could be occupied) "?	
	ask if q10==1	I do not agree at all	
		Rather, I do not agree	
		I rather agree	
		I completely agree	
	dk	Difficult to answer	
p3_6	single	Rate how much you agree with the statement: "There was a possibility that I may be injured or killed as a result of destruction / damage to my result"?	
	ask if q10==1	I do not agree at all	
		Rather, I do not agree	
		I rather agree	
		I completely agree	
	dk	Difficult to answer	
p4	single	Has anyone offered you help for settlement from the city of your permanent residence?	
	ask if q10==1	So	
		No	
	dk	It is difficult to answer / I do not want to answer	
p5	multiple	Who exactly offers you assistance for leaving the city of your permanent residence?	Select all that apply:
	ask if p4==1	Family members / friends / neighbors / acquaintances	
	rotate	Volunteers	
		Random people	
		Representatives of authorities	
		Military	
		Employer	
	other	Other	Please specify:
	dk	It is difficult to answer / I do not want to answer	
p6	multiple	How did you offer help to family members / friends / neighbors / acquaintances to leave the city of your permanent residence?	Select all that apply:
	ask if p5==1	Informative (for example, they offered to suggest a route)	
		They offered to provide transport / a ride in their own vehicle	
		They offered to provide shelter	
		They offered to provide them during the evacuation	

		They offered to give money	
	other	Other	Please specify:
	dk	It is difficult to answer / I do not want to answer	
p7	multiple	How did you offer assistance to volunteers for leaving the city of your permanent residence?	Select all that apply:
	ask if p5==2	Informative (for example, they offered to suggest a route)	
		They offered to provide transport / a ride in their own vehicle	
		They offered to provide shelter	
		They offered to provide them during the evacuation	
		They offered to give money	
	other	Other	Please specify:
	dk	It is difficult to answer / I do not want to answer	
p8	multiple	How did you offer help to random people to leave the city of your permanent residence?	
	ask if p5==3	Informative (for example, they offered to suggest a route)	
		They offered to provide transport / a ride in their own vehicle	
		They offered to provide shelter	
		They offered to provide them during the evacuation	
		They offered to give money	
	other	Other	Please specify:
	dk	It is difficult to answer / I do not want to answer	
p9	multiple	In what way were you offered help by representatives of the authorities to leave the city of your permanent residence?	
	ask if p5==4	Informative (for example, they offered to suggest a route)	
		They offered to provide transport / a ride in their own vehicle	
		They offered to provide shelter	
		They offered to provide them during the evacuation	
		They offered to give money	
	other	Other	Please specify:
	dk	It is difficult to answer / I do not want to answer	
p10	multiple	How were you offered assistance to the military for leaving the city of your permanent residence?	
	ask if p5==5	Informative (for example, they offered to suggest a route)	
		They offered to provide transport / a ride in their own vehicle	
		They offered to provide shelter	
		They offered to provide them during the evacuation	
		They offered to give money	
	other	Other	Please specify:
	dk	It is difficult to answer / I do not want to answer	
p11	multiple	How did the employer offer you help for leaving the city of your permanent residence?	
	ask if p5==6	Informative (for example, they offered to suggest a route)	
		They offered to provide transport / a ride in their own vehicle	
		They offered to provide shelter	
		They offered to provide them during the evacuation	
		They offered to give money	
	other	Other	Please specify:
	dk	It is difficult to answer / I do not want to answer	
p12	single	What is your primary occupation after the full-scale invasion begins on February 24, 2022?	
	ask if q10==1	Worked in offline modes (physically at the workplace)	
	rotate	Worked in online modes	
		Was a member of the ZSU / TRO	
		Volunteers	
		Studied at universities, specialized courses	
	dk	did not work	

	dk	It is difficult to answer / I do not want to answer	
Section for all respondents			
	integer	If you needed to make sure that the residents of your city evacuate due to the danger of hostilities, rate how effective the following message would be, on a scale from 0 to 10, where 0 is completely ineffective (no one would visit), 10 - very effective (almost everyone would leave).	
	random	until: 10	
	Control	Due to armed aggression by Russia, a very critical situation is developing around your city. We urge you to act judiciously on the issue of evacuation from a dangerous zone. Leave as soon as possible!	
	Control+plan	Due to armed aggression by Russia, a very critical situation is developing around your city. We urge you to act judiciously on the issue of evacuation from a dangerous zone. Free buses will be waiting for you at <...>. Sing up by phone <...>. Accommodation and medical assistance will be waiting for you at your destination. Take documents, personal belongings and products for 2-3 days with you. Leave as soon as possible!	
	Gain	Due to armed aggression by Russia, a very critical situation is developing around your city. We urge you to act judiciously on the issue of evacuation from a dangerous zone. Evacuation saves lives! Take care of your safety, the safety of your children and relatives. Leave as soon as possible!	
	Gain+plan	Due to armed aggression by Russia, a very critical situation is developing around your city. We urge you to act judiciously on the issue of evacuation from a dangerous zone. Free buses will be waiting for you at <...>. Record by phone <...>. Accommodation and medical assistance will be waiting for you at your destination. Take documents, personal belongings and products for 2-3 days with you. Evacuation saves lives! Take care of your safety, the safety of your children and relatives. Leave as soon as possible!	
	Loss of life	Due to armed aggression by Russia, a very critical situation is developing around your city. We urge you to act judiciously on the issue of evacuation from a dangerous zone. Almost every day, civilian residents of the community die and are wounded. Do not put yourself, your children and relatives at risk. Leave as soon as possible!	
	Loss of life+plan	Due to armed aggression by Russia, a very critical situation is developing around your city. We urge you to act judiciously on the issue of evacuation from a dangerous zone. Almost every day, civilian residents of the community die and are wounded. Do not put yourself, your children and relatives at risk. Free buses will be waiting for you at <...>. Record by phone <...>. Accommodation and medical assistance will be waiting for you at your destination. Take documents, personal belongings and products for 2-3 days with you. Leave as soon as possible!	
	Loss of living conditions	Due to armed aggression by Russia, a very critical situation is developing around your city. We urge you to act judiciously on the issue of evacuation from a dangerous zone. Infrastructure and life support facilities, residential buildings are being destroyed every day. It has become difficult and dangerous to deliver food, drinking water, and medicine to the city. Leave as soon as possible!	

	Loss of living conditions+plan	Due to armed aggression by Russia, a very critical situation is developing around your city. We urge you to act judiciously on the issue of evacuation from a dangerous zone. Infrastructure and life support facilities, residential buildings are being destroyed every day. There is no water, gas, and partly electricity. It has become difficult and dangerous to deliver food, drinking water, and medicine to the city. Free buses will be waiting for you at <...>. Record by phone <...>. Accommodation and medical assistance will be waiting for you at your destination. Take documents, personal belongings and products for 2-3 days with you. Leave as soon as possible!	
	Opportunity Cost	Due to armed aggression by Russia, a very critical situation is developing around your city. We urge you to act judiciously on the issue of evacuation from a dangerous zone. By evacuating, you save the city's limited resources for the military of the Armed Forces and allow them to do their jobs better. Leave as soon as possible!	
	Opportunity Cost+plan	Due to armed aggression by Russia, a very critical situation is developing around your city. We urge you to act judiciously on the issue of evacuation from a dangerous zone. By evacuating, you save the city's limited resources for the military of the Armed Forces and allow them to do their jobs better. Free buses will be waiting for you at <...>. Record by phone <...>. Accommodation and medical assistance will be waiting for you at your destination. Take documents, personal belongings and products for 2-3 days with you. Leave as soon as possible!	