Political Debates and the Integration of Ukrainian Refugees in Germany[*]

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September 3, 2025

Abstract

Refugee integration is a core policy concern. Expanding on prior research on domestic policies and elite cues, we explore whether host-country debates about military aid to refugees' homeland shape perceived support, belonging, and return intentions. We implement a survey experiment with 2,631 Ukrainian refugees in Germany. Participants viewed authentic statements by German politicians with varying support for military aid. Average effects on integration outcomes are largely null. We then argue that this stems from moderation by the information environment. Using day-to-day variation in national news coverage, we show that without national Ukraine coverage, any experimental cue—supportive, ambivalent, or opposing—negatively affected perceived integration outcomes. On days with Ukraine coverage, our treatments had no effect. We propose that these patterns reflect a contestation mechanism: refugees treat the visibility of debate, rather than its valence, as evidence that support for Ukraine is contested and acceptance of Ukrainians in Germany is weaker.

Keywords: Foreign aid, Refugee integration, Ukraine, Germany, Survey experiment

1 Introduction

Refugee integration is a pressing global concern that carries profound implications for both displaced populations and host societies (UNHCR, 2023). As conflicts worldwide continue to displace millions, understanding the determinants of refugee integration is essential for promoting social cohesion, economic development, and humanitarian objectives (Martén, Hainmueller and Hangartner, 2019; Harder et al., 2018).

After Russia's full-scale invasion of Ukraine, European countries faced the dual challenges of responding to an inflow of refugees and deciding on the extent of military engagement in the ongoing Russo-Ukrainian War. Germany, in particular, remains the second most popular destination for Ukrainian refugees within the EU (Kinkartz, 2024), while also playing an important role in determining the level of military support to Ukraine. While the German government provides social programs to support Ukrainian refugees and extends military, economic, and humanitarian aid to Ukraine, the degree to which Germany should provide military support has been frequently debated. The German population is also divided on the topic (Hopkins, 2023). This debate is still ongoing: in March 2025, amid the uncertainty about the US military aid, the EU Commission proposed increased support for Ukraine,[1] and the US's recent decision to reduce its own commitments has heightened the pressure on European countries to maintain or step up their engagement.[2]

Prior research has examined the role of direct policies and political messaging about refugees themselves on integration (Hainmueller, Hangartner and Pietrantuono, 2015; Fouka, 2023). However, just as domestic policies of host countries can affect refugee integration outcomes , national debates over military engagement in the conflict could affect refugees' integration outcomes by signaling overall (lack of) support for their country of origin and its citizens. When politicians publicly oppose military aid to refugees' country of origin, it may

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[1] https://www.europarl.europa.eu/news/en/press-room/20250310IPR27219/meps-debate-future-of-eu-defence-and-support-for-ukraine
[2] https://www.theguardian.com/world/2025/mar/04/us-military-aid-ukraine-pause-trump-zelenskyy-updates

lead to group-based resentment towards the host country reduced perceptions of psychological safety and trust in the host society, hindering successful integration (Phillimore, 2012; Kuhn and Maxwell, 2023; Weiss, 2025). Conversely, political support for military aid may signal acceptance and inclusion, potentially increasing refugees' motivation to integrate (Berry et al., 2006).

In this paper, we provide the first evidence on this topic by examining the effect of German debates about military support for Ukraine on refugees' feelings of belonging, perceptions of the host country more generally, and their intentions to stay. To do so, we conducted a survey experiment on a sample of 2,631 Ukrainian refugees who resided in Germany as of March 2024. Given the difficulty of reaching this population, we used targeted online ads to recruit our study participants and expose participants to authentic statements by members of the German government, with varying levels of support for increased military support for Ukraine.

On the full sample we find no evidence that treatments affected refugees' feelings of belonging, perceptions of general refugee support, or intentions to leave Germany. Investigating mechanisms, we find that these null results are *not* driven by respondents who see military support as counterproductive. Similarly, we find that self-reported consumption of German mainstream news does not moderate effects.

We then investigate whether short-term fluctuations in the information environment, rather than long-term media consumption levels, may explain the overall null results. Building on work showing that individuals' attitudes are influenced most significantly by recent news coverage (Tesler, 2015; Zaller, 1992), we contend that high salience of debates over military support of Ukraine in German media shortly before the survey may have saturated the information environment and muted the effects of our experimental treatments. Put differently, the short-term information environment may condition the effects of the political messages we present respondents with.

To test our argument, we leverage daily variation in coverage of Ukraine in German

media, proxied by coverage in the *Tagesschau*, Germany's most-watched TV news program. For each respondent, we code whether Ukraine was mentioned in the Tagesschau on the evening before she took the survey. Based on secondary evidence, we argue that Tagesschau coverage provides a good proxy for the salience of the topic at the time the respondent completed the survey (Krämer and Schroll, 2009). This proxy for day-to-day variation in German news coverage thus allows us to assess whether treatment effects are conditional on contemporaneous media salience.

Our findings reveal two patterns that support the information saturation argument. First, we find suggestive evidence that the national information environment independently shifts baseline perceptions among control group respondents. Following coverage in the national news, control group respondents reported lower perceptions of military support, general support for Ukrainians, belonging in German as well as increased return intentions. Moreover, we find that these patterns are independent of the valence of national media coverage, i.e. any reporting on Ukraine is associated with the same attitudinal effect.

Second, among respondents surveyed on days when Ukraine was not covered in the news, clear experimental effects emerge. In this *low-salience environment*, all three treatments (supportive, ambivalent, and oppositional) reduced perceived German support, increased return intentions, and decreased feelings of belonging in Germany. These shifts parallel how control-group perceptions differ between no-mention and mention days. By contrast, when Ukraine received any media coverage the preceding evening, treatment effects are near zero across all outcomes. This pattern is consistent with an information-environment saturation mechanism explaining the pooled null effects.[3]

Additional checks reduce concerns about unobserved confounding. First, days with and without a Tagesschau mention of Ukraine are balanced on a wide range of respondent characteristics. Second, estimates are robust to adding a linear time trend and to alternative standard error calculations. Third, a permutation test using placebo coverage dates supports

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[3]   Most interviews occurred on days following Ukraine coverage in German news.

the main heterogeneity result. Finally, a partial replication with an independent survey of Ukrainian refugees in Germany reproduces the valence-independent effect of media coverage on attitudes.

Taken together, the experimental and observational evidence indicate that debates about military support shape refugees' feelings of belonging, perceptions of the host country, and intentions to stay or return. Contrary to our initial expectations, message valence does not matter: any visible debate—supportive, ambivalent, or opposing—functions as a contestation signal and produces similar effects.

Our work contributes to several strands of research on refugee integration, political messaging, and conflict attitudes. First, our findings broaden the scope of research on how political rhetoric shapes the attitudes of immigrants and other minority groups (Pérez, 2015; Grewal and Hamid, 2024; Secen and Öztürk, 2024; Tyrberg, 2024). We identify an indirect channel through which elite discourse about a homeland conflict affects perceptions of acceptance and inclusion in the host society. Unlike prior work, which has studied rhetoric that explicitly targets immigrants or minorities, we focus on political messages that address military support to refugees' country of origin. We focus on this debate because, first, the timing of a war makes military support questions especially salient and dominant in public discourse, and second, such debates are rooted in the broader question of whether host societies feel responsible for refugees—shaping how refugees interpret themselves as valued or ignored. We show that such messages, despite not mentioning refugees directly, can nonetheless influence perceptions of belonging and return intentions under certain conditions. Our findings suggest that refugees interpret political cues about the conflict they fled not only as foreign policy positions, but also as signals of their social status and inclusion in the host society.

Second, we contribute to research on the conditional effects of political communication by showing that elite cue effects may hinge on short-term salience in mainstream news. Building on agenda-setting and priming (McCombs, Shaw and Weaver, 2014; Scheufele and Tewksbury,

2007; Tesler, 2015), and on RAS and pre-treatment accounts (Zaller, 1992; Druckman and Leeper, 2012; Druckman, 2022), we find that when ambient media coverage does not mention Ukraine, brief elite statements move perceived host support, belonging, and return intentions. When Ukraine is covered, effects vanish, consistent with saturation and cue competition (Prior, 2007; Nicholson, 2011; Bullock, 2011). This also underscores the importance of measuring short-term media fluctuations as a potential moderator of political persuasion, distinct from self-reported, long-term media consumption.

Methodologically, we provide a blueprint of how to investigate this short-term salience mechanism. We rely on time-varying measures of the ambient media environment, matched with survey completion dates, to investigate how treatment effects may be conditional on the short-term media salience of a specific topic. We contend that this approach—combing experimental cues and observational media exposure data—enables researchers to distinguish true null effects of informational cues from false negatives driven by pre-treatment exposure through the organic media environment.

Finally, we document a valence-independent pattern: under low salience, all kinds of cues—supportive, ambivalent, and oppositional—shift outcomes in the same direction. This departs from arguments that emphasize directional updating under elite disagreement (Zaller, 1992; Chong and Druckman, 2007; Druckman, Peterson and Slothuus, 2013). Instead, our results suggests that the mere presence of debate may act as a signal of contestation that drives perceptions of support.

2   Why Military Aid Debates May Matter?

Refugee attitudes are shaped not only by integration policies but also by signals of acceptance inferred from broader political discourse (Berry et al., 2006; Phillimore, 2012; Harder et al., 2018; Fouka, 2023). Such signals are often conveyed through elite cues—politicians' statements or policies—that refugees may use as heuristics for wider public attitudes, updating perceptions

of belonging and intentions to remain (Hainmueller, Hangartner and Pietrantuono, 2015; Hall and Werner, 2022). Elite rhetoric shapes attention and evaluation, and in cue-taking models, visible disagreement can dampen persuasion by activating counter-considerations (McCombs, Shaw and Weaver, 2014; Tesler, 2015; Zaller, 1992; Druckman and Leeper, 2012; Druckman, 2022).

Even brief political messages shift beliefs and behaviors among minority groups. Negative ads increased political engagement among Latino Americans (Besco et al., 2022; Pérez, 2015); inclusive statements by Chancellor Merkel reduced perceived discrimination among Muslims in Germany (Grewal and Hamid, 2024); and welcoming versus hostile remarks altered Syrian refugees' political engagement and sense of belonging (Secen and Öztürk, 2024; Tyrberg, 2024). Across these settings, elite rhetoric functions as a signal of group standing (Kuhn and Maxwell, 2023).

A key limitation of this work is its focus on direct rhetoric toward established minorities (e.g., Grewal and Hamid, 2024; Pérez, 2015). We extend this research to the context of indirect cues through military support debates, where the symbolic inclusion or exclusion communicated by elite rhetoric may be particularly potent. Lacking deep-rooted knowledge of host-country politics, and with the fate of their homeland at stake, recent refugees of war are highly motivated to scan prominent elite debates—such as those over military aid to Ukraine—for signals about their social standing and the durability of their welcome. This focus highlights a novel pathway through which elite discourse shapes integration outcomes.

2.1   Symbolic Role of Military Aid

While debates over military aid are, on their surface, about geopolitics, they may function as powerful symbolic signals for affected refugee populations. Arguments over German aid to Ukraine bundle concrete policy with an implicit question of continued German material and moral investment. Under conditions of high uncertainty and personal threat, Ukrainian refugees are likely to interpret this symbolic layer as diagnostic information about expected

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empathy, solidarity, and long-run commitment, shaping their sense of belonging and future prospects (Sasse and Lackner, 2020; Harm Adema et al., 2023; Al Husein and Wagner, 2023).

Two channels make this plausible. First, minorities use elite statements as heuristics for mass sentiment. Second, social identity and system-justification perspectives hold that individuals scan elite discourse for cues to their group's esteem and future security (Tajfel and Turner, 2004). As a result aid debates can serve a double symbolic role: they communicate not only the degree of domestic solidarity with displaced Ukrainians but also the depth of Germany's geopolitical alignment with their national in-group (e.g., Fearon, 1994; Tomz, 2007). Both layers can then be projected by refugees' onto their own status and safety. Supportive rhetoric, by signaling sustained commitment abroad and empathy at home, reassures psychological security, while oppositional rhetoric primes uncertainty about protection or hospitality (Stevens and Thijs, 2018; Hall and Werner, 2022)[4].

Applied to our case, statements favoring increased military assistance can transmit a compound signal about material commitment and moral alignment. This should elevate perceptions of support and belonging by affirming refugees' social status as a deserving group and reinforcing their sense of psychological safety. Stronger perceived host commitment should then reduce near-term return intentions by increasing expected integration payoffs (Al Husein and Wagner, 2023).

Conversely, while opposition to aid could be framed as pragmatic caution, for the affected group it is more plausibly interpreted as a signal of waning solidarity. It suggests a declining willingness to bear costs on behalf of Ukrainians, which can weaken belonging by casting doubt on the durability of their welcome. Such cues could also alter expectations about conflict duration, but the primary update concerns *host solidarity*, not war timelines. Identity-relevant status signals shift affect and belonging quickly (Stevens and Thijs, 2018; Hall and Werner, 2022; Secen and Öztürk, 2024), shaping our expectation of reduced perceived support and

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[4] Prior experimental studies show that even brief cues on unrelated topics can shift minorities' trust and belonging (Grewal and Hamid, 2024; Pérez, 2015; Secen and Öztürk, 2024; Tyrberg, 2024), consistent with heightened threat sensitivity among displaced groups (Jaschke, Sardoschau and Tabellini, 2022; Weiss, Siegel and Romney, 2023).

belonging and (weakly) higher return intentions.

In summary, the symbolic-signal logic yields clear directional expectations for pro- and anti-aid statements. These predictions follow from a framework that treats foreign policy not as separate from domestic inclusion, but as a critical site where belonging is negotiated for diaspora communities, thus identifying an overlooked pathway through which elite discourse shapes minority integration. Based on these theoretical considerations, we derive our primary hypothesis[5]:

H1: Exposure to pro-/anti-aid statements from German politicians increases/decreases Ukrainian refugees' perceptions of overall German support, feelings of belonging, and intentions of staying in Germany, relative to non-political messaging.

We pre-registered two additional moderation hypotheses. First, some refugees may view military aid as undesirable, believing it prolongs conflict and signals German intent to send them home. Such reactions likely depend on preferences for war termination: those favoring negotiations may respond differently than those supporting continued combat (Fabbe, Hazlett and Sınmazdemir, 2019; Lyall, Blair and Imai, 2013). Second, prior media exposure may condition treatment effects. Refugees who frequently consume German news already have strong perceptions of the government's stance, reducing the novelty and persuasiveness of our treatments (Druckman and Leeper, 2012; Druckman, 2022). Based on these theoretical considerations, we derive two additional hypotheses relating to effect moderation by war termination preferences (**H2**) and self-reported consumption of German media (**H3**).

H2: Exposure to pro-/anti-aid statements from German politicians has an effect *only among refugees who prefer continued combat to protect all of Ukraine's territories over negotiations.*

H3: Exposure to pro-/anti-aid statements from German politicians has an effect *only among refugees who do not consume German news.*

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[5] Hypotheses presented here are simplified compared to the ones we pre-registered. See Appendix A.2 for a discussion of the deviations in hypotheses we state here from the pre-analysis plan.

2.2 Alternative Mechanisms

While the above *symbolic inclusion* mechanism provides our pre-registered baseline expectations, other pathways may operate even if refugees do not treat aid debates as solidarity cues.

Contestation. Political debates can carry informational value that derives less from the valence of any single statement and more from the publicly observable fact of sustained *contestation*. Work on framing and cue competition in American politics shows that when multiple elite positions circulate, audiences update not only on policy content but also on meta-information about issue security, coalition cohesion, and likely durability of support (Slothuus, 2010; Leeper and Slothuus, 2014; Druckman, Levendusky and McLain, 2018). Studies of information saturation and selective exposure further suggest that once an issue is repeatedly cued, marginal messages increasingly function as signals that support is not unanimous (Guess, Nyhan and Reifler, 2018; Bullock, 2011; Nicholson, 2011). Unlike the symbolic mechanism, which implies directional effects based on the positivity or negativity of aid rhetoric, this "contestation mechanism" predicts valence-independent effects: what matters is not the content of the message but the public visibility of disagreement.[6]

Backfire. Supportive rhetoric can also reduce, rather than increase, integration prospects. Refugees may interpret pro-aid statements not as lasting solidarity but as signals that protections are temporary and contingent on the war's course. A large literature shows that insecure status discourages early investments in language, employment, and community ties (Kosyakova and Brenzel, 2020; Menjívar, Agadjanian and Oh, 2022). Related U.S. evidence on the "public charge" debates demonstrates that even rhetorical threats of future retrenchment can depress engagement with host institutions (Bernstein et al., 2019). In this

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[6] To our knowledge, this valence-independent pathway has not previously been shown to operate in the immigration or refugee integration context, and evidence of it would provide a novel explanation for why supportive and opposing cues can generate parallel negative downstream effects on integration outcomes. Below we document evidence of valence-independent effects on low-salience days consistent with this mechanism.

view, pro-aid cues may hasten expectations of return, while opposition can paradoxically reassure permanence.

Table 1 summarizes predictions of the symbolic mechanism and two alternative mechanisms we discuss above.

Table 1: Empirical predictions by mechanism

Mechanism	Support	Ambivalent	Opposition
Symbolic	↑	↑↓	↓
Contestation	↓	↓	↓
Backfire	↓	↑↓	↑

Notes: Arrows indicate expected direction across perceived overall support, belonging, and staying intentions.

3   Experimental Design

3.1   Sample Recruitment and Intervention

Participants were recruited through targeted advertisements on Meta's platforms, Facebook and Instagram. Recent surveys indicate that 96% of Ukrainian refugees in Germany with internet access use these platforms at least occasionally, and 74% use them frequently (European Centre for Press and Media Freedom, 2023). This high engagement rate among our target population suggests recruitment via Meta ads likely avoids significant selection biases common to online surveys of migrants in other contexts (Pötzschke, 2022).

To minimize entries from ineligible respondents, ads were geographically restricted to users currently located in Germany and presented only in Ukrainian and Russian—the two predominant languages among Ukrainian refugees. Ads were further stratified by region (South, East, North/West), age (above or below 40), and primary language. Participants were incentivized by entering a raffle for 10 Amazon vouchers. Recruitment ran from March 9 to April 16, 2024.

Due to the absence of pre-existing sampling frames or panels for Ukrainian refugees in Germany, we employed a two-stage sampling approach. First, we recruited participants via

targeted Meta ads based on geographic location, language, age, and gender. Second, we used initial filtering questions to verify respondents' eligibility concerning their previous residence in Ukraine and current residence in Germany.

The resulting sample consists of 2,631 Ukrainian refugees living across various regions in Germany, covering both urban and rural areas. Participants range in age from 18 to over 60 (median age of 40). Summary statistics of these characteristics are provided in Appendix F. 81 % of the sample are female, which mirrors the population profile of Ukrainian refugees in Germany: administrative data from the Ausländerzentralregister show that about 62 % of all adult Ukrainians registered as refugees are female (Mediendienst Integration, 2025). A probability-based IAB–BAMF–SOEP panel survey reports an even higher share, noting that "three quarters of adult respondents were women" (Kosyakova, Rother and Zinn, 2025). This gender imbalance is structural rather than a sampling artifact: since the declaration of martial law on 24 February 2022, Ukrainian men aged 18-60 have been barred from leaving Ukraine except for narrow exemptions.

Female-majority profiles are typical for conflict-driven displacement: UNHCR notes that 75% of Sudanese refugees and 79% of those now in South Sudan are women and children, and more than 75% of Rohingya refugees in Bangladesh are likewise women and children (UNHCR, N.d., 2025). Where exit is constrained by conscription or hazardous routes, a female-dominated refugee stream is therefore the norm.

Participants were randomly assigned, using simple randomization in Qualtrics, to one of four conditions. In the placebo (*Control*) condition, participants watched a neutral news segment—a weather forecast—unrelated to the Ukraine war. In the *Oppose* treatment, they viewed a video of an SPD politician strongly opposing weapons deliveries to Ukraine and advocating for diplomacy. In the *Ambivalent* treatment, participants saw a video of Chancellor Olaf Scholz (SPD) expressing opposition to sending certain weapons to Ukraine, while acknowledging other forms of support. Lastly, respondents assigned to the *Support* treatment were shown a video of Olaf Scholz stating that military support for Ukraine should

be increased. Full video transcripts are provided in Appendix J.1.

Our main outcome indices were the German Support Index, which measures perceived German governmental and public support for Ukraine beyond military aid; the Belonging Index, which assesses feelings of belonging and integration within German society; and the Return Intentions Index, which gauges intentions to stay in Germany or return to Ukraine. These indices were constructed from specific survey items detailed in the Appendix J.2 and J.3.[7] We also included a manipulation check measuring perceptions of German military support for Ukraine, which corresponds to the belief that our treatment is supposed to manipulate.

3.2   Estimation

To assess the effect of the treatment video clips, we estimated the following model:

$$Y_{ijk} = \alpha_k + \sum_{T \in \mathcal{T}} \beta_T D_i^T + X_i'\gamma + W_j'\delta + \varepsilon_{ijk} \tag{1}$$

In this model, Y_{ijk} represents the outcome of interest for respondent i in county j and state k. The term α_k is a state-specific intercept to control for unobserved state-level factors. The variable D_i^T is a dummy variable indicating whether individual i was assigned to treatment condition T, with the control group (C) serving as the reference category.

The vector X_i' includes individual-level control variables. These are: reason for leaving the city/town in Ukraine where the respondent used to reside, age, gender, marital status, current employment status, current financial situation, highest level of education, and vote choice in the 2019 Ukrainian election. The vector W_j' includes county-level control variables. These are population density, GDP per capita, unemployment rate, and household income. The error term is denoted by ε_{ijk}.

The set $\mathcal{T}$ includes all treatment conditions to which a respondent can be assigned,

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[7]   Our main outcome indices are constructed from multiple items to capture distinct facets of broad concepts like belonging and perceived support. The rationale for this design and a full diagnostic of the relationships between index items are provided in Appendix B.1.

specifically $\mathcal{T} = \{\text{Oppose}, \text{Ambivalent}, \text{Support}\}$. The coefficients β_T capture the average treatment effect of being assigned to treatment T relative to the control group.

4   Main Results

We present our main results using dot-whisker plots with points representing OLS effect estimates and lines representing 95% confidence intervals. All outcomes are standardized using the control group mean and standard deviation. The main estimates are shown in Figure 1. We first assessed whether the experimental treatments effectively shifted participants' perceptions of German military support for Ukraine. Participants exposed to statements opposing military aid (*Oppose*) reported significantly lower perceptions of German military support than the control group. The size of this effect–at 0.39 control-group standard deviations–is meaningful. As we expected, the weaker statement used in the *Ambivalent* treatment had a weaker effect that did not reach statistical significance. Results are similar without covariates; see Appendix Figure C.1 and the item-level estimates in Figure C.2.
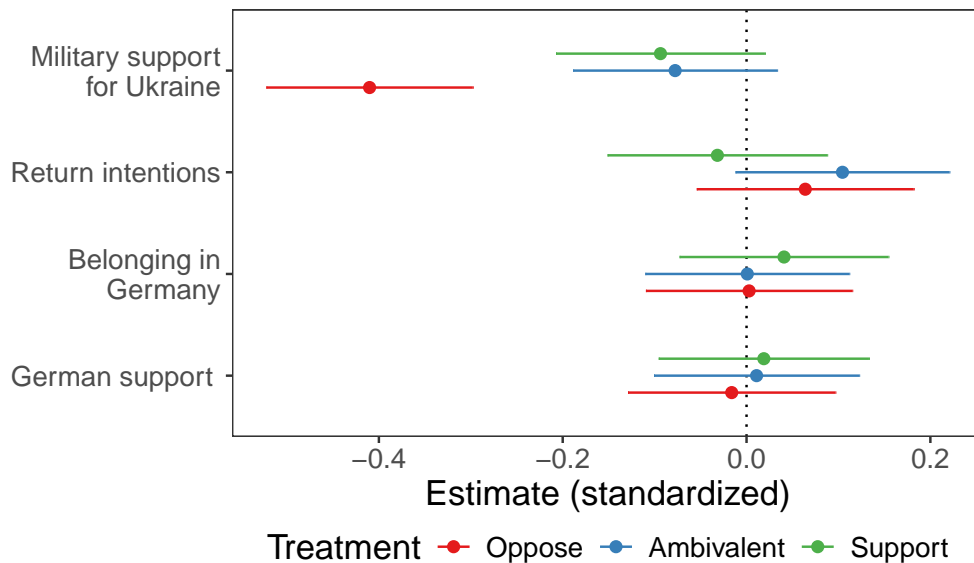

Figure 1: Estimates of the Treatment Effects on Perceptions and Integration Outcomes. *Estimates correspond to the effect of treatment relative to the control condition (weather report). See Section C for the corresponding regression table.*

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Despite these shifts in perceptions of military support, we found no significant effects of the treatments on our main outcomes. The treatments did not significantly affect participants' overall perceptions of German support for Ukrainians beyond military aid, as measured by the German Support Index. Similarly, there were no notable differences in feelings of belonging or integration within German society, according to the Belonging Index, across the different treatment conditions. Additionally, the likelihood of intending to return to Ukraine, as captured by the Return Intentions Index, did not differ significantly between participants exposed to different treatments. These results suggest that the overall effect of exposure to political debates about military support on Ukrainian refugees' integration-related attitudes is not distinguishable from zero.
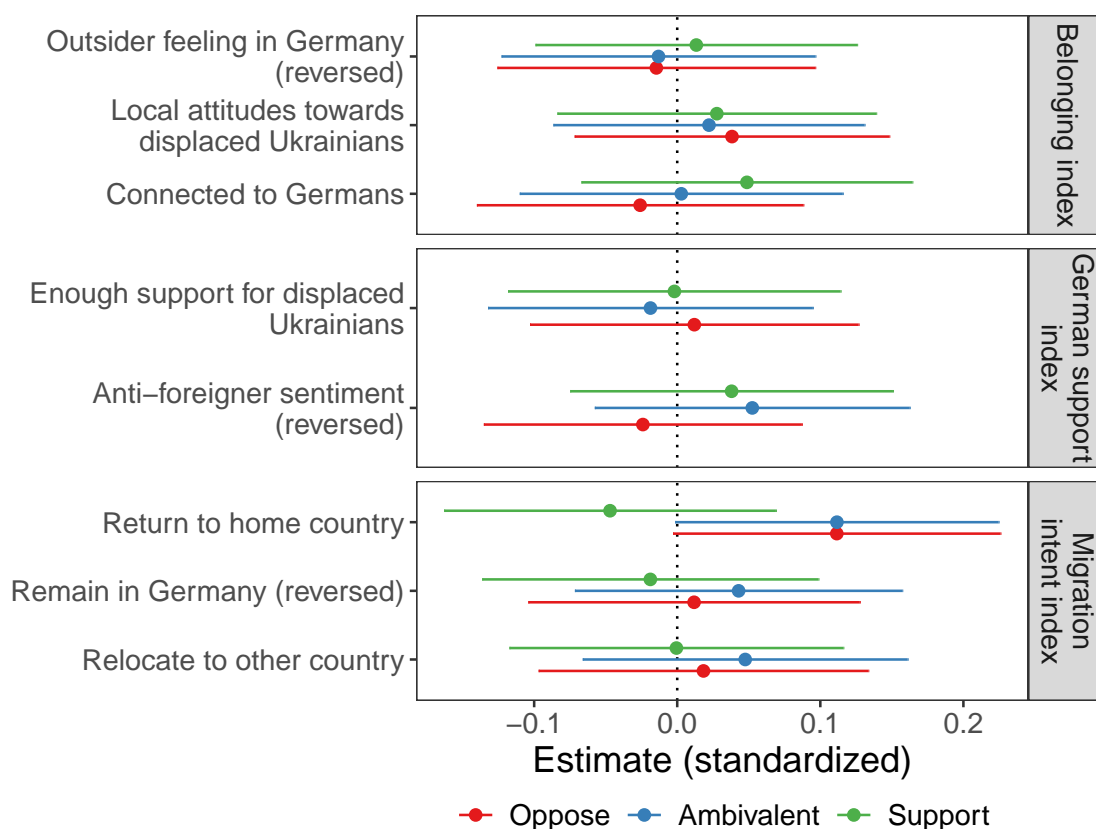

Figure 2: Estimates of the treatment effects for index components. *Estimates correspond to the effect of treatment relative to the control condition (weather report).*

In the pre-analysis plan we registered several diagnostic tests for potential assumption

violations that could threaten our experimental inferences. These included: (i) an attention check embedded in the survey (passed by 95.6% of the final study sample); (ii) tests of balance on pre-treatment covariates across experimental groups (see Appendix B.3); (iii) a manipulation check using a direct item on perceived German military support for Ukraine (see Figure 1); (iv) tests related to the Missing-At-Random (MAR) assumption for attrition (see Appendix E.3); and (v) an experimenter demand test using an endline question about the study's purpose (see Appendix E.2). Across these diagnostics, we find no evidence of violations that would undermine validity of our experimental estimates. Although inattentiveness and effects of treatment on correctly guessing the study aims are non-zero, their magnitudes are small and unlikely to affect the results we report in the paper.

4.1   Pre-registered mechanisms

Our main specification shows no evidence that information about opposition to military support for Ukraine changes feelings of belonging, perceptions of general refugee support, or intentions to leave the host country. We now discuss and test several mechanisms to explain these overall null results.

First, some refugees might view military support as counter-productive, preferring diplomacy. We surveyed this preference, finding a sizable minority (38%) favors negotiations over continued fighting. Second, sustained engagement with German media could create differential baseline responsiveness to our treatments.[8] Investigating heterogeneity based on these potential moderators, our analysis provides no support for either mechanism. The results, presented in Figure D.1, show no evidence of effect heterogeneity on the main integration outcomes across any of these subgroups. Therefore, neither differing war preferences nor prior media consumption appears to explain the overall null results.

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[8] We define this measure based on a survey item that asks respondents to indicate whether they consume mainstream German news media. This includes, e.g., the Tagesschau or newspapers like FAZ or Die Zeit. Respondents can select from a list of predefined mainstream outlets and/or fill out a text entry field. Our moderator is defined as one if respondents select any of the predefined outlets or if the text entry fields list a mainstream outlet. If neither of those is the case, the moderator is defined as zero.

However, long-term self-reported media consumption might not accurately capture the relevant dynamics for a number of reasons. First, self-reported consumption has been shown to be a poor measure of actual consumption (Konitzer et al., 2021). Secondly, individuals' attitudes may be shaped through indirect exposure because "those who watch [...] talk to and persuade others who did not watch" (Druckman, Levendusky and McLain, 2018, p. 99). Third, especially in fast-developing and highly volatile debates such as those over a recently erupted military conflict, short-term changes in the information environment may be more consequential than long-term consumption levels.

We therefore posit an additional, exploratory explanation of our overall null results that was not part of the pre-analysis plan: an "information environment saturation" mechanism, whereby short-term fluctuations in the level of support communicated by the media may condition treatment effects.

5 Effect Heterogeneity by Information Environment Saturation

While our pooled estimates suggest little evidence that our treatments significantly shifted integration-related outcomes, the null results we report above simply show that the *marginal signal* respondents receive from our treatments, on average, do not have a detectable effect. However, respondents do not enter the survey experimental environment as a blank slate; rather, they arrive with attitudes already shaped by the broader information environment to which they have recently been exposed, including news coverage, public debates, and other political signals circulating in their daily lives. This pre-existing exposure can amplify, mute, or crowd out the influence of our experimental cues, meaning that the effects of political debates over military support may only manifest under certain conditions—specifically, when

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the surrounding information environment is relatively sparse.[9]

The most direct test of moderation by the overall information environment draws on short-term measures of media reporting. To proxy for the overall media environment, we draw on transcripts of the 8 p.m. edition of the *Tagesschau*, Germany's most-watched daily TV news program. Based on these transcripts, we code whether Ukraine was mentioned and, if so, whether German politicians expressed support, opposition, or ambivalence toward military aid. This approach allows us to assess whether the salience and content of contemporaneous media coverage moderate our experimental treatment effects.

This analysis builds on research showing that media coverage creates shared informational contexts that fundamentally alter how individuals process information (Zaller, 1992; Prior, 2007). Such contexts define what issues are top-of-mind, shape the interpretive frames people use, and influence how they evaluate new information (Scheufele and Tewksbury, 2007; McCombs, Shaw and Weaver, 2014). When issues receive extensive coverage, the information environment becomes saturated, reducing the marginal effect of additional messages through two main pathways.

First, pre-treatment effects occur when ambient exposure to political information—through headlines, public discourse, or repeated references in multiple outlets—shapes individuals' baseline attitudes before any experimental intervention (Druckman and Leeper, 2012; Druckman, Peterson and Slothuus, 2013). This means that even respondents who do not directly consume the media source in question may still be indirectly exposed through interpersonal discussion, social media circulation, or spillovers from other outlets (Druckman, Levendusky and McLain, 2018; Barabas and Jerit, 2009). Such pre-treatment can narrow the scope for experimental messages to shift attitudes because the core considerations relevant to the issue are already activated.

Second, opinion crystallization occurs when repeated exposure to consistent messages

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[9]   We have decided to present the theoretical and empirical discussion of this mechanism after the main results to transparently reflect the research process, since we derived this mechanism after collecting the data and obtaining the main results.

stabilizes attitudes, making them more resistant to change (Tesler, 2015). Once individuals have formed a strong evaluative position, additional messages—whether congruent or incongruent—are less likely to move them, and may instead be filtered through motivated reasoning processes (Taber and Lodge, 2006; Jerit and Zhao, 2020). Over time, high-salience issues become "settled" in the minds of attentive audiences, reducing the capacity for new cues to generate measurable change.

This saturation dynamic is particularly relevant in highly politicized contexts, where media coverage not only supplies factual information but also signals the presence of elite contestation (Bullock, 2011; Nicholson, 2011). In such contexts, the marginal informational value of an additional statement—like those used in our treatments—depends critically on whether it introduces genuinely novel content or simply joins a pre-existing canon of messages on an already salient topic.

Therefore, we propose (1) that *any* exposure to discussion of military support to Ukraine, whether experimental or ambient, may shift baseline perceptions of support; and (2) that experimental treatments will only have measurable effects when the information environment is relatively sparse (i.e., when Ukraine is not being actively discussed in media) but will be "crowded out" when the environment is already saturated with relevant content. This leads to two testable implications: first, baseline perceptions of support should differ systematically based on short-term fluctuations in the level of media coverage; and second, treatment effects should be moderated by the presence or absence of contemporaneous media coverage about Ukraine.

5.1 Media Coverage Data

To test the proposed mechanism, we examine treatment effect heterogeneity based on German media coverage of Ukraine on the day preceding survey participation. To measure media coverage, we rely on official transcripts from the 8:00 p.m. edition of the *Tagesschau*, which is Germany's most-watched daily TV news program. We code whether Ukraine was

mentioned on a particular day and, if so, whether German politicians expressed support, opposition, or ambivalence toward military aid.[10] This approach allows us to assess whether the contemporaneous coverage moderates our experimental treatment effects.

The Tagesschau is Germany's most important and widely viewed national news broadcast, airing daily at 8:00 p.m. on the public television channel ARD. Its viewership consistently exceeds ten million, making it the single most influential news source in shaping public awareness of political events. Multiple sources indicate that refugees' consumption of German media is substantial (Appendix A.3). Because the Tagesschau sets the national news agenda for the following day, the topics covered on the Tagesschau reflect the broader informational environment to which most Germans, and also many refugees, are exposed (Deutschlandfunk, 2024; ARD Programmdirektion, 2025; Maier, Ruhrmann and Stengel, 2009; Krämer and Schroll, 2009; Mayerhöffer and Heft, 2022).

From the German public broadcaster ARD, we obtain daily transcripts of the 8:00 p.m. Tagesschau broadcast. We classify each transcript along two dimensions: (1) whether Ukraine was mentioned at all, and (2) whether coverage conveyed a German government stance on military aid (support, oppose, neutral, or no stance mentioned). We assign each respondent surveyed on day t to the Tagesschau coverage on the previous day $t-1$.

To classify content, we implement a two-step pipeline with the OpenAI API (GPT-4o-mini). First, for each transcript we extract only text related to Ukraine (Stage 1). Second, conditional on Ukraine-related content, we classify whether the coverage signals German government support, opposition, neutrality, or contains no stance (Stage 2). Prompts are provided verbatim in Appendix G. The resulting stance label is mapped to four mutually exclusive categories: *support*, *oppose*, *neutral*, and *not mentioned*; we additionally construct a collapsed indicator for *Any mention* (support/oppose/mentioned without stance) versus *No mention*. As we document in more detail in Section 5.3, there is good balance along respondent background characteristics when comparing the No mention / any mention

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[10]   We chose these categories to directly match the experimental treatment conditions.

categories (Appendix G.5), and there is further no evidence that Ukraine mentions are merely a function of conflict intensity (Appendix G.10).

Several examples in Table G.1 illustrate the content we capture. Supportive stances frequently highlight resource commitments and coordination (e.g., Ramstein Air Base meetings, munitions packages, coalition pledges). Oppositional stances center on legal or operational constraints (e.g., debates over Taurus deliveries, "no boots/no targeting" positions). Finally, some Ukraine mentions provide situational updates or commemorations (e.g., Bucha remembrance, frontline summaries, diplomatic developments) without articulating a government stance.

5.2   Baseline Shifting by Media Coverage

Using the data described above, we first we examine whether media coverage shifts baseline perceptions among control group respondents. Figure 3 presents control group means across our main outcomes, separated by the type of Tagesschau coverage on the previous day. The results reveal substantial baseline shifting: when Ukraine was not mentioned in the Tagesschau, control group respondents showed markedly different perceptions compared to days with any Ukraine coverage.

When Ukraine was absent from media coverage, control group respondents exhibited markedly different baseline perceptions. Most notably, they reported higher perceptions of both military support $(+0.184 vs. - 0.019)$ and general German support for Ukraine $(+0.082 vs. - 0.010)$, higher feelings of belonging $(+0.179 vs. - 0.024)$, and lower return intentions $(-0.189 vs. + 0.023)$ compared to days with any Ukraine coverage. This pattern aligns with the proposed contestation signaling mechanism: in the presence of coverage, refugees may infer active political contestation, which lowers perceived support and increases return intentions.[11]

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[11]   We also conducted hypothesis tests for differences in means between coverage and no coverage groups. Given the smaller sample size due to focusing on the control group, standard errors are larger. Differences are significant at $\alpha = 0.1$ for belonging, German support and return intentions outcomes. The difference is not significant for the military support outcome.
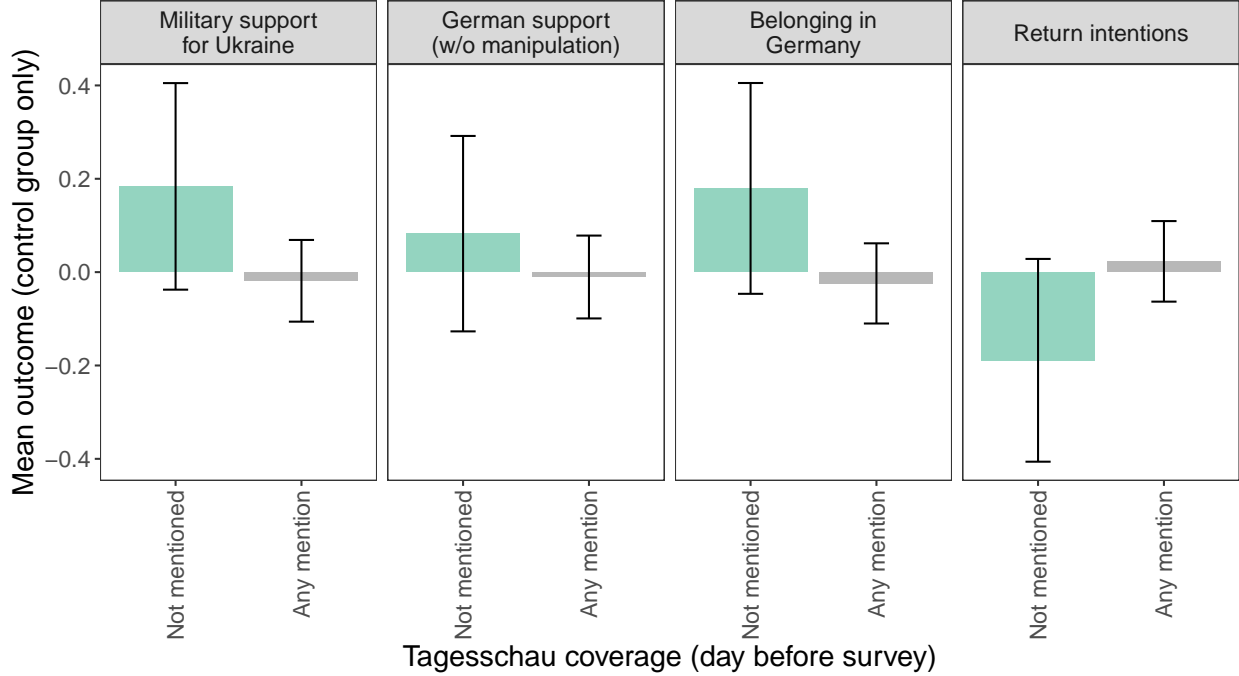
Figure 3: Baseline shifting by media coverage. *Control group means by type of Tagesschau coverage on the day before survey participation. Error bars represent 95% confidence intervals. This demonstrates how the information environment shapes baseline perceptions even before experimental treatment.*

5.3 Treatment Effects Conditional on Media Environment

To investigate whether our experimental treatments do affect outcomes during periods of low salience, we re-estimate our main specification on two subsamples: respondents sampled when Ukraine was not mentioned in the Tagesschau (14.2% of the total sample) versus when it was (85.8%).

Figure 4 presents our main finding: experimental treatments produce substantial effects only in the absence of prior media coverage. When Ukraine was not mentioned in the Tagesschau, all three treatments—oppose, support, and ambivalent—generated large, significant effects across multiple outcomes. Most strikingly, both supportive and oppositional treatments produced remarkably similar effects: reducing perceived German support by 0.43-0.49 standard deviations, increasing return intentions by 0.38-0.50 standard deviations, and decreasing feelings of belonging by about 0.23-0.32 standard deviations. This valence-
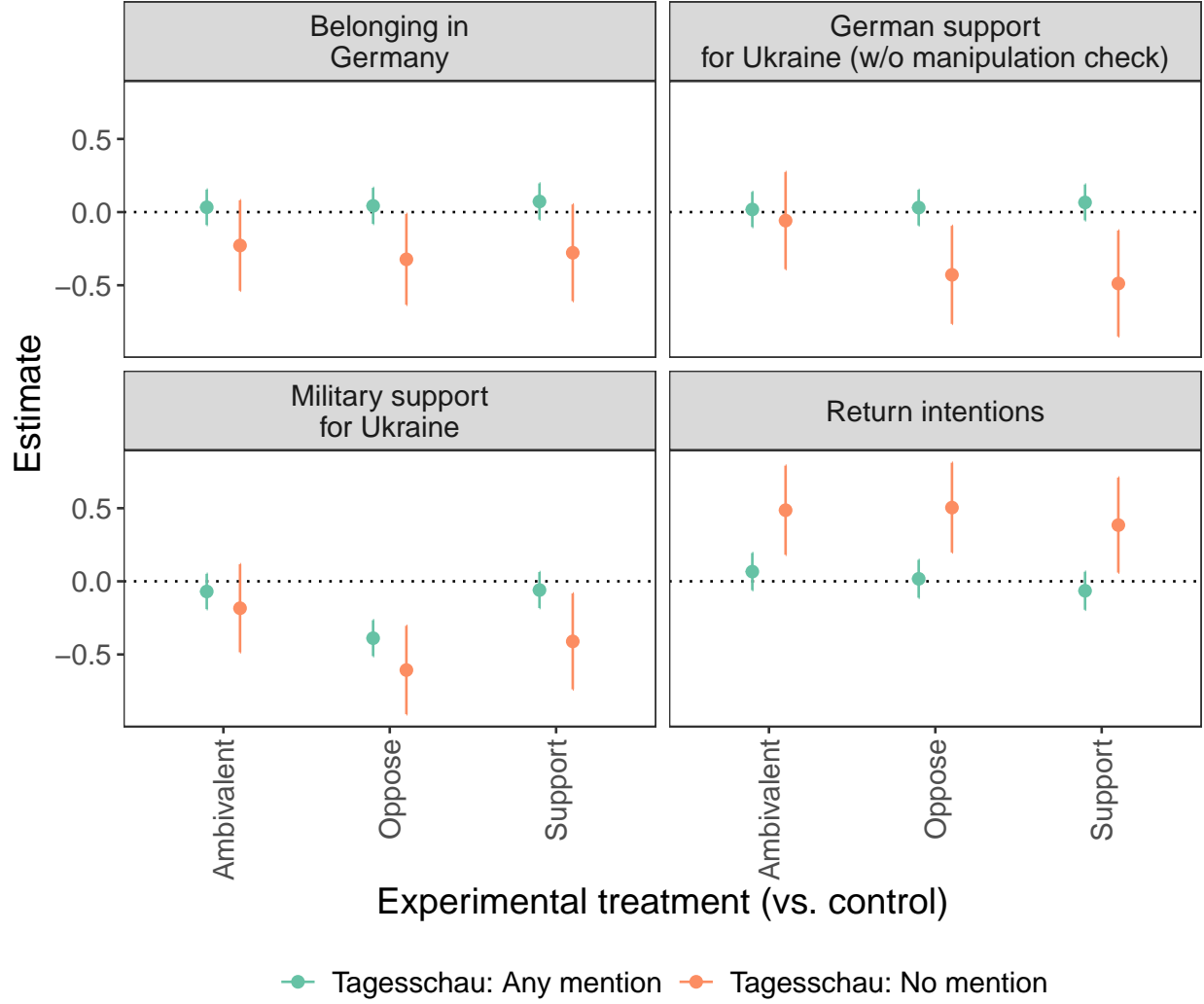
22

Figure 4: Treatment effects by media coverage condition. *Treatment effects (relative to control within each media condition) for outcomes excluding the manipulation check. Experimental treatments produce substantial effects only when Ukraine was not covered in German media the previous day. Error bars represent 95% confidence intervals. Corresponding interaction coefficients are reported in Table E.2. In the appendix, we report additional specifications with linear time trends (Figure G.3), standard errors clustered by day (Figure G.4), and Newey-West standard errors with a 3-day lag (Figure G.5).*

independent pattern strongly supports a contestation signaling mechanism. Any political attention to military aid, regardless of valence, conveys that support is debated rather than assured.

In contrast, when Ukraine received any media coverage (85.8% of our sample), treatment effects became small and statistically indistinguishable from zero across all outcomes. The

oppose treatment reduced German support perceptions (without manipulation check) by only 0.03 standard deviations and increased return intentions by just 0.02 standard deviations—substantially smaller than the effects observed without coverage. Treatment effects across all outcomes ranged from −0.18 to +0.08 standard deviations with most being statistically insignificant. This pattern holds regardless of whether the coverage was supportive, opposing, or neutral, indicating that the mere presence of Ukraine in the media environment, rather than its specific content, drives the moderation effect.

Disaggregating coverage further into support, oppose, and mentioned-without-stance yields the same conclusion: There are sizable treatment effects only on no-coverage days, whereas on coverage days effects are small and largely indistinguishable from zero across stances. We present the disaggregated specifications in Appendix Figure E.3.

Importantly, we note that the direction and magnitude of the experimental results in the no-coverage subsample closely align with the observational control-group mean differences presented in Figure 3: media coverage of military support debates decreases perceived levels of military support and general levels of support for Ukrainians, and increases return intentions while decreasing feelings of belonging in Germany, regardless of message content.

For completeness, we also estimate the corresponding interaction models that pool the two subsets and interact each treatment with an indicator for "No mention." The interaction coefficients, reported in Table E.2, mirror the visual pattern in Figure 4: treatment effects are concentrated in the no-coverage condition. columns (1)-(4) report models without covariates; columns (5)-(8) add controls. Results are highly similar across specifications.

Taken together, these findings suggest that political debates over military support affect Ukrainian refugees' feelings of general host-country support as well as their return intentions and feelings of belonging in Germany. Interestingly, the magnitude and direction of these effects does not vary by the valence of the information: any coverage of military support debates—whether supportive or oppositional—signals that support is contested rather than universally agreed upon, aligning with research showing that the mere presence of political

debate conveys important information about political divisions on the issue (Bullock, 2011; Nicholson, 2011).

In our specific case, debates about military aid to refugees' homeland carry particular significance. Social identity theory suggests that group members are especially attentive to signals about their group's status and acceptance (Tajfel and Turner, 2001). When political elites debate support for Ukraine, refugees may interpret this as evidence that their cause lacks unanimous backing, regardless of individual politicians' positions. This creates a paradoxical effect, whereby even supportive statements can reduce perceived support by highlighting the existence of opposition.

5.4 Internal and External Validity

To assess the robustness of these findings, we first note that since treatment assignment remains random within each media coverage subset, the subgroup effects presented in Figure 4 are unbiased within both the no-coverage and any-coverage subsamples.

However, to interpret the difference in treatment effects between subsamples as evidence of information environment saturation, we require an additional assumption: that assignment to media coverage conditions is uncorrelated with potential outcomes. In other words, whether a respondent completed the survey following (no) Ukraine coverage in the Tagesschau must be 'as-if random' with respect to their latent responsiveness to the treatments.

Addressing potential confounding: While not directly testable, we provide three pieces of evidence in support of this assumption in Appendix G. First, we demonstrate that days with or without Ukraine coverage are not systematically clustered but distributed relatively evenly across our survey period (see Figure G.1). This temporal distribution suggests that coverage patterns reflect day-to-day editorial decisions rather than systematic trends that could confound our results. Second, we show that respondents in both subsamples are balanced on a variety of pre-treatment covariates, including demographics, region, move motivation, vote

choice in Ukraine, prior media exposure, prior integration, and war termination preferences (Figure G.2).

Third, we address the concern of unobserved confounding that is correlated with the survey date. We re-estimate the split-sample specification in Figure 4 using a linear time trend (see Figure G.3). The results of this robustness check are very similar to the original pattern, which alleviates concerns that unobserved, time-varying confounding drives our findings. Together, these tests suggest that our findings reflect a genuine interaction between experimental treatments and the broader information environment rather than a spurious correlation driven by unobserved confounders.

Permutation evidence based on placebo coverage dates: Complementing these checks, we implement a permutation-style check in Appendix G.9. If the information environment effects are spurious, we would expect similar coefficients as shown in Figure 4 using "placebo" coverage dates – that is, coverage on dates further in the past or even in the future. Instead of assigning coverage to a respondent surveyed on day t based on the *Tagesschau* edition on day $t - 1$, we construct a reference distribution by shifting the coverage window over days $t - k$ with $k \in [-10, 10]$, $k \neq 1$. This means that, instead of the previous evening, we assess treatment effect moderation by coverage that occurred several days before or after the survey date t. Coverage on these placebo dates should not moderate our main treatment effects.[12]

We then compare the estimated moderation effect to the placebo distribution. We find that the observed moderation in Figure 4 is unusually large. We calculate two-sided p-values by counting the number of placebo estimates with absolute magnitude at least as large as the observed effect. We obtain $p = 0.000$ for perceived German support, belonging, and return intentions, and $p = 0.200$ for military support. We interpret this as additional evidence that the moderation effects in Figure 4 derive from the short-term information environment rather than from spurious fluctuations in treatment effects across different days.

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[12] Coverage on earlier days, such as $t - 2$ or $t - 3$, may still moderate treatment effects through lingering salience or carryover, but the expected magnitude is smaller. If moderation reflects the *Tagesschau* news cycle, the effect at $t - 1$ should be largest.

Conflict intensity and media coverage: We further consider the possibility of a bundled treatment: coverage may be more likely precisely when the conflict is more severe, so Tagesschau mentions could proxy recent conflict intensity. To address this, we use daily casualties from UCDP GED (v25.1) to proxy for conflict intensity. We compute windowed averages over the previous k days ($k = 1, 2, 3$) for each Tagesschau day (the evening before respondents' survey date) and compare casualties preceding mention or no-mention days. Across all casualty measures, the differences in total casualties are small. This indicates that mentions in the Tagesschau do not merely track short-run conflict intensity (for more details and results, see Appendix G.10 and Figure G.7).

Alternative standard errors: Additionally, to account for possible within-day dependence and short-run serial correlation, we implement two complementary adjustments: first, we cluster standard errors by survey day, which modestly widens confidence intervals without altering substantive conclusions (see Appendix G.7 and Figure G.4). Second, we compute heteroskedasticity- and autocorrelation-consistent Newey-West standard errors with a three-day lag based on the survey date to accommodate a smoothly evolving information environment, which yields substantively identical results (see Appendix G.8 and Figure G.5).

Partial replication using SOEP survey data: We replicate some of our results using a different survey data set: the IAB-BiB/FReDA-BAMF-SOEP survey of Ukrainian refugees. Using data from 2023 and outcomes on intentions to stay in Germany or return to Ukraine, we again merge survey responses to Tagesschau coverage on the preceding day. Comparing respondents who are either exposed or not exposed to Ukraine coverage, we again find that media attention to Ukraine (any mention) is associated with increased return intentions and lower intention to stay, regardless of message valence. The results using this additional dataset reproduce the sign and pattern of the findings in Figure 3, which reduces concern that the results are sample- or measurement-specific. Details and specification are provided in Appendix I and Figure I.1.

Multiple comparisons correction: To address multiplicity, we pre-specified two families of tests, main treatment effects and Tagesschau interaction effects, and applied Benjamini-Hochberg false discovery rate control at $q = 0.10$ within each family. After adjustment, no average (pooled-sample) treatment effects on the three primary indices are significant, reinforcing the conclusion of null average effects. In contrast, several treatment-by-low-salience (no Tagesschau mention) interactions remain significant after FDR correction—specifically, decreases in perceived German support (Oppose, Support), increases in return intentions (all three treatments), and a decline in belonging (Oppose). This suggests that the salience-conditioned findings are not artifacts of multiple testing.

5.5 Heterogeneity by War Termination Preferences.

Similar to the pre-registered analyses, we can expect that the treatment effects we observe on low-saturation days are moderated by war-termination preferences (fight to retake all territory vs. negotiate even with territorial concessions). We therefore restrict to the no-mention subsample and re-estimate the model separately for these two groups. Because Figure 4 shows the three treatments move outcomes in the same direction with similar magnitudes under low salience, we pool them and compare the combined treatment group to the placebo control group. Figure G.8 in the Appendix displays the estimates across war termination preferences subgroups.

The results on no-mention subsample should be read cautiously given small sample sizes, but a clear pattern emerges. Among *"hawks"* (those who prefer fight to retake all territory) the treatment sharply lowers perceived German military support and broader German support for Ukrainians; this shift is absent among *"doves"* (those who favor negotiations and possible territorial concessions). In contrast, the increase in return intentions is larger for doves—driven by a higher stated likelihood of returning to Ukraine. Belonging declines modestly and similarly for both groups, primarily via weaker reported connection to Germans and stronger outsider feelings (see Figure D.2 in the Appendix).

Taken together, the pattern is consistent with the valence-independent contestation mechanism. Under low salience, any elite cue (regardless of valence) appears to function as a contestation signal. Hawks respond primarily by sharply downgrading perceived, military and broader, German support—consistent with interpreting visible debate as wavering allied resolve. Doves show comparatively little belief updating about support but do increase their return or onward intentions, suggesting they translate contestation into revised migration timing rather than into support re-assessment. Both groups register modest declines in belonging, in line with the idea that debate visibility-rather than its directional content-signals a less secure social status. Given small subgroup Ns, these heterogeneity estimates are imprecise and should be viewed as suggestive.

6   Discussion

In this paper, we set out to examine whether German political debates about military support for Ukraine affected Ukrainian refugees' integration-related attitudes. While our main experimental results suggest only little evidence of these debates meaningfully shifting respondents' perceptions, additional analyses suggest that the experimental treatments produced substantively and statistically significant effects when the broader information environment was not already saturated by coverage of these debates. When the Tagesschau did not mention Ukraine the evening before our respondents were surveyed, brief, authentic statements by German elite politicians on the topic of military aid—whether supportive, oppositional, or ambivalent in content—moved outcomes in the same direction: perceived German support (aid-specific and more general) fell, feelings of belonging in Germany decreased, and return intensions rose. When Ukraine received any coverage, the experimental treatment effects were small and statistically indistinguishable from zero.

Observationally, control-group baselines on days with media coverage of the debate shifted in the same directions as the experimental effects observed on no-coverage days, again

regardless of the valence content of the debate. These results indicate that (i) the marginal effect of the experimental exposure to the debate can only be measured when respondents have not already been pre-treated through coverage outside the experimental environment, and (ii) that it the *presence* of public contestation–rather than message valence–that refugees use to update beliefs.

This study makes several contributions to the literature. Conceptually, we recast elite debates as evidence of contestation, whereby any elite cue, regardless of valence, can have negative effects on perceived levels of support by signaling disagreement. This valence-independence suggests that even supportive statements can reduce perceived support and belonging among migrants and nudge migration plans toward return. Furthermore, substantively, we widen the lens from rhetoric *about* immigrants to elite discourse *about the conflict they fled.* Foreign-policy debates that never mention refugees nonetheless carry integration-relevant information, shaping perceived acceptance and migration intentions. This connects research on minority politics to work on wartime public opinion and alliance credibility, showing that refugees interpret domestic contestation over military aid as a signal about future support for their group.

Methodologically, the study demonstrates the importance of accounting for information environment saturation when designing survey experiments on politically salient topics. Our findings suggest that experimental treatments may appear ineffective when pooled across all respondents, even when accounting for self-reported long-term media consumption, but can reveal substantial effects when disaggregated by the ambient, short-term media environment. This highlights a broader challenge in experimental research: treatments that seem to "fail" may actually succeed under specific informational conditions, but these effects can be masked by pre-treatment through everyday information exposure. Our approach of linking daily media content to individual survey responses offers a template for future studies seeking to understand how experimental interventions interact with naturally occurring information flows. By coding the content and timing of mainstream media coverage and matching it to

survey participation dates, researchers can better isolate the marginal effects of experimental treatments from the background information environment that shapes baseline attitudes.

Using authentic political statements (Appendix A.4) rather than vignettes improves external validity without sacrificing experimental control. Pairing real rhetoric with day-level measures of the information environment strengthens inference about how debates shape refugee integration and offers a template for other cases, such as immigration policy, trade affecting ethnic communities, and diaspora-relevant foreign policy.

We further explore what drives the contestation mechanism at the individual level. Within the low-salience subset where treatments meaningfully shift outcomes, we find suggestive evidence that refugees with different war termination preferences respond through distinct pathways. Refugees favoring continued military resistance ("hawks") mainly downgrade perceptions of German (military and general) support—consistent with updating on wavering allied resolve. Those favoring a negotiated settlement ("doves") adjust return/onward plans more than beliefs—treating contestation as a cue to reassess migration timing rather than allied commitment. Both groups exhibit modest declines in belonging, consistent with debate visibility signaling a less secure social status. Given small subgroup samples, these patterns are suggestive and warrant further investigation.

Finally, we discuss generalizability of our findings. The mechanism we document should travel to settings where two conditions occur. First, the relevant foreign policy debate has become contentious in mainstream news (i.e., not a quiet consensus but an openly contested issue). Second, the affected refugee or diaspora group faces uncertainty about the durability of host support, for instance, through temporary protections, budget fights, or shifting political coalitions. We contend that these conditions are common. The high-salience debates over Ukraine aid in national legislatures, such as the recent discussions in the German Bundestag following the new government's coalition agreement, illustrate elite contestation. At the same time, periodic policy shifts and budget reassessments by European governments create uncertainty that refugees with temporary status are likely to perceive. Where either condition

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is absent, because the issue is settled or the diaspora enjoys secure, long-term status, our effects should not appear. Framed this way, our contribution is general: in contexts where contentious elite debate exist, and where refugees are exposed to uncertainty, we should expect similar, valence-independent shifts in perceived support, belonging, and migration intentions.

References

Al Husein, Nawras and Natascha Wagner. 2023. "Determinants of Intended Return Migration among Refugees: A Comparison of Syrian Refugees in Germany and Turkey." *International Migration Review* 57(4):1771–1805.

ARD Programmdirektion. 2025. "Tendenzen im Zuschauerverhalten 2024." *Media Perspektiven* (17/2025). Reports average audience of 9,642,000 for the 20:00 Tagesschau across all carrying channels in 2024.
URL: *https://www.media-perspektiven.de/fileadmin/user_upload/media − perspektiven/pdf/2025/MP_17_2025_Tendenzen_im_Zuschauerverhalten.pdf*

Barabas, Jason and Jennifer Jerit. 2009. "Estimating the Causal Effects of Media Coverage on Policy-Specific Knowledge." *American Journal of Political Science* 53(1):73–89.

Bernstein, Hamutal, Dulce Gonzalez, Michael Karpman and Stephen Zuckerman. 2019. "One in seven adults in immigrant families reported avoiding public benefit programs in 2018." *Washington, DC: Urban Institute* .

Berry, John W., Jean S. Phinney, David L. Sam and Paul Vedder. 2006. "Immigrant Youth: Acculturation, Identity, and Adaptation." *Applied Psychology* 55(3):303–332.

Besco, Randy, Sergio Garcia-Rios, Julius Lagodny, Nazita Lajevardi, Kassra Oskooii and Erin Tolley. 2022. "Fight Not Flight: The Effects of Explicit Racism on Minority Political Engagement." *Electoral Studies* 80:102515.

Bloom, Howard S. 1995. "Minimum Detectable Effects: A Simple Way to Report the Statistical Power of Experimental Designs." *Evaluation Review* 19(5):547–556.

Brücker, Herbert et al. 2024. Geflüchtete aus der Ukraine in Deutschland: Ergebnisse der IAB–BAMF–SOEP-Befragung, Welle 2. Iab-kurzbericht 51/2024 Institut für Arbeitsmarkt- und Berufsforschung (IAB) Nürnberg: .

Bullock, John G. 2011. "Elite Influence on Public Opinion in an Informed Electorate." *American Political Science Review* 105(3):496–515.

Chong, Dennis and James N Druckman. 2007. "Framing public opinion in competitive democracies." *American political science review* 101(4):637–655.

Deutschlandfunk. 2024. "Hauptausgabe der ARD-"Tagesschau" erneut meistgesehene deutsche Nachrichtensendung.". News report citing NDR figures that the 20:00 Tagesschau was the most-watched newscast in 2023.
  URL: *https://www.deutschlandfunk.de/hauptausgabe-der-ard-tagesschau-erneut-meistgesehene-deutsche-nachrichtensendung-102.html*

Druckman, James N. 2022. "A Framework for the Study of Persuasion." *Annual Review of Political Science* 25(1):65–88.

Druckman, James N., Erik Peterson and Rune Slothuus. 2013. "How Elite Partisan Polarization Affects Public Opinion Formation." *American Political Science Review* 107(1):57–79.

Druckman, James N., Matthew S. Levendusky and Audrey McLain. 2018. "No Need to Watch: How the Effects of Partisan Media Can Spread via Interpersonal Discussions." *American Journal of Political Science* 62(1):99–112.

Druckman, James N. and Thomas J. Leeper. 2012. "Learning More from Political Communication Experiments: Pretreatment and Its Effects." *American Journal of Political Science* 56(4):875–896.

European Centre for Press and Media Freedom. 2023. "Media Consumption and Information Needs of Ukrainian Refugees in Germany." ECPMF/JX Fund report. Fieldwork by FORSA, April-July 2023.
  URL: *https://www.ecpmf.eu/wp-content/uploads/2023/11/ECPMF$_U$A$_M$ediaSurvey.pdf*

Fabbe, Kristin, Chad Hazlett and Tolga Sınmazdemir. 2019. "A Persuasive Peace: Syrian Refugees' Attitudes Towards Compromise and Civil War Termination." *Journal of Peace Research* 56(1):103–117.

Fearon, James D. 1994. "Domestic political audiences and the escalation of international disputes." *American political science review* 88(3):577–592.

Fouka, Vasiliki. 2023. "State Policy and Immigrant Integration." *Annual Review of Political Science* 27.

für Migration und Flüchtlinge, Bundesamt. 2023. Evaluation der Erstorientierungskurse 2020–2022. Forschungsbericht 43 BAMF-Forschungszentrum Migration, Integration und Asyl Nürnberg: .

Grewal, Sharan and Shadi Hamid. 2024. "Discrimination, Inclusion, and Anti-System Attitudes among Muslims in Germany." *American Journal of Political Science* 68(2):511–528.

Guess, Andrew, Brendan Nyhan and Jason Reifler. 2018. "Selective exposure to misinformation: Evidence from the consumption of fake news during the 2016 US presidential campaign." *European Research Council* 9(3):4.

Hainmueller, Jens, Dominik Hangartner and Giuseppe Pietrantuono. 2015. "Naturalization Fosters the Long-Term Political Integration of Immigrants." *Proceedings of the National Academy of Sciences* 112(41):12651–12656.

Hall, Jonathan and Katharina Werner. 2022. "Trauma and Trust: How War Exposure Shapes Social and Institutional Trust Among Refugees." *Frontiers in Psychology* 13.

Harder, Niklas, Lucila Figueroa, Rachel M. Gillum, Dominik Hangartner, David D. Laitin and Jens Hainmueller. 2018. "Multidimensional Measure of Immigrant Integration." *Proceedings of the National Academy of Sciences* 115(45):11483–11488.

Harm Adema, Joop Age, Cevat Giray Aksoy, Yvonne Giesing and Panu Poutvaara. 2023. "The Effect of Conflict on Ukrainian Refugees' Return and Integration.".

Hopkins, Daniel J. (@dhopkins1776). 2023. "Support for German military assistance is down slightly from 2022.". Tweet on X (formerly Twitter).
URL: *https://x.com/dhopkins1776/status/1638529521057157120*

Jaschke, Philipp, Sulin Sardoschau and Marco Tabellini. 2022. "Scared Straight? Threat and Assimilation of Refugees in Germany.".

Jerit, Jennifer and Yangzi Zhao. 2020. "Political Misinformation." *Annual Review of Political Science* 23:77–94.

Kinkartz, Sabine. 2024. "Ukrainian Refugees in Germany: Why Few Work for a Living – DW – 02/22/2024.".
URL: *https://www.dw.com/en/ukrainian-refugees-in-germany-why-few-work-for-a-living/a-68338226*

Konitzer, Tobias, Jennifer Allen, Stephanie Eckman, Baird Howland, Markus Mobius, David Rothschild and Duncan J Watts. 2021. "Comparing Estimates of News Consumption from Survey and Passively Collected Behavioral Data." *Public Opinion Quarterly* 85(S1):347–370.

Kosyakova, Yuliya and Hanna Brenzel. 2020. "The role of length of asylum procedure and legal status in the labour market integration of refugees in Germany." *Soziale Welt* 71(H. 1/2):123–159.

Kosyakova, Yuliya, Nina Rother and Sabine Zinn. 2025. Lebenssituation und Teilhabe ukrainischer Geflüchteter in Deutschland: Ergebnisse der IAB-BAMF-SOEP-Befragung. Technical report IAB-Forschungsbericht.

Krämer, Benjamin and Thorsten Schroll. 2009. Die Funktion der Koorientierung für den Jour-

nalismus. In *Leitmedien: Konzepte – Relevanz – Geschichte*, ed. Daniel Müller, Annemone Ligensa and Peter Gendolla. Bielefeld: transcript pp. 93–111.

Kuhn, Eroll and Rahsaan Maxwell. 2023. "Asylum Seekers Feel More Welcome in Counties with More Foreign-Born Residents: Evidence from Germany." *West European Politics* 0(0):1–27.

Leeper, Thomas J and Rune Slothuus. 2014. "Political parties, motivated reasoning, and public opinion formation." *Political psychology* 35:129–156.

Lyall, Jason, Graeme Blair and Kosuke Imai. 2013. "Explaining Support for Combatants during Wartime: A Survey Experiment in Afghanistan." *American Political Science Review* 107(4):679–705.

Maier, Michaela, Georg Ruhrmann and Karin Stengel. 2009. Der Wert von Nachrichten im deutschen Fernsehen: Inhaltsanalyse von TV-Nachrichten im Jahr 2007. Technical report Landesanstalt für Medien Nordrhein-Westfalen (LfM) Düsseldorf: .
URL: *https://www.medienanstalt-nrw.de/fileadmin/lfm-nrw/Forschung/nachrichtenanalyse_{1}992–2007.pdf*

Martén, Linna, Jens Hainmueller and Dominik Hangartner. 2019. "Ethnic Networks Can Foster the Economic Integration of Refugees." *Proceedings of the National Academy of Sciences* 116(33):16280–16285.

Mayerhöffer, Eva and Annett Heft. 2022. "Between Journalistic and Movement Logic: Disentangling Referencing Practices of Right-Wing Alternative Online News Media." *Digital Journalism* 10(8):1409–1430.

McCombs, Maxwell E., Donald L. Shaw and David H. Weaver. 2014. "New Directions in Agenda-Setting Theory and Research." *Mass Communication and Society* 17(6):781–802.

Mediendienst Integration. 2025. "Ukrainische Flüchtlinge: Alter, Geschlecht, Wohnort.". Online report.

URL: *https://mediendienst-integration.de/migration/flucht-asyl/ukrainische-fluechtlinge.html*

Menjívar, Cecilia, Victor Agadjanian and Byeongdon Oh. 2022. "The contradictions of liminal legality: economic attainment and civic engagement of Central American immigrants on temporary protected status." *Social Problems* 69(3):678–698.

Nicholson, Stephen P. 2011. "Dominating Cues and the Limits of Elite Influence." *The Journal of Politics* 73(4):1165–1177.

Phillimore, Jenny. 2012. "Implementing Integration in the UK: Lessons for Integration Theory, Policy and Practice." *Policy & Politics* 40(4):525–545.

Prior, Markus. 2007. *Post-Broadcast Democracy: How Media Choice Increases Inequality in Political Involvement and Polarizes Elections.* Cambridge University Press.

Pérez, Efrén O. 2015. "Xenophobic Rhetoric and Its Political Effects on Immigrants and Their Co-Ethnics." *American Journal of Political Science* 59(3):549–564.

Pötzschke, Steffen. 2022. "Using the Innovative to Improve the Established: The Employment of Social Networking Sites as Recruitment Tools in Migrant Surveys." *International Migration* 60(2):261–265.

Sasse, Gwendolyn and Alice Lackner. 2020. "The Displaced as 'Ordinary Citizens': Exploring Variation in the Political Attitudes of the Displaced from Donbas." *Europe-Asia Studies* 72(3):354–382.

Scheufele, Dietram A. and David Tewksbury. 2007. "Framing, Agenda Setting, and Priming: The Evolution of Three Media Effects Models." *Journal of Communication* 57(1):9–20.

Secen, Sefa and Aykut Öztürk. 2024. "How Refugees Respond to Hostile Political Discourse: No Exit, but Less Voice." *Politics, Groups, and Identities* pp. 1–22.

Slothuus, Rune. 2010. "When can political parties lead public opinion? Evidence from a natural experiment." *Political Communication* 27(2):158–177.

Stevens, Gonneke W. J. M. and Jochem Thijs. 2018. "Perceived Group Discrimination and Psychological Well-Being in Ethnic Minority Adolescents." *Journal of Applied Social Psychology* 48(10):559–570.

Taber, Charles S. and Milton Lodge. 2006. "Motivated Skepticism in the Evaluation of Political Beliefs." *American Journal of Political Science* 50(3):755–769.

Tajfel, Henri and John C. Turner. 2004. The Social Identity Theory of Intergroup Behavior. In *Political Psychology*, ed. John T. Jost and Jim Sidanius. Psychology Press pp. 276–293.

Tajfel, Henri and John Turner. 2001. An Integrative Theory of Intergroup Conflict. In *Intergroup Relations: Essential Readings.* Psychology Press pp. 94–109.

Tesler, Michael. 2015. "Priming Predispositions and Changing Policy Positions." *American Journal of Political Science* 59(4):806–824.

Tomz, Michael. 2007. "Domestic audience costs in international relations: An experimental approach." *International organization* 61(4):821–840.

Tyrberg, Maria. 2024. "The Impact of Discrimination and Support on Immigrant Trust and Belonging." *European Political Science Review* 16(1):18–34.

UNHCR. 2023. "Global Trends Report 2023.".
URL: *https://www.unhcr.org/us/global-trends-report-2023*

UNHCR. 2025. "Rohingya Emergency.".
URL: *https://www.unhcr.org/emergencies/rohingya-emergency*

UNHCR. N.d. "Annual Results Report 2024.". Accessed 22 Aug 2025.

   URL: *https://www.unhcr.org/sites/default/files/2025-06/South%20Sudan%20ARR%202024.pdf*

Weiss, Chagai M. 2025. 3: Group Identity, Ingroups, and Their Implications. In *Handbook of Innovations in Political Psychology.*

Weiss, Chagai M., Alexandra A. Siegel and David Romney. 2023. "How Threats of Exclusion Mobilize Palestinian Political Participation." *American Journal of Political Science* 67(4):1080–1095.

Zaller, John R. 1992. *The Nature and Origins of Mass Opinion.* Cambridge University Press.

Appendix

A Additional information

A.1 Ethical Considerations

Given that our study targets a vulnerable population of Ukrainian refugees who may have limited economic resources, we implemented several ethical precautions to ensure participant welfare and autonomy. While we offered entry into a raffle for Amazon vouchers as compensation, we mitigated undue influence by specifying in the consent form that participation in the raffle was possible without completing the survey. Our recruitment materials emphasized the opportunity to share opinions and experiences, mentioning the raffle only subtly to avoid coercion. To prevent any unintended negative consequences of the intervention–especially since it could affect respondents' migration intentions–we included a debriefing at the end of the survey explaining the study's purpose and experimental nature, allowing participants to readjust any influenced attitudes. Participants were informed of their right to withdraw at any time, and we provided contact information for support services, including a hotline for Ukrainians in Germany, should they experience any distress during the survey.

A.2 Deviations from pre-analysis plan

We note three main deviations from the pre-analysis plan (https://osf.io/32h9n).

First, because the data did not support our preregistered directional hypotheses, we report two-sided tests and corresponding confidence intervals throughout; Hypotheses H1-H3 in Section 2 are stated accordingly.

Second, the preregistered German support index originally bundled the military support perception item that also serves as our manipulation check. Since that item is mechanically most proximate to the treatment, we report versions of the German support index both including and excluding it and use the standalone military support item as the manipulation check.

Third, the plan included an observational design leveraging quasi-random initial regional allocation of refugees in Germany. By the time of fieldwork, substantial secondary moves and pre-arranged placements meant too few respondents still resided in their originally assigned localities; consequently, we did not implement or report that observational component.

A.3 Media consumption among Ukrainian refugees

Several independent data sources indicate that a substantial share of Ukrainian refugees in Germany routinely follow domestic news media. A commissioned survey by the European Centre for Press and Media Freedom (ECPMF) and the JX Fund, fielded by FORSA between April and July 2023 ($N = 508$), shows that 42% of respondents report using at least one German-language outlet for political information; the most frequently named sources are Deutsche Welle (23%), Tagesschau (13%), *ZDF heute* (9%), and Der Spiegel (13%) (European Centre for Press and Media Freedom, 2023). Qualitative follow-ups in the same study suggest

that the turn to German outlets is motivated by a search for "more diverse perspectives" and by the desire to practice language skills.

Complementary evidence arises from administrative and panel data. In the IAB–BAMF–SOEP refugee panel, wave 2 (July 2023-January 2024), approximately 70% of Ukrainian respondents report having completed an integration or language course; among these participants, "regular watching of German news programs or reading German press" is documented as one of the most common voluntary activities undertaken to reinforce classroom learning (Brücker et al., 2024). A separate evaluation of the Federal Office for Migration and Refugees' Erstorientierungskurse likewise finds that course instructors systematically recommend public-broadcast news formats for self-study, and that participants subsequently adopt these media as everyday information sources (für Migration und Flüchtlinge, 2023). Taken together, the survey and administrative records demonstrate that exposure to German public-service news is neither incidental nor marginal but forms an integral component of many refugees' information environments. This prevalence strengthens the plausibility that elite cues broadcast via Tagesschau can reach and influence a sizable segment of the Ukrainian refugee population.

A.4 Video treatment selection

The videos we use across treatment arms intentionally mirror the prevailing elite register in Germany during early 2024: a cautious, legal-operational framing that emphasized escalation risks, alliance coordination, and the categorical exclusion of any Bundeswehr involvement in targeting. During the Taurus debate, Chancellor Scholz repeatedly rejected deliveries with references to prudence and to the requirement that German soldiers must not be associated with target selection; he defended this stance in the Bundestag and in press appearances.[13] Contemporary reporting likewise framed the dispute in terms of proportionality, legal constraints, and alliance management, rather than hostile affect toward Ukrainians.[14] Because the public debate rarely employed emotive or outgroup-directed language, we used muted, authentic clips that preserved this register.

A.5 Minimum detectable effect size

The minimum detectable effect size (MDES) quantifies the smallest standardized average treatment effect that our design could detect with 80% power using a two-sided test at $\alpha = 0.05$ (Bloom, 1995). Let $\widehat{\text{SE}}$ denote the heteroskedastic-robust standard error of the treatment coefficient. Then

$$\text{MDES} = \left(z_{\alpha/2} + z_{1-\beta}\right)\widehat{\text{SE}} = (1.96 + 0.84)\,\widehat{\text{SE}} = 2.80\,\widehat{\text{SE}}.$$

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[13] Deutscher Bundestag, Regierungsbefragung, 13 March 2024, "Nichtbeteiligung deutscher Soldaten sicherstellen."

[14] AP News, 26 February 2024, "Germany's Scholz explains his reluctance to send Taurus long-range missiles to Ukraine."; AP News, 13 March 2024, "Germany's Scholz defends his refusal to send Taurus missiles to Ukraine."; *Süddeutsche Zeitung*, 13 March 2024, "Scholz bekräftigt Nein zu Lieferung von Taurus."; *El País*, 28 February 2024, "Scholz's refusal to send Taurus missiles to Ukraine divides German government."; Politico Europe, 10 April 2024, "Zelenskyy blasts Scholz's reason for not sending German Taurus missiles."

Using the largest standard error reported in Table C.1 (column 3, $\widehat{SE} = 0.060$) gives

$$\text{MDES} = 2.80 \times 0.060 = 0.168 \approx 0.17 \text{ SD}.$$

Repeating the calculation for the other models ($\widehat{SE} \approx 0.057$) yields MDE values of 0.16 SD. Because all outcomes are standardized using the control-group standard deviation, these figures are directly interpretable: the experiment was powered to detect effects smaller than ± 0.17 SD,.

B   Descriptive

B.1   Index diagnostics: item-item correlations

We report correlation matrices among the components of each index (three indices shown: German support without the manipulation item, belonging, and migration intentions).

Table B.1:   Correlation matrix among components of German support (no manipulation item)

Item	Enough support for displaced Ukrainians	Anti-foreigner sentiment (reversed)
Enough support for displaced Ukrainians	1.000	0.134
Anti-foreigner sentiment (reversed)	0.134	1.000

Table B.2:   Correlation matrix among components of Belonging

Item	Connected to Germans	Outsider feeling in Germany (reversed)	Local attitudes towards displaced Ukrainians
Connected to Germans	1.000	0.635	0.325
Outsider feeling in Germany (reversed)	0.635	1.000	0.408
Local attitudes towards displaced Ukrainians	0.325	0.408	1.000

Table B.3:   Correlation matrix among components of Migration intentions

Item	Return to home country	Remain in Germany (reversed)	Relocate to other country
Return to home country	1.000	0.473	0.008
Remain in Germany (reversed)	0.473	1.000	-0.020
Relocate to other country	0.008	-0.020	1.000

As shown in Table B.1, the correlation between the two items of the German support index is positive but weak (0.134). This pattern reflects the fact that the items are designed to capture different aspects of support: one measures explicit endorsement of assistance for displaced Ukrainians, while the other taps the absence of anti-foreigner sentiment. The low correlation therefore signals complementarity rather than inconsistency—together, the items cover both positive and negative dimensions of the underlying construct.

By contrast, the belonging index in Table B.2 shows stronger associations among items, with correlations ranging from 0.325 to 0.635, indicating that measures of connection to Germans, outsider feelings, and local attitudes toward Ukrainians capture related but non-identical facets of social attachment. Migration intentions (Table B.3) display lower correlations, especially between "return to home country" and "relocate to other country" (0.008), which is expected since these represent distinct choices rather than positions along a single continuum. In sum, the indices demonstrate internal coherence where theory predicts it, while preserving conceptual breadth by avoiding redundant items.

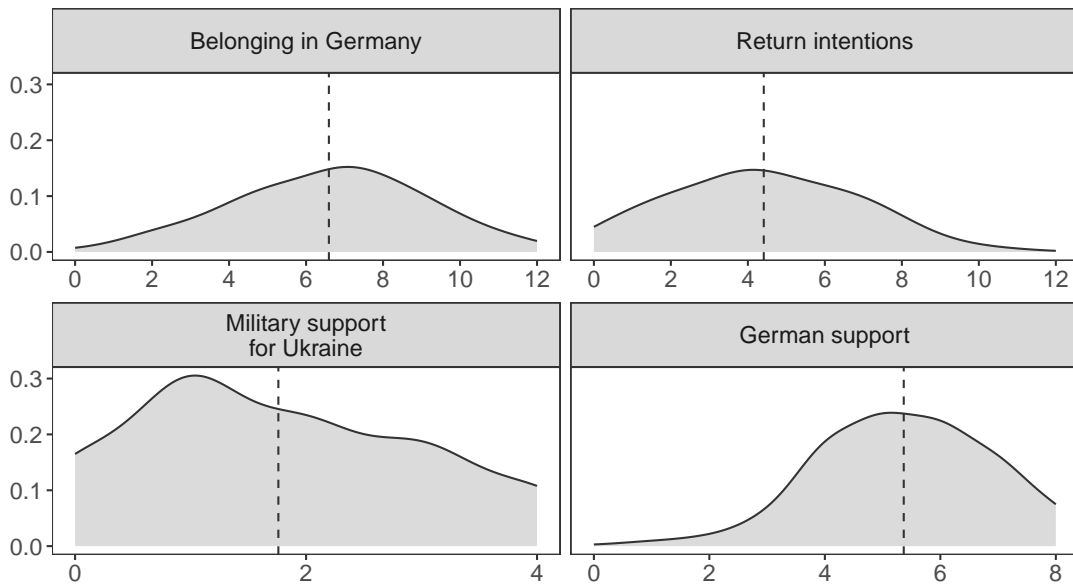## B.2 Distribution of outcomes

Figure B.1: Raw Distributions of Perceptions and Integration Outcomes. *Unlike the paper, the outcomes are not standardized to show the observed (raw) distribution of the main outcomes used in the paper. Dashed lines indicate the mean response.*

B.3 Balance

Table B.4: Treatment Balance by Covariates. Each cell in the table shows RI p-values for the relationship between specific treatment assignment (as opposed to control group) and baseline covariate based on 10,000 permutation of treatment vector.

	P-value by treatment		
Variable	**Oppose**	**Ambivalent**	**Support**
Age	0.068	0.726	0.096
NA	0.434	0.394	0.434
Employment: Employed	0.756	0.216	0.668
Employment: Odd jobs	0.152	0.438	0.370
Employment: Other	0.112	0.908	0.520
Employment: Pensioner	0.464	0.256	0.902
Employment: Running household	0.826	0.628	0.674
Employment: Self-employed	0.978	0.288	0.638
Employment: Student	0.356	0.808	0.498
Employment: Unemployed	0.316	0.028	0.216
Female	0.910	0.358	0.498
Male	0.846	0.328	0.550
Other gender	0.704	0.732	0.670
Income	0.768	0.512	0.700
Married	0.618	0.798	0.804
Move motivation: assigned	0.988	0.858	0.938
Move motivation: family	0.086	0.108	0.286
Move motivation: host family	0.874	0.690	0.588
Move motivation: other	0.096	0.022	0.408
State: Schleswig-Holstein	0.500	0.640	0.230
State: Hamburg	0.326	0.424	0.352
State: Niedersachsen	0.706	0.144	0.968
State: Bremen	0.798	0.796	0.724
State: North Rhine-Westphalia	0.580	0.160	0.408
State: Hesse	0.988	0.336	0.838
State: Rhineland-Palatinate	0.882	0.200	0.906
State: Baden-Württemberg	0.232	0.852	0.494
State: Bavaria	0.772	0.724	0.586
State: Saarland	0.976	0.848	0.876
State: Berlin	0.250	0.914	0.562
State: Brandenburg	0.044	0.298	0.128
State: Mecklenburg-Vorpommern	0.818	0.528	0.008
State: Saxony	0.208	0.346	0.106
State: Saxony-Anhalt	0.470	0.602	0.640
State: Thuringia	0.246	0.656	0.768
State: missing	0.830	0.990	0.344
Vote choice in Ukraine: no vote	0.382	0.926	0.688
Vote choice in Ukraine: Poroshenko	0.296	0.780	0.916
Vote choice in Ukraine: Zelensky	0.908	0.898	0.798

C Main results in table format

Table C.1: Main results

Dependent Variables:	German support (1)	Belonging (2)	Return intentions (3)	Military support (4)
Variables				
Oppose	-0.016	0.003	0.064	-0.410***
	(0.058)	(0.057)	(0.060)	(0.057)
Ambivalent	0.011	0.0008	0.104*	-0.078
	(0.057)	(0.057)	(0.059)	(0.057)
Support	0.019	0.041	-0.032	-0.094
	(0.058)	(0.058)	(0.061)	(0.058)
Observations	2,196	2,250	2,215	2,215
R^2	0.101	0.069	0.051	0.081

IID standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Table C.2: Heterogeneous treatment effects by war termination preference

| Dependent Variables: War termination pref. | German support | Belonging | Return intentions | Military support | German support | Belonging | Return intentions | Military support |
| | | Pref. territorial loss | | | | Pref. war | | |
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Variables								
Oppose	0.072	0.024	0.141	-0.260***	-0.088	-0.003	-0.009	-0.440***
	(0.089)	(0.095)	(0.099)	(0.096)	(0.077)	(0.076)	(0.080)	(0.073)
Ambivalent	0.082	0.064	0.032	-0.050	-0.026	-0.021	0.113	-0.043
	(0.089)	(0.094)	(0.099)	(0.095)	(0.076)	(0.075)	(0.078)	(0.073)
Support	0.107	-0.032	-0.181*	-0.135	0.0008	0.096	0.042	-0.036
	(0.089)	(0.094)	(0.099)	(0.096)	(0.079)	(0.077)	(0.082)	(0.075)
Prefers war over territorial loss	No	No	No	No	Yes	Yes	Yes	Yes
Observations	788	800	794	789	1,341	1,376	1,349	1,355
R^2	0.129	0.103	0.094	0.105	0.117	0.078	0.060	0.100

IID standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Table C.3: Heterogeneous treatment effects by mainstream media exposure

| Dependent Variables: Mainstream media | German support | Belonging | Return intentions | Military support | German support | Belonging | Return intentions | Military support |
| | | No mainstream media | | | | Any mainstream media | | |
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Variables								
Oppose	-0.002	0.049	0.095	-0.387***	-0.048	-0.040	0.039	-0.420***
	(0.082)	(0.081)	(0.085)	(0.079)	(0.082)	(0.080)	(0.086)	(0.084)
Ambivalent	0.027	0.059	0.153*	0.022	-0.015	-0.046	0.041	-0.192**
	(0.079)	(0.078)	(0.081)	(0.076)	(0.083)	(0.081)	(0.087)	(0.085)
Support	0.014	0.008	0.142*	-0.060	0.028	0.059	-0.222**	-0.141*
	(0.084)	(0.082)	(0.086)	(0.080)	(0.083)	(0.081)	(0.087)	(0.085)
Exposed to mainstream media	No	No	No	No	Yes	Yes	Yes	Yes
Observations	1,173	1,207	1,190	1,186	1,023	1,043	1,025	1,029
R^2	0.108	0.073	0.062	0.096	0.124	0.111	0.077	0.105

IID standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Table C.4: Heterogeneous treatment effects by prior integration level

| Dependent Variables: Prior integration | German support | Belonging | Return intentions | Military support | German support | Belonging | Return intentions | Military support |
| | | Low integration | | | | High integration | | |
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Variables								
Oppose	0.047	-0.018	0.054	-0.448***	-0.019	0.128*	0.002	-0.329***
	(0.088)	(0.086)	(0.091)	(0.087)	(0.078)	(0.072)	(0.082)	(0.079)
Ambivalent	0.187**	0.072	-0.021	-0.032	-0.069	-0.014	0.152*	-0.091
	(0.089)	(0.086)	(0.091)	(0.087)	(0.076)	(0.070)	(0.080)	(0.077)
Support	0.149*	0.104	-0.120	-0.113	0.0002	0.049	-0.009	-0.023
	(0.090)	(0.087)	(0.092)	(0.088)	(0.078)	(0.073)	(0.083)	(0.079)
Prior integration level	Low	Low	Low	Low	High	High	High	High
Observations	952	975	963	959	1,178	1,188	1,181	1,182
R^2	0.137	0.080	0.058	0.122	0.121	0.118	0.082	0.095

IID standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*
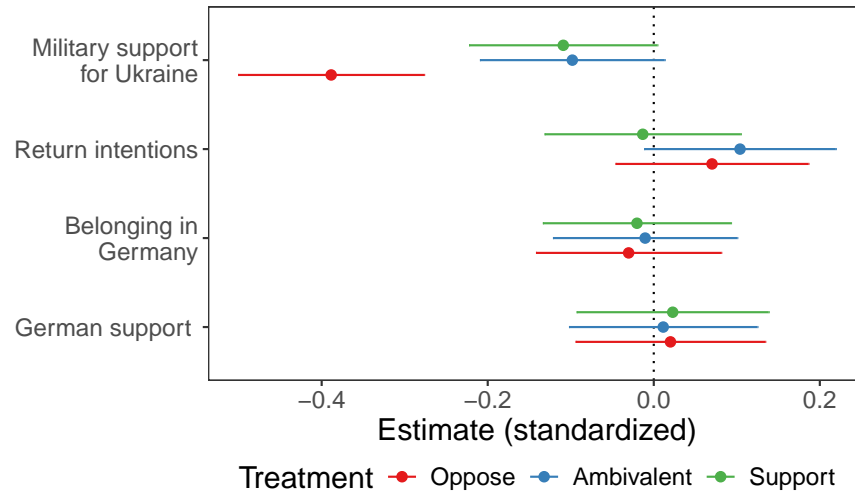
C.1 Results without covariates

Figure C.1: Main estimates without covariates. Points show OLS estimates; whiskers show 95% CIs. Outcomes are standardized using the control-group mean and SD.
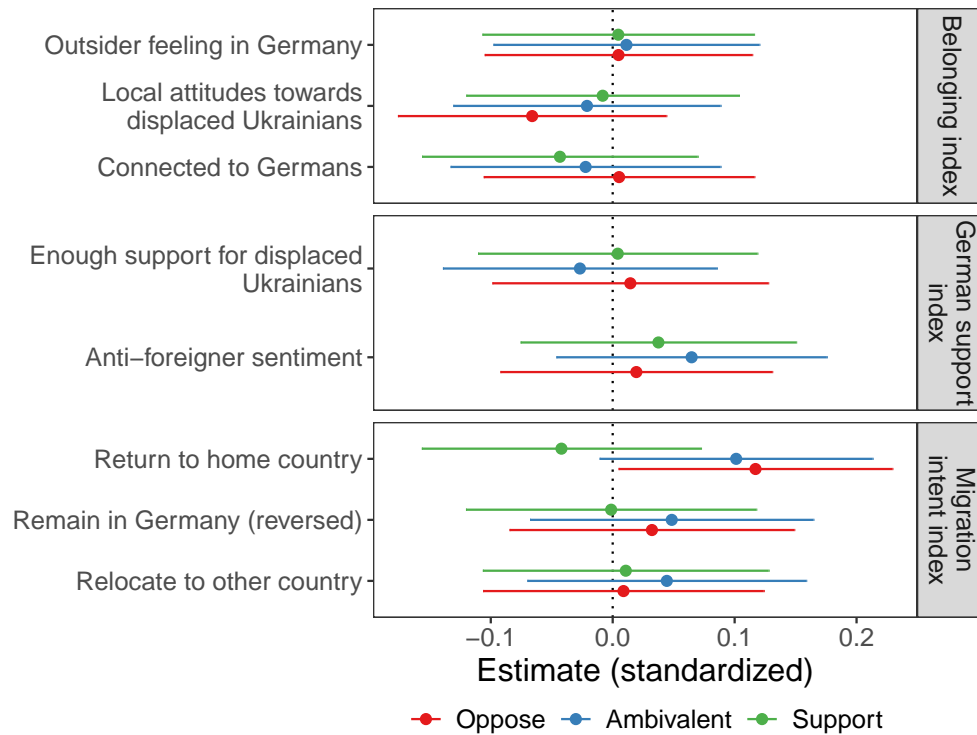

Figure C.2: Item-level estimates without covariates. Points show OLS estimates; whiskers show 95% CIs. Items are standardized using the control-group mean and SD.
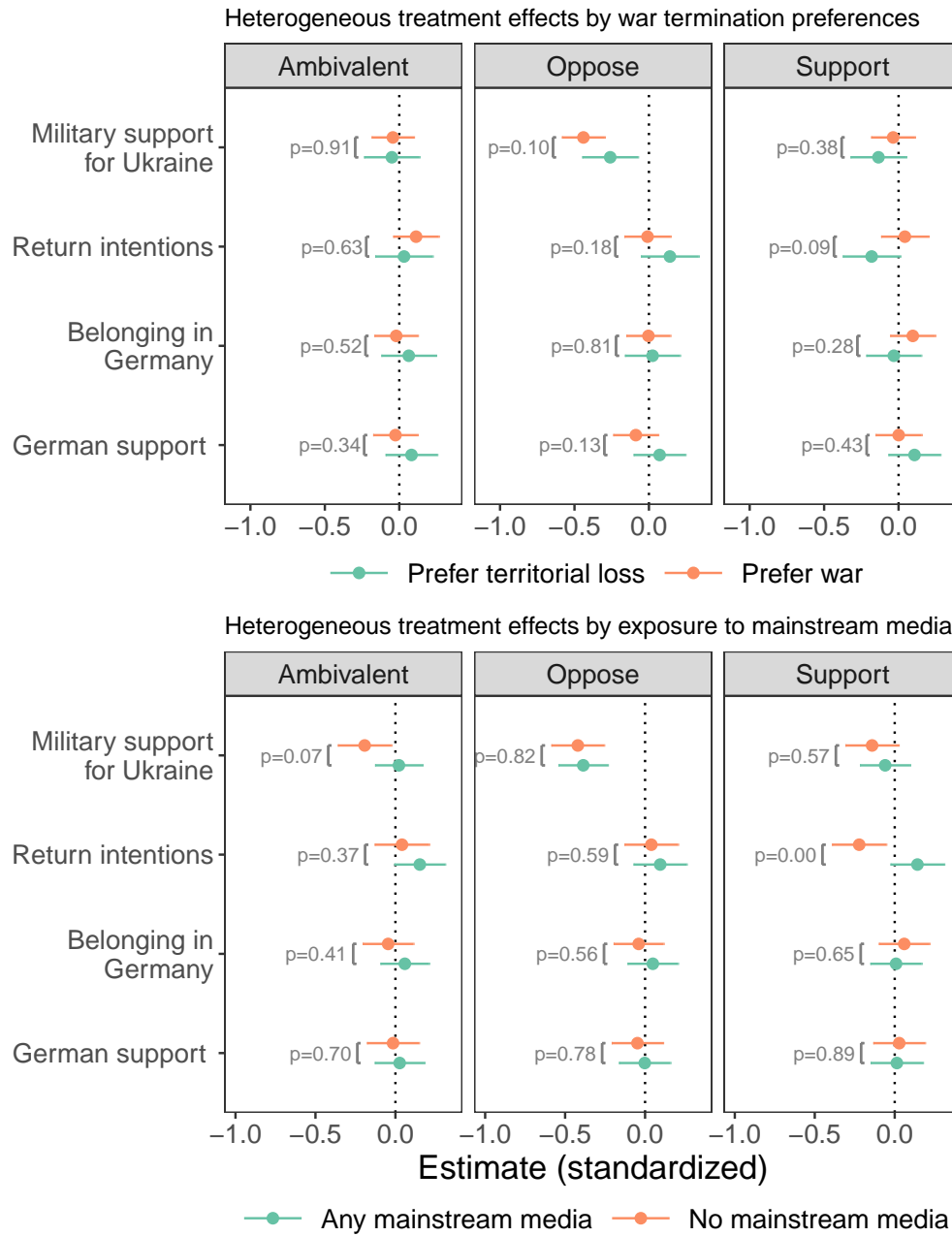
D   Pre-Registered Mechanisms Tests

Figure D.1: Estimates of the Treatment Effects Heterogeneity by War Termination Preferences (top panel) and Prior Media Consumption (bottom panel). *Estimates correspond to the effect of treatment relative to the control condition (weather report). SeeSection C for the corresponding regression table.*
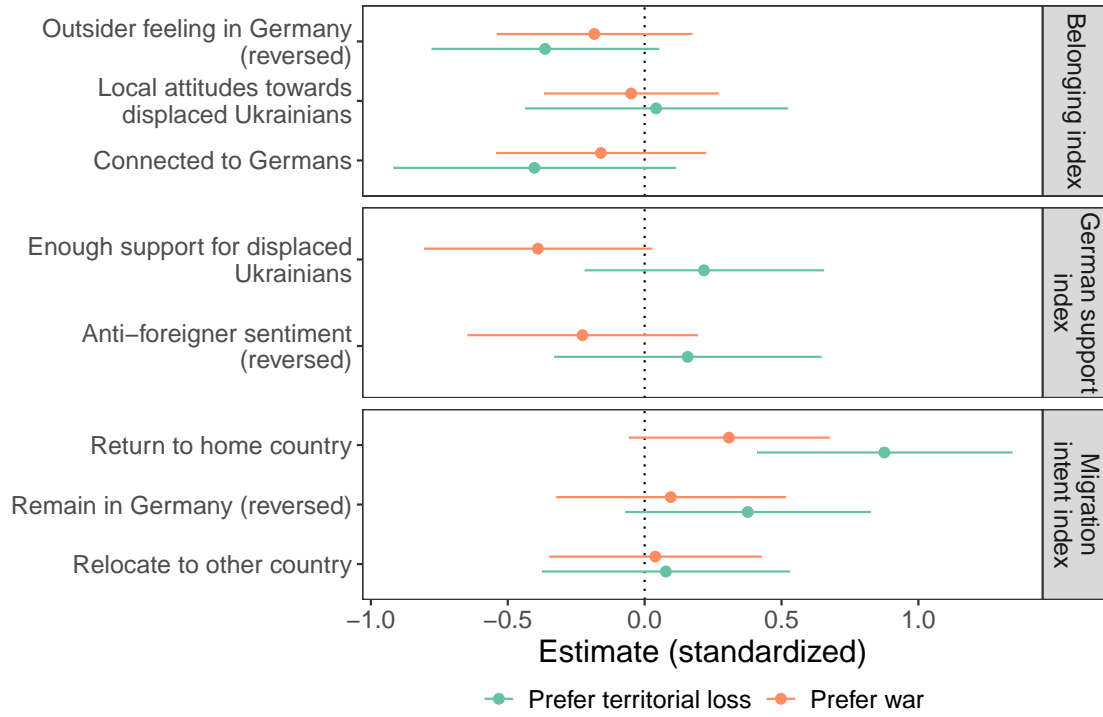
Figure D.2: No-mention subgroup treatment effects by war termination preferences.

E Additional results

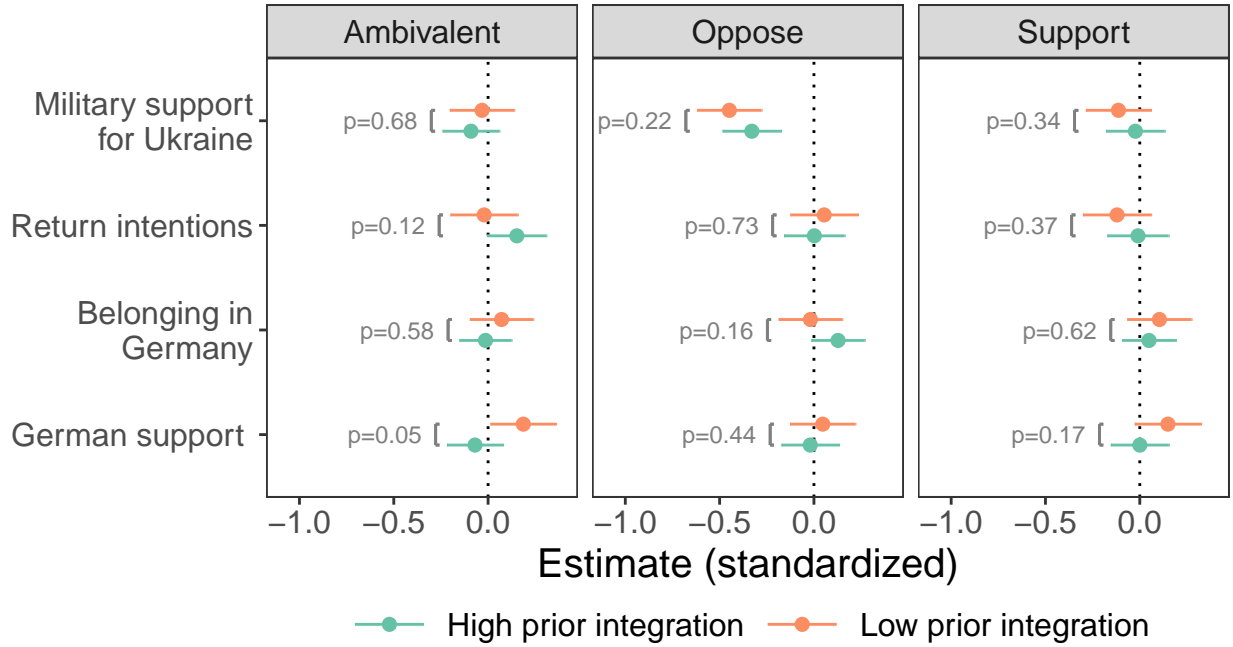## E.1 Heterogeneity by prior integration

Figure E.1: Estimates of Treatment Effects Heterogeneity by Prior Integration Index. *High and low groups are based on a median split.*

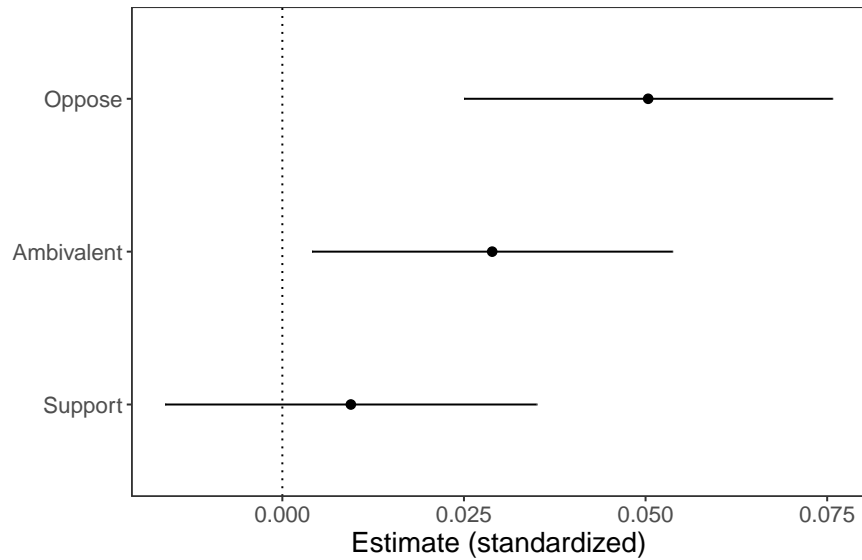## E.2 Experimenter demand effects

Figure E.2: Estimates of treatment effect on guessing the aim of the study. *Rates of correctly guessing the outcome were 1.86% in the control condition, 6.58% in the oppose condition, 4.64% in the ambivalent condition, and 2.84% in the support condition.*

E.3 Attrition

For our main attrition indicator, we coded an observation as missing if the respondent reached the treatment assignment in the survey, but all main outcomes were missing. Based on this indicator, we observe an attrition rate of approximately 8.9%. Table D.1 below presents the results of pre-registered attrition tests of missingness related to treatment assignment—unequal variance t-tests and F-tests of the relationship between attrition and treatment-by-covariate interactions. The results indicate that our main treatments, *Oppose* and *Ambivalent*, did not show attrition rates different from the control condition. However, attrition rates in the *Support* treatment were systematically different from all other experimental groups, suggesting that the video shown in this condition prompted respondents to drop out.

Table E.1: t and F tests of relationship between treatment assignment and attrition

Outcome	t-test p-values						F-test p-value
	control vs oppose	control vs support	control vs ambival	oppose vs support	oppose vs ambival	support vs ambival	
Missing Military Support	0.907	0.004	0.195	0.006	0.154	0.001	0.338
Missing German Support	0.862	0.003	0.240	0.006	0.160	0.000	0.244
Missing Belonging in Germany	0.841	0.001	0.240	0.008	0.184	0.000	0.828
Missing Return Intentions	0.692	0.000	0.408	0.001	0.235	0.000	0.828
Missing All Outcomes	0.715	0.000	0.387	0.000	0.656	0.000	

Each p-value corresponds to separate test of independence of treatment assignment from attrition pattern we observe. The F-test is conducted excluding Support treatment that is not included in the analyses and exhibits different patterns of attrition. Covariates included in the model for the F-test are all covariates used in our main regression model specification and indicator of passing attention check.

E.4 Tagesschau interaction models (pooled)

Table E.2: Treatment effects interacted with Tagesschau: No mention

Dependent Variables:	German support (1)	Belonging (2)	Return intentions (3)	Military support (4)	German support (5)	Belonging (6)	Return intentions (7)	Military support (8)
Variables								
Oppose	0.061	0.073	0.028	-0.362***	0.032	0.048	0.012	-0.386***
	(0.063)	(0.062)	(0.064)	(0.062)	(0.062)	(0.062)	(0.065)	(0.062)
Ambivalent	0.023	0.045	0.062	-0.099	0.021	0.033	0.065	-0.070
	(0.063)	(0.062)	(0.064)	(0.061)	(0.062)	(0.061)	(0.064)	(0.061)
Support	0.066	0.050	-0.050	-0.081	0.063	0.074	-0.068	-0.058
	(0.064)	(0.063)	(0.065)	(0.062)	(0.063)	(0.063)	(0.066)	(0.062)
Oppose × No mention	-0.318*	-0.337**	0.362**	-0.250	-0.362**	-0.339**	0.449***	-0.204
	(0.169)	(0.164)	(0.171)	(0.165)	(0.167)	(0.165)	(0.173)	(0.165)
Ambivalent × No mention	-0.085	-0.238	0.343**	-0.043	-0.099	-0.238	0.366**	-0.087
	(0.169)	(0.164)	(0.170)	(0.164)	(0.167)	(0.165)	(0.173)	(0.165)
Support × No mention	-0.374**	-0.239	0.345*	-0.251	-0.420**	-0.282	0.369**	-0.316*
	(0.175)	(0.171)	(0.176)	(0.171)	(0.176)	(0.173)	(0.181)	(0.175)
Controls included	No	No	No	No	Yes	Yes	Yes	Yes
Observations	2,256	2,344	2,312	2,285	2,170	2,222	2,188	2,188
R^2	0.004	0.002	0.005	0.025	0.107	0.071	0.056	0.083

IID standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

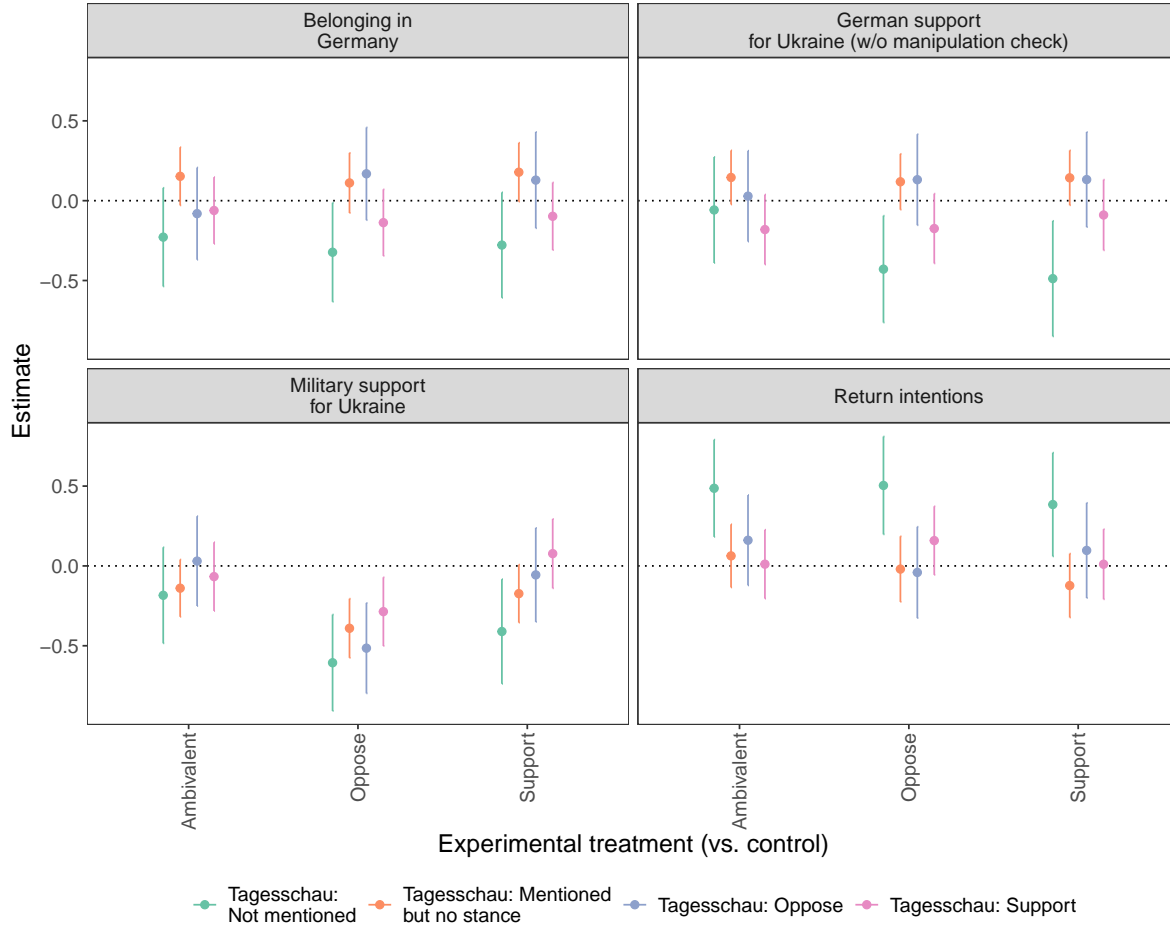## E.5   Tagesschau interaction models (four categories)

Figure E.3: Treatment effects by Tagesschau coverage type (Support, Oppose, Mentioned without stance, Not mentioned). Outcomes exclude the manipulation check. Effects are sizeable only on no-coverage days and remain small across coverage stances.

F   Summary statistics

Summary statistics for treatments, outcomes, and moderators

Variable	Mean	Median	Std. Dev.	Min	Max
Treatment: Oppose	0.25	0.00	0.43	0.00	1.00
Treatment: Ambivalent	0.25	0.00	0.43	0.00	1.00
Treatment: Support	0.25	0.00	0.43	0.00	1.00
Treatment: Control	0.25	0.00	0.43	0.00	1.00
German support	5.37	5.00	1.48	0.00	8.00
Belonging in Germany	6.59	7.00	2.49	0.00	12.00
Return intentions	4.41	4.00	2.42	0.00	12.00
Military support for Ukraine	1.76	2.00	1.24	0.00	4.00
War termination preference: prefer war	0.62	1.00	0.49	0.00	1.00
Any mainstream media	0.45	0.00	0.50	0.00	1.00
Prior integration	9.34	9.00	4.45	0.00	26.00

Summary Statistics - Control Variables

Variable	Mean	Median	Std. Dev.	Min	Max	**what**
Age	41.72	40.00	12.79	18	100	Control
Education	3.37	4.00	1.23	0	5	Control
Employment: Employed	0.22	0.00	0.41	0	1	Control
Employment: Odd jobs	0.05	0.00	0.23	0	1	Control
Employment: Other	0.17	0.00	0.37	0	1	Control
Employment: Pensioner	0.07	0.00	0.26	0	1	Control
Employment: Running household	0.06	0.00	0.24	0	1	Control
Employment: Self-employed	0.03	0.00	0.16	0	1	Control
Employment: Student	0.06	0.00	0.23	0	1	Control
Employment: Unemployed	0.34	0.00	0.47	0	1	Control
Female	0.81	1.00	0.39	0	1	Control
Male	0.19	0.00	0.39	0	1	Control
Other gender	0.00	0.00	0.05	0	1	Control
Income	3.34	3.00	0.97	1	6	Control
Married	0.51	0.51	0.47	0	1	Control
Move motivation: assigned	0.18	0.00	0.39	0	1	Control
Move motivation: family	0.51	1.00	0.50	0	1	Control
Move motivation: host family	0.18	0.00	0.39	0	1	Control
Move motivation: other	0.16	0.00	0.37	0	1	Control
State ID 01	0.03	0.00	0.17	0	1	Control
State ID 02	0.03	0.00	0.18	0	1	Control
State ID 03	0.08	0.00	0.27	0	1	Control
State ID 04	0.01	0.00	0.10	0	1	Control
State ID 05	0.21	0.00	0.41	0	1	Control
State ID 06	0.09	0.00	0.28	0	1	Control
State ID 07	0.03	0.00	0.17	0	1	Control
State ID 08	0.14	0.00	0.34	0	1	Control
State ID 09	0.17	0.00	0.37	0	1	Control
State ID 10	0.01	0.00	0.12	0	1	Control
State ID 11	0.07	0.00	0.25	0	1	Control
State ID 12	0.02	0.00	0.15	0	1	Control
State ID 13	0.02	0.00	0.13	0	1	Control
State ID 14	0.05	0.00	0.22	0	1	Control
State ID 15	0.02	0.00	0.15	0	1	Control
State ID 16	0.02	0.00	0.14	0	1	Control
State ID NA	0.01	0.00	0.10	0	1	Control
Vote choice in Ukraine: no vote	0.27	0.00	0.44	0	1	Control
Vote choice in Ukraine: Poroshenko	0.20	0.00	0.40	0	1	Control
Vote choice in Ukraine: Zelensky	0.53	1.00	0.50	0	1	Control

G Tagesschau Media Coverage Analysis

This section provides comprehensive documentation of our analysis of German media coverage using transcripts from the *Tagesschau*, Germany's most-watched daily news program. We use this analysis to examine how the information environment moderates treatment effects in our experiment.

G.1 Data Collection and Classification Procedure

We obtained transcripts for the 20:00 edition of *Tagesschau* covering our entire survey period (March 8–April 9, 2024). The *Tagesschau* is the most important news program in Germany and generally reports on the most significant news of the day. If there is sufficiently salient news related to the conflict between Ukraine and Russia as well as the German government's stance on this topic, the *Tagesschau* will report on it.

We employed a two-stage classification process using GPT-4o-mini:

Stage 1: Ukraine Content Extraction – We first extracted any portions of each transcript that discussed Ukraine, the Ukrainian people, or the war in Ukraine.

Stage 2: German Government Stance Analysis – For episodes containing Ukraine-related content, we classified whether the coverage signaled German government support, opposition, or neutrality regarding military aid to Ukraine, or contained no mention of the German government's stance.

G.2 Classification Rules and Prompts

The exact prompts used for our GPT-4o-mini classification are provided below, in both German (original) and English (translation).

Stage 1: Ukraine Content Extraction **German Original:**

> *Extrahiere nur die Teile dieses deutschen Nachrichtentextes, die sich auf die Ukraine, das ukrainische Volk oder den Krieg in der Ukraine beziehen. Gib nur den extrahierten Text zurück, sonst nichts. Wenn nichts über die Ukraine vorhanden ist, gib 'NONE' zurück. Text: [TRANSCRIPT]*

English Translation:

> *Extract only the parts of this German news text that relate to Ukraine, the Ukrainian people, or the war in Ukraine. Return only the extracted text, nothing else. If nothing about Ukraine is present, return 'NONE'. Text: [TRANSCRIPT]*

Stage 2: German Government Stance Analysis **German Original:**

> *Bitte analysieren Sie den folgenden deutschen Nachrichtentext. Bestimmen Sie, ob darin Hinweise darauf enthalten sind, ob die deutsche Regierung Unterstützung für die Ukraine im Konflikt mit Russland signalisiert oder nicht, sei es direkt oder indirekt. Falls ja, geben Sie bitte die Haltung der deutschen Regierung an, indem Sie eine der folgenden Optionen auswählen:*
>
> *1. Ein Signal militärischer Unterstützung für die Ukraine, auch wenn das Signal schwach ist [support]*
>
> *2. Ein Signal gegen militärische Unterstützung für die Ukraine, auch wenn das Signal schwach ist [oppose]*
>
> *3. Eine völlig neutrale Haltung zu diesem Thema [neutral]*
>
> *4. Der Text enthält keine Hinweise auf die Haltung der deutschen Regierung zu diesem Thema [not_mentioned]*
>
> *Bitte antworten Sie ausschließlich mit dem entsprechenden Text in Klammern und fügen Sie nichts Weiteres hinzu.*
>
> *Text: [UKRAINE_CONTENT]*

English Translation:

Please analyze the following German news text. Determine whether it contains indications of whether the German government signals support for Ukraine in the conflict with Russia or not, either directly or indirectly. If so, please indicate the German government's stance by selecting one of the following options:

1. A signal of military support for Ukraine, even if the signal is weak [support]

2. A signal against military support for Ukraine, even if the signal is weak [oppose]

3. A completely neutral stance on this topic [neutral]

4. The text contains no indications of the German government's stance on this topic [not_mentioned]

Please respond exclusively with the corresponding text in brackets and add nothing further.

Text: [UKRAINE_CONTENT]

G.3 Coverage Examples During Survey Period

To illustrate the variation in German media coverage of military support for Ukraine during our study period, Table G.1 presents examples of *Tagesschau* episodes classified by their stance toward German government support. These examples are drawn from episodes that aired on survey days or the day before survey days during our survey period.

Table G.1: Examples of *Tagesschau* Coverage by Stance Classification

Stance	Date		German Original	English Translation
Support	March 2024	19,	Mehr als zwei Jahre nach Beginn des russischen Überfalls auf die Ukraine gerät das Land militärisch stärker unter Druck. Wie die westliche Hilfe ausgebaut werden kann, darüber hat heute die Ukraine-Kontaktgruppe in Ramstein beraten. Kiew benötigt mehr Waffen und Munition, um den russischen Vormarsch zu stoppen...	More than two years after the beginning of the Russian attack on Ukraine, the country is coming under stronger military pressure. The Ukraine Contact Group met in Ramstein today to discuss how Western aid can be expanded. Kyiv needs more weapons and ammunition to stop the Russian advance...
Oppose	March 2024	13,	Bundeskanzler Scholz hat im Bundestag erneut seine Haltung verteidigt, keine Taurus-Lenkflugkörper an die Ukraine zu liefern. Die Union will zum Marschflugkörper Taurus fragen und warum Scholz ihn nicht an die Ukraine liefern will. Die Union unterstellt dem Kanzler, der Ukraine zu misstrauen...	Chancellor Scholz has once again defended his position in the Bundestag not to deliver Taurus cruise missiles to Ukraine. The Union wants to ask about the Taurus cruise missile and why Scholz does not want to deliver it to Ukraine. The Union accuses the Chancellor of distrusting Ukraine...
Mentioned but no stance	March 2024	31,	In der Ukraine gedenken die Menschen heute der Opfer von Butscha. In der Kleinstadt wurden Hunderte Zivilisten ermordet. Als die russischen Besatzer vor genau zwei Jahren abzogen, lagen Leichen auf den Straßen — viele gefesselt und gefoltert. Die Ukraine wirft Moskau Kriegsverbrechen vor...	In Ukraine, people are commemorating the victims of Bucha today. Hundreds of civilians were murdered in the small town. When the Russian occupiers withdrew exactly two years ago, bodies lay on the streets — many bound and tortured. Ukraine accuses Moscow of war crimes...

G.4 Temporal Distribution of Coverage Types

During our survey period, among the 31 *Tagesschau* episodes on survey-relevant dates, 41.9% were classified as "Mentioned but no stance" (coverage of Ukraine without reference to German government stance), 25.8% as "Support" (signaling government support for military aid), 22.6% as "Not mentioned" (no Ukraine coverage), and 9.7% as "Oppose" (signaling government opposition to military aid, primarily regarding Taurus missile deliveries). No episodes were classified as taking a neutral stance during this period.

Note: Points represent Tagesschau episodes on survey days or day before survey days (March 8 – April 9, 2024)
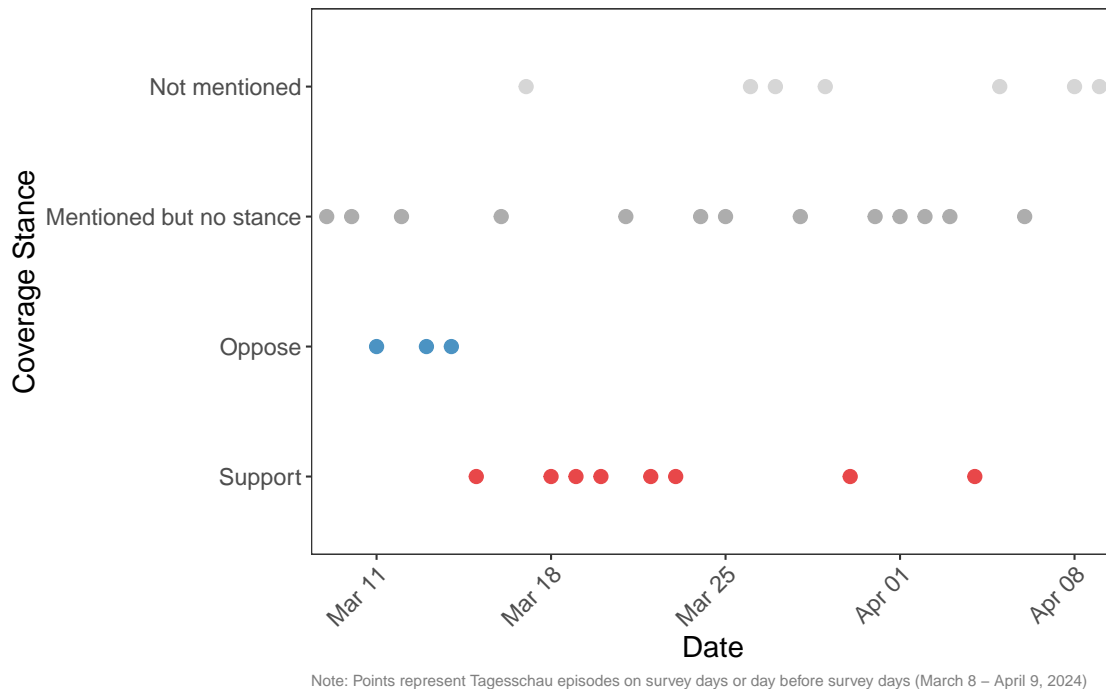
Figure G.1: *Tagesschau* Coverage by Date During Survey Period

Figure G.1 shows the temporal distribution of coverage types across the survey period. The plot illustrates how different types of *Tagesschau* coverage varied day by day, providing context for understanding the media environment that survey respondents experienced.

G.5 Balance Across Media Coverage Conditions

To assess whether our sample exhibits systematic differences based on media coverage patterns that could confound our analysis, we examine balance across covariates by *Tagesschau* coverage on the day preceding survey participation. Figure G.2 presents standardized differences in means between respondents who participated when Ukraine received any media coverage versus those who participated when Ukraine was not mentioned in German media.
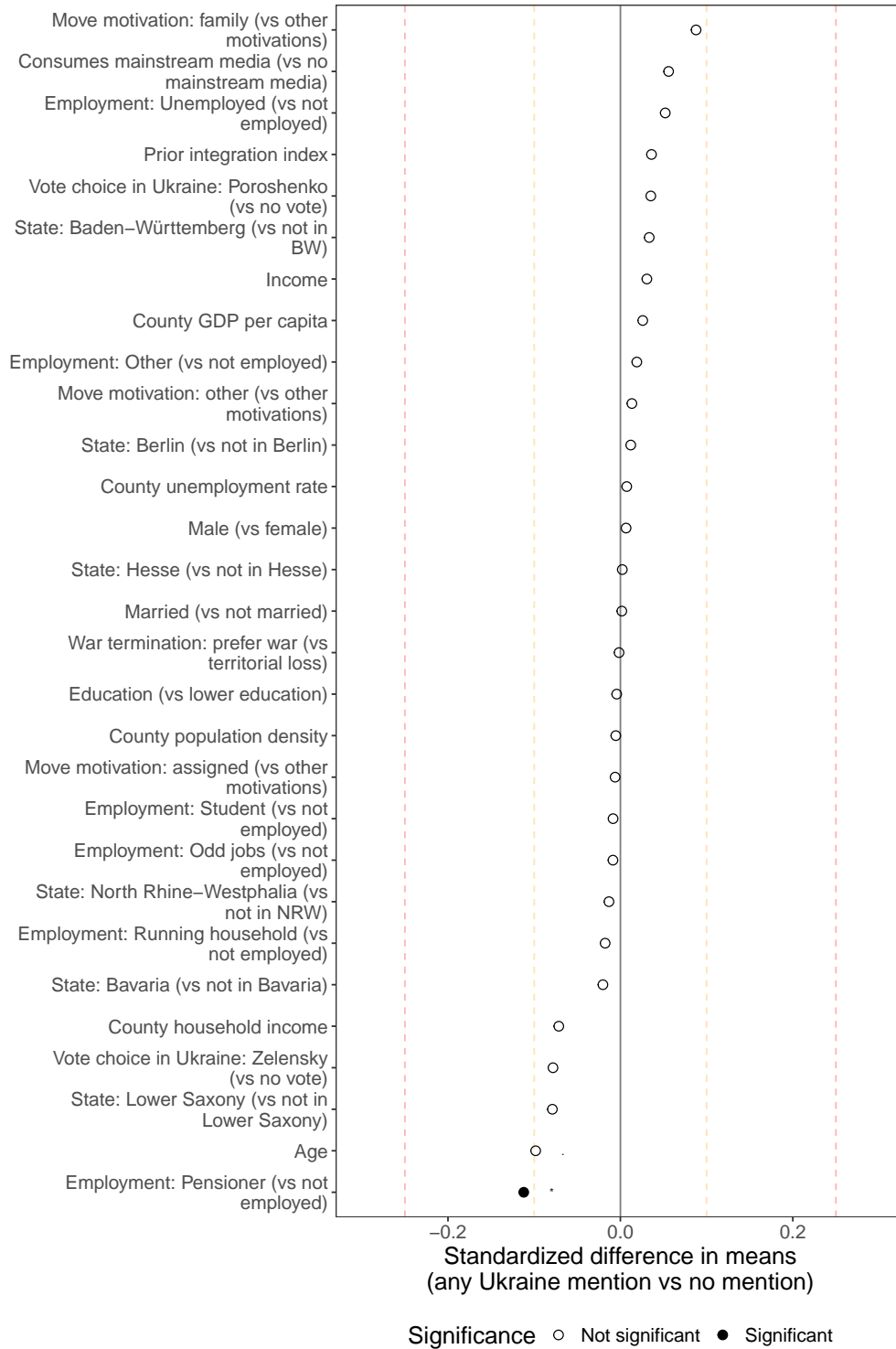
20

Figure G.2: Balance Check: Any Ukraine Mention vs. No Mention in *Tagesschau. Standardized differences in means between respondents surveyed when Ukraine received any media coverage versus when Ukraine was not mentioned. Points represent standardized differences; error bars show 95% confidence intervals. Dashed lines indicate conventional imbalance thresholds (±0.1 and ±0.25 standard deviations). Stars indicate statistical significance: *** p<0.001, ** p<0.01, * p<0.05, . p<0.1. Legend denotes significance (filled = significant, open = not significant).*

The balance analysis reveals no systematic evidence of selection into our sample based on media coverage patterns. Across 29 demographic, socioeconomic, geographic, and moderator covariates (including war termination preferences, prior media exposure, and prior integration), we observe only one statistically significant difference (3.4% of tests) and one marginally significant difference (3.4% of tests), with 93.1% of comparisons showing no significant imbalance. Most importantly, all standardized differences fall well within conventional balance thresholds, with no differences exceeding 0.25 standard deviations and only a few exceeding the more stringent 0.1 standard deviation threshold.

This balance indicates that respondents who participated during periods of high versus low Ukraine media salience are comparable across observed characteristics. Therefore, the differential treatment effects we observe by media coverage condition are unlikely to be driven by systematic differences in sample composition.

We also conducted balance tests across the more granular, uncollapsed Tagesschau coverage categories (support, oppose, mentioned but no stance, and not mentioned). These analyses similarly revealed only very few statistically significant differences across covariates, with small substantive differences that fall well within conventional balance thresholds. This additional evidence further confirms that our sample composition does not vary systematically by the specific type of media coverage on survey days.

G.6 Time-trend adjusted treatment effects by media coverage

To address potential unobserved time-varying confounding, we re-estimate the treatment effects by Tagesschau coverage with a linear time trend added to the regression model. Specifically, we include a covariate equal to the number of days since the first survey date and replicate the split-sample specification from Figure 4.
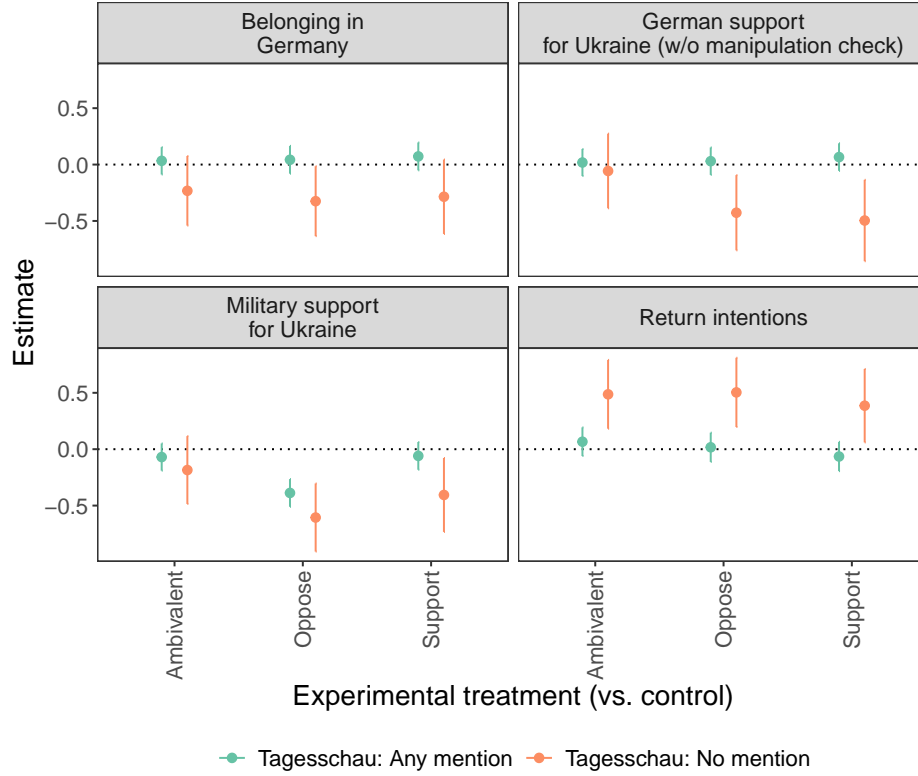
Figure G.3: Treatment effects by Tagesschau coverage (any vs. none) controlling for a linear time trend. Points show OLS estimates; whiskers show 95% CIs. Outcomes exclude the manipulation check.

We report the results in Figure G.3. The time-trend adjusted results closely mirror the unadjusted results: sizable negative effects on perceived German support and increased return intentions, with similar magnitudes, remain concentrated in the no-coverage subsample. Effects remain small and imprecise when coverage is present. If anything, adding the time trend slightly tightens several confidence intervals without changing qualitative conclusions.

G.7 Clustered-by-day treatment effects by media coverage

As an additional check for within-day correlation in outcomes, we re-estimate the split-sample specification clustering standard errors by survey day. Figure G.4 shows the resulting estimates.
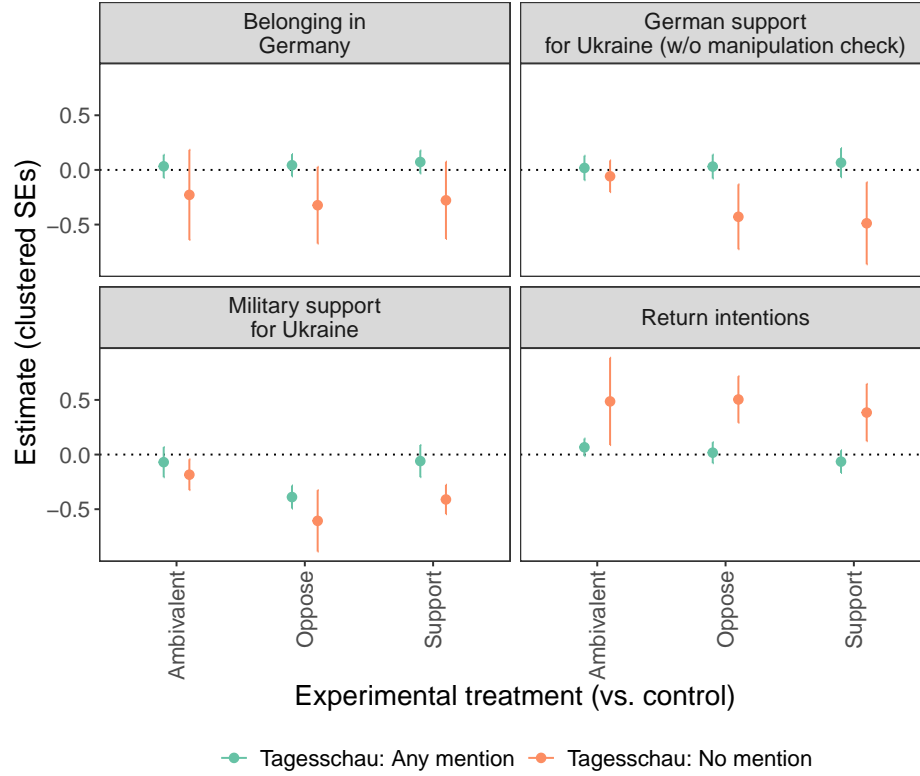
Figure G.4: Treatment effects by Tagesschau coverage (any vs. none) with standard errors clustered by survey day. Points show OLS estimates; whiskers show 95% clustered CIs.

Clustering by survey day modestly widens some confidence intervals, as expected, but leaves the substantive pattern intact: effects are concentrated in the no-coverage condition and remain small and imprecise under any coverage. We find no indication that the main conclusions hinge on not clustering by day.

G.8 Newey–West (HAC) standard errors by media coverage

As an additional robustness check for serial correlation across survey days, we re-estimate the split-sample specification using Newey–West heteroskedasticity- and autocorrelation-consistent (HAC) standard errors with a 3-day lag, using the survey date as the time index and respondent `id` as the panel identifier (Figure G.5). The estimates closely match the baseline and clustered-by-day results: confidence intervals widen minimally and the substantive conclusions remain unchanged.
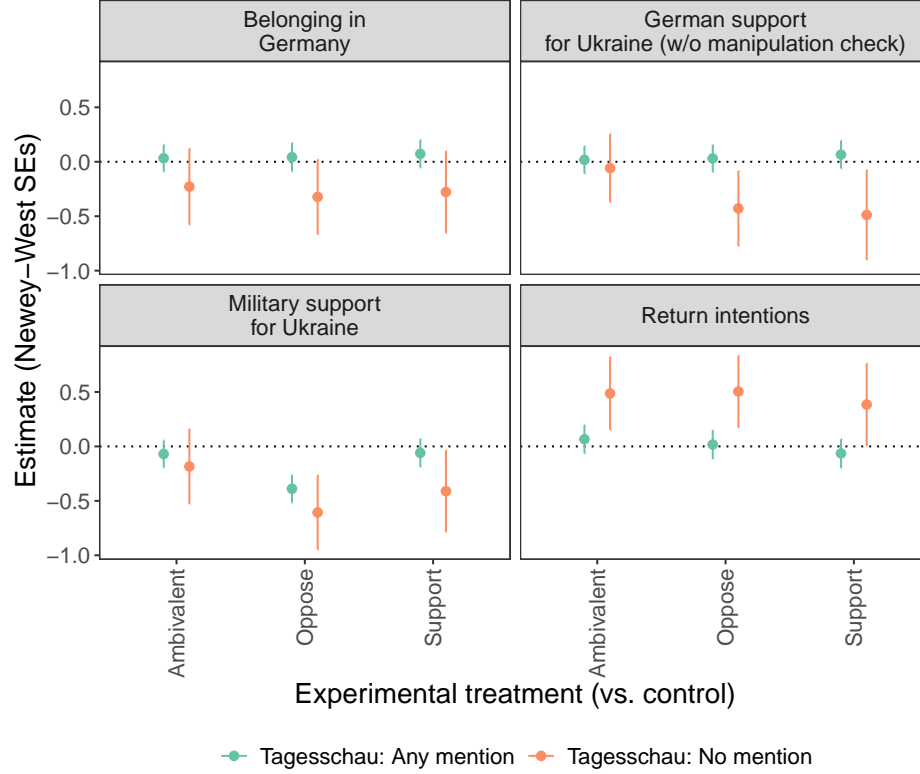
Figure G.5: Treatment effects by *Tagesschau* coverage (any vs. none) with Newey–West (3-day lag) standard errors. Points show OLS estimates; whiskers show 95% HAC CIs. Outcomes exclude the manipulation check.

G.9 Permutation test based on placebo coverage dates

We assess whether the sharp difference in treatment effects between "Any mention" and "No mention" at lag $k=1$ reflects a genuine alignment with the news environment, rather than an artifact of generic day-to-day fluctuations. For each integer shift k in a symmetric window around the survey date (we use $k \in [-10, 10]$ and keep only shifts with available *Tagesschau* data), we recompute the pooled treatment effect (treated vs. control) separately within the two media conditions and take the difference $\Delta_k \equiv \widehat{\tau}_{\text{Any}}(k) - \widehat{\tau}_{\text{None}}(k)$. By construction, positive k are lags (coverage dated k days before the survey date); thus $k=1$ is the design-relevant case where *Tagesschau* coverage is measured on the evening before a respondent completes the survey. Negative k are leads (i.e., using coverage from dates after the interview). The rationale for examining these placebo shifts is straightforward: coverage many days before the interview, or any coverage dated after it, should not systematically change the treatment-control difference. If our interpretation is correct, only the previous-evening case ($k=1$) should stand out. We therefore compare $\Delta_{k=1}$ to the empirical distribution of $\{\Delta_k : k \neq 1\}$ and report a two-sided empirical p-value $\hat{p} = \frac{1}{|\mathcal{K}|} \sum_{k \neq 1} \mathbb{1}\{ |\Delta_k| \geq |\Delta_1| \}$.

Figure G.6 shows the permutation distributions (histograms of Δ_k for $k \neq 1$) with the observed statistic Δ_1 indicated by a dashed line. The empirical two-sided p-values are: 0.000 for German support (without the manipulation item), 0.000 for return intentions, 0.000 for

belonging, and 0.200 for military support. These values indicate that the $k=1$ alignment is unusually large relative to other shifts for support, belonging, and return intentions, consistent with a short-term information-saturation interpretation. We take this as evidence that the observed alignment at $k=1$ reflects a genuine effect rather than spurious timing.
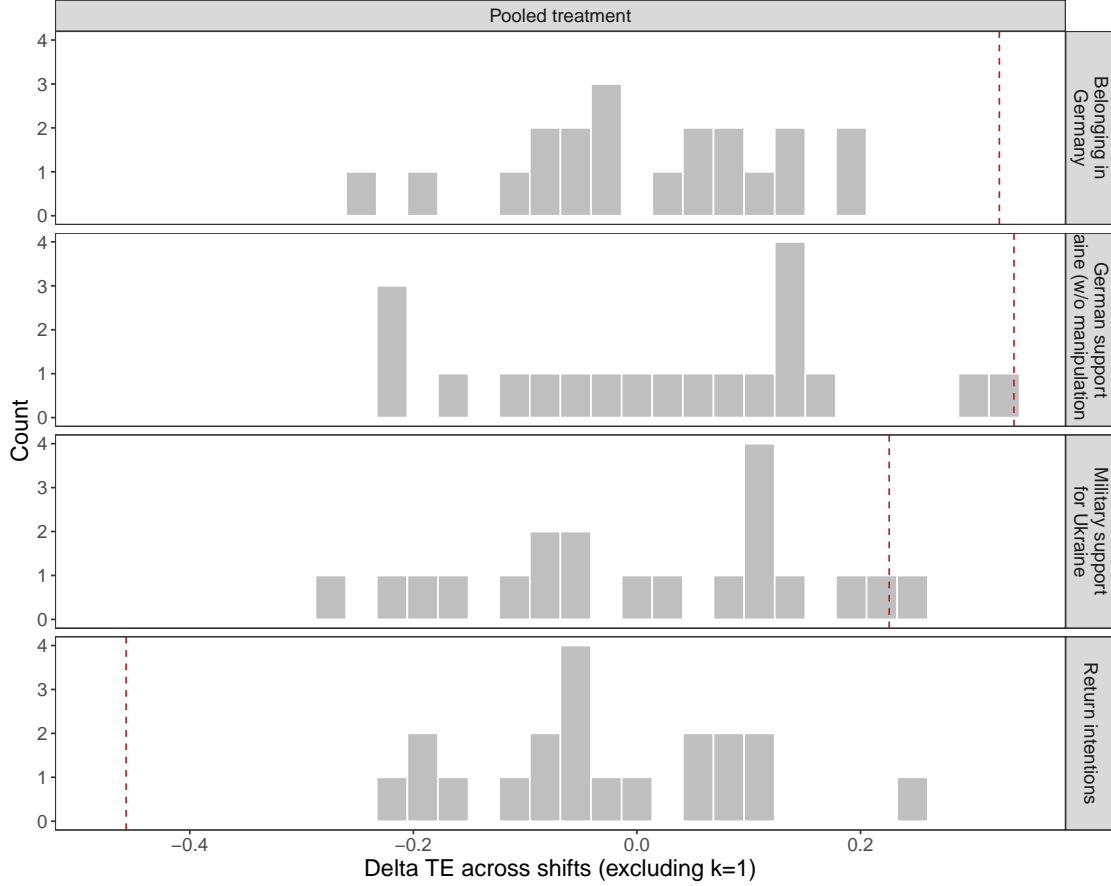

Figure G.6: Permutation distributions of Δ_k for $k \neq 1$ with observed Δ_1 (dashed). Facets by outcome and pooled treatment.

G.10   Does Tagesschau coverage follow casualties?

We assess whether news coverage simply follows conflict intensity, which we track using daily casualties from the Uppsala Conflict Data Program's Georeferenced Event Dataset (GED, v25.1). We construct a daily series by converting event-level fatalities to the day level (evenly allocating fatalities across multi-day events) and use GED *fatalities (best)* as our casualty proxy.

For each Tagesschau day linked to our respondent sample (the evening before the survey date), we compute the average number of daily fatalities in the k-day window $[t - k + 1, t]$ for $k \in \{1, 2, 3\}$.

Let C_t denote GED fatalities (best) on day t, and define the k-day window average

$$\bar{C}_k(t) \equiv \frac{1}{k} \sum_{\tau=t-k+1}^{t} C_\tau.$$

Let $D_t \in \{0,1\}$ indicate whether the Tagesschau mentioned Ukraine on day t ($1 =$ mention). We compare, for $k \in \{1,2,3\}$,

$$E\big(\bar{C}_k(t) \mid D_t = 1\big) \quad \text{vs.} \quad E\big(\bar{C}_k(t) \mid D_t = 0\big).$$

As shown in Figure G.7, differences are small and CIs overlap across k. For example, mean prior fatalities are 158 (mention) vs. 155 (no mention) for k=1, 159 vs. 155 for k=2, and 158 vs. 159 for k=3. These results indicate that Tagesschau mentions are not mechanically tracking short-run casualty fluctuations in this period.
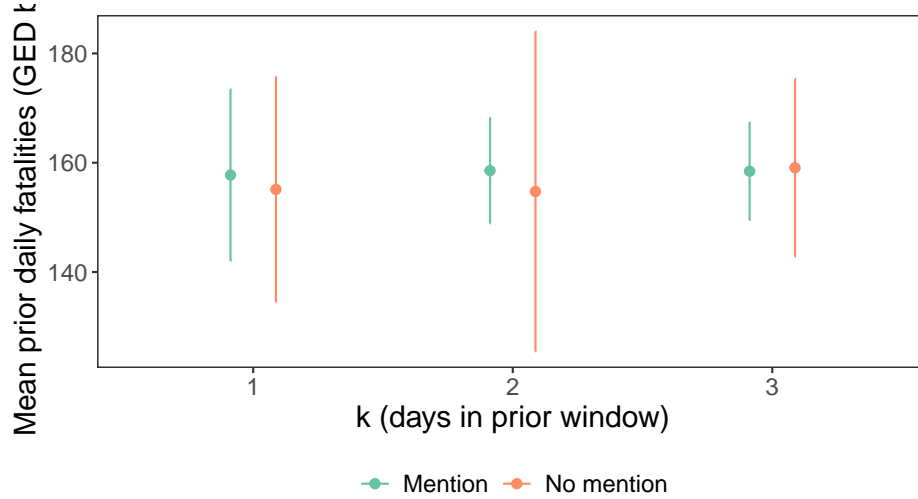

Figure G.7: GED *fatalities (best)*: Mean prior casualties in $[t - k + 1, t]$ by Tagesschau mention status, with 95% CIs.

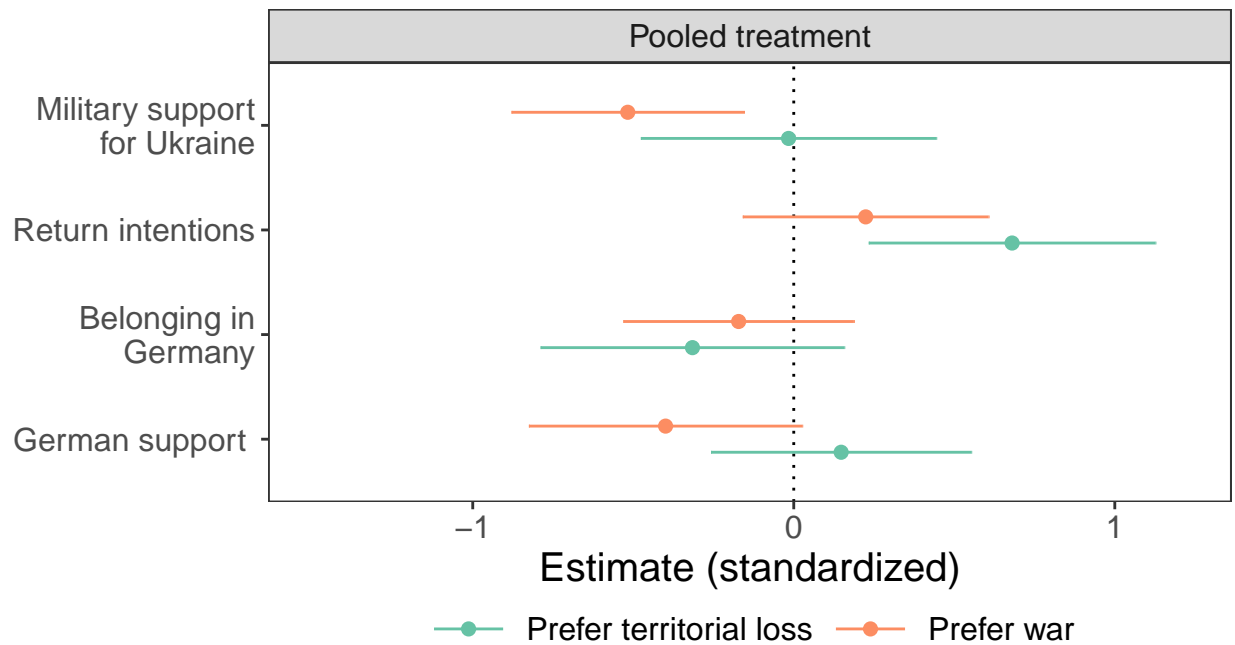## G.11 No-mention subgroup treatment effects by war termination preferences

Figure G.8: No-mention subgroup treatment effects by war termination preferences. *Points show OLS estimates; whiskers show 95% confidence intervals. Outcomes are standardized using the control-group mean and SD. All three treatments are pooled and compared to control within the no-mention subset.*

Table H.2: Main effects: FDR (BH) q-values (3 indices × 3 treatments)

Outcome	Treatment	Estimate	p	BH q-value
Belonging	Ambivalent	0.001	0.988	0.988
Belonging	Oppose	0.003	0.961	0.988
Belonging	Support	0.041	0.482	0.988
German support	Ambivalent	0.011	0.848	0.988
German support	Oppose	-0.016	0.779	0.988
German support	Support	0.019	0.747	0.988
Return intentions	Ambivalent	0.104	0.079	0.710
Return intentions	Oppose	0.064	0.289	0.988
Return intentions	Support	-0.032	0.603	0.988

H Multiple-comparisons adjustments

To guard against false positives from testing several outcomes and treatments, we pre-specified two families and controlled the false discovery rate (FDR) at 10% using the Benjamini-Hochberg procedure. We report BH q-values in Tables H.2 and H.3. A q-value is the Benjamini-Hochberg-adjusted p-value and can be read as the minimum FDR level at which the test would be called significant; at our preregistered 10% threshold, results with $q \leq 0.10$ are treated as discoveries. Unlike Bonferroni, this controls the expected share of false positives among the rejections rather than the probability of any false positive in the family.

The first family (main effects) contains the three primary indices (German support, Belonging, Return intentions) crossed with the three treatment contrasts (Oppose, Ambivalent, Support vs. Control), for nine tests. The second family (Tagesschau moderation) contains the same indices crossed with the three treatment-by-No mention interactions, again nine tests.

After FDR correction, none of the main-effect coefficients in Family 1 are significant (Table H.2). This supports the conclusion that there are no detectable average treatment effects across the full sample.

In contrast, several interaction terms in Family 2 remain significant after the same FDR control (Table H.3). When Ukraine was not mentioned in the Tagesschau on the previous day, return intentions increase for all three treatments; perceived German support decreases for the Oppose and Support treatments; and belonging decreases for the Oppose treatment. This aligns with the figures and reinforces our interpretation that effects emerge in low-salience news environments and are largely independent of message valence. We conclude that multiple testing is not driving our results.

Table H.3: Tagesschau interaction (No mention): FDR (BH) q-values (with controls)

Outcome	Term	Estimate	p	BH q-value
Belonging	Ambivalent × No mention	-0.238	0.149	0.199
Belonging	Oppose × No mention	-0.339	0.041	0.082
Belonging	Support × No mention	-0.282	0.104	0.156
German support	Ambivalent × No mention	-0.099	0.555	0.598
German support	Oppose × No mention	-0.362	0.031	0.082
German support	Support × No mention	-0.420	0.017	0.082
Return intentions	Ambivalent × No mention	0.366	0.034	0.082
Return intentions	Oppose × No mention	0.449	0.009	0.082
Return intentions	Support × No mention	0.369	0.041	0.082

I Evidence from the SOEP survey

Data and sample.   We use the IAB-BiB/FReDA-BAMF-SOEP Survey of Refugees (which we refer to as SOEP)[15] and restrict to the 2023 wave, which includes a dedicated sample of Ukrainian refugees residing in Germany. We merge SOEP interview dates to daily *Tagesschau* transcripts, in the same way as described in section (Appendix 5.1). We again code whether Ukraine was mentioned on day $t-1$ ("Any mention"), using the same procedure described in Appendix G.

Outcomes.   We focus on migration intention outcomes because SOEP provides the closest analogues to our survey for these measures. These outcomes are whether a respondent (i) plans to return to Ukraine (binary), (ii) intends to leave Germany (binary: return or move to third country vs. live in both), and (iii) reports higher stay intentions (1–4; higher means longer stay). Other attitudinal constructs (e.g., belonging) have less direct counterparts.

Specification.   For each outcome, we estimate OLS models of the form $Y_i = \beta \cdot \text{Mention}_{t-1} + X_i\gamma + \alpha_{s(i)} + \alpha_{m(t)} + \varepsilon_i$, where $\alpha_{s(i)}$ are state fixed effects and $\alpha_{m(t)}$ are month fixed effects based on the interview date. Covariates X_i include age, gender, marital status, employment status, and education. Outcomes are standardized using the no-mention group's mean and standard deviation.

Results.   Figure I.1 shows estimates from the specification described above. A prior-day Tagesschau mention of Ukraine is associated with higher intentions to leave (positive effects on return plans and leave intentions) and a lower intention to stay longer in Germany. These observational results align with our main-study mechanism: media attention serves as a contestation signal increasing the salience of return/relocations.
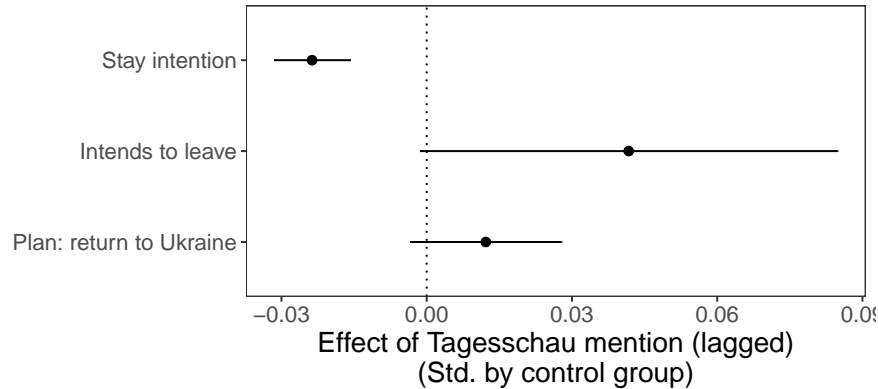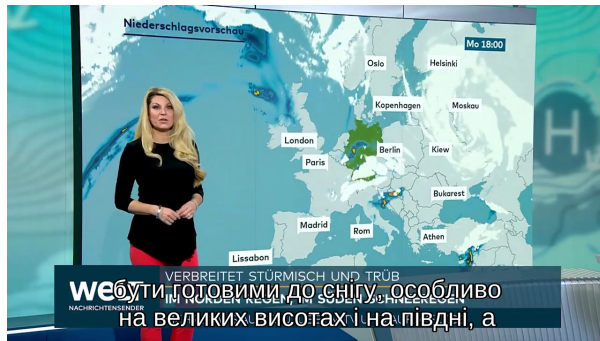

Figure I.1: SOEP 2023: Relationship between lagged Tagesschau mentions (t-1) on migration intention outcomes. Outcomes standardized by the no-mention group.

J Study materials

J.1 Treatment video transcripts

J.1.1 Placebo condition

[**Weather presenter**]: *After the calm night, a new low is causing new precipitation and a freshening wind starting this morning, especially now in rush hour traffic, you should first be prepared for snow, especially at higher altitudes and also in the south, and therefore also for slippery roads in the south. This also applies to the lower altitudes, so here too you have to expect wintry road conditions. Only in the extreme east and southeast it is nicer in the morning and here the sun even comes out sometimes. In the western low mountain ranges the wind also picks up quite a bit. In the afternoon this blows along the western low mountain ranges up to the Alps and then continues strongly on the Alpine peaks, in some cases severe squalls are possible here.*

J.1.2 Oppose treatment condition

[**Lars Klingbeil (SPD)**]: *I am fundamentally convinced that it will be of no use if we supply weapons and, especially in the current situation, it would lead to us opening a door that we may no longer be able to close and I believe that supplying arms would send a completely wrong signal that would not lead to that that we come to a diplomatic easing of the situation. We support Ukraine economically, we support you diplomatically, reviving the Normandy format is a very important step, so Germany is doing a lot, but arms deliveries are the wrong way. I have just made clear my fundamental skepticism about arms deliveries to crisis areas. It's now about organizing peace, it's about conversations, it's about diplomacy, it's also about sitting down at the table. I don't believe in supplying weapons to crisis areas, no matter which country they come from.*

J.1.3 Ambivalent treatment condition

[**Interviewer**]: *So you're saying that in order to control the [Taurus] targets, German soldiers should be sent to Ukraine, but you don't want that?*
[**Chancellor Olaf Scholz**]: *German soldiers should not be associated with the targets that this system [Taurus] achieves, anywhere.*
[**Interviewer**]: *So that's off the table for Germany? And sending Taurus missiles to Ukraine is out of the question?*
[**Chancellor Olaf Scholz**]: *I said very clearly that there are reasons why our government is providing the most support to Ukraine in Europe. But right now, sending Taurus missiles to support Ukraine is not on the agenda for us, and it's also clear.*

J.1.4 Support treatment condition

[**Chancellor Olaf Scholz**]: *Ladies and gentlemen, no matter how important our German contribution is, it alone will not be enough to ensure Ukraine's long-term security. Therefore, I call on our allies in the European Union to strengthen their efforts in support of Ukraine—efforts currently undertaken by most EU member states. The planned arms deliveries to Ukraine by the member states are too small. We need to accurately overview the exact contributions of our European partners to supporting Ukraine this year, at the latest before the meeting of the European Council on February 1.*

J.2 Measurement of outcomes and moderators

This Section details the construction of outcomes and moderators we use in the main analyses in the paper. All question numbers refer to the Appendix J.3 below.

We elicit a total of nine main outcome items. To increase precision and mitigate issues arising due to family-wise error rates (FWER), we combine these into three core outcome indices by first recoding them to go in the same direction, then standartizing them using control group means and standard deviations, and then summing them up into index. The three main outcome indices are:

1. **Return intentions:** This is the index of the three sub-items asked in question 22 as shown in the Appendix J.3. Each sub-item is included in such a way that the resulting index will measure the likelihood of returning to Ukraine (i.e., higher values will translate to a higher likelihood of intending to return).

2. **Belonging in Germany:** This index measures the perceived sense of belonging in Germany based on questions 23-25 as shown in the Appendix J.3. Higher values will measure a greater sense of belonging.

3. **German support:** This index measures the degree to which respondents perceive the German government and the German population to be supportive of Ukraine. It is the average of the first and third sub-items of question 26 as shown in the Appendix J.3. Higher values indicate greater perceivedGerman support for Ukraine.

In addition to the main outcome indices, we use responses to the second sub-item of question 26 (see Appendix J.3) as a manipulation check. This item directly measures respondents' perceptions of German military aid to Ukraine, which is the primary focus of our treatment videos. This also constitutes a departure from our pre-analysis plan as we initially planned to include answers to this question into the German support index described above.

Finally, we rely on a number of pre-treatment question in our survey to measure moderators we consider in Section 4.1. We use questions 6 and 15 to measure prior consumption of mainstream German media and preferences for territorial loss respectively. To measure prior integration we construct an index of all sub-items in questions 16 and 17 and second sub-item of question 18.

J.3 Survey instrument

1. [**FILTER, speak Ukrainian or Russian**] Which language do you want to take this survey in?

   - Ukrainian
   - Russian

2. [**FILTER, 18+**] What is your age?

3. [**FILTER, resided in Ukraine before February 24th, 2022**] Did you reside in Ukraine before the full-scale Russian invasion on February 24th, 2022?

4. **[FILTER, reside in Germany]** Do you currently reside in Germany?

5. **[SINGLE]** What gender best describes you?

   - Female
   - Male
   - Other
   - Prefer not to Answer

6. **[MULTIPLE]** Which of the following news sources do you use to receive information about current events and opportunities in Germany?

   - Tagesschau
   - ZDF Heute
   - BILD
   - Die Welt
   - Süddeutsche Zeitung
   - Der Spiegel
   - Frankfurter Allgemeine Zeitung
   - Other [specify]
   - I try to avoid such information

7. **[INTRO]** Now, we would like to ask you a few questions about how Russia's full-scale invasion of Ukraine has affected your place of residence.

8. **[SINGLE]** When did you move to Germany?

9. **[SINGLE]** Where in Germany are you currently living?

10. **[SINGLE: If refusal to the previous question]** Please, at least tell us what type of settlement you are living in now.

    - Village
    - Urban-type settlement
    - City
    - Collective Center for Refugees
    - Other [specify]

11. **[MULTIPLE]** Which factors motivated your choice to move here?

    - We were assigned to move to this settlement after registering in one of the distribution centers in Germany
    - We had family or friends living in this locality
    - We found a host family that was willing to host us
    - Other [specify]

12. [**SINGLE: If refusal to the previous question**] Did you decide to move to this settlement yourself?

- Yes
- No

13. [**MULTIPLE**] What are your main reasons for leaving the place where you lived before the full-scale invasion?

- There was active combat near or in the settlement
- The settlement infrastructure was severely damaged or destroyed
- My home was destroyed or damaged
- I lost my job
- It was hard to find the necessary food and medical supplies
- The costs of living became too high
- There were frequent planned or unexpected electricity service shutdowns
- Other [specify]

14. [**MATRIX/SINGLE**] Overall, how much do you trust each of the following?

- Other Ukrainians who left Ukraine because of the full-scale Russian invasion on February 24th, 2022
- Ukrainians who currently reside in Ukraine
- Government of Ukraine
  - Strongly distrust
  - Somewhat distrust
  - Neither trust nor do not trust
  - Somewhat trust
  - Strongly trust

15. With which of these statements regarding possible compromises to achieve peace do you agree to a greater extent?

- Countries should protect all their territories at all cost, even if it means fighting a war and risking independence of the whole country
- Giving up some of the territories can be warranted if it ends active combat and reduces threat to independence of the whole country

16. [**MATRIX / SINGLE**] Next, we would like to ask you about your skills in German. How well can you do the following in German?

- I can read and understand the main points in simple newspaper articles on familiar subjects
- In conversation, I can speak about familiar topics and express personal opinions
  - Very well

- Well
- Moderately well
- Not so well
- Not well at all

17. [**MATRIX / SINGLE**] In Germany, how difficult or easy would it be for yo ...

- ... to see a doctor?
- ... to search for a job?
- ... to search for new accommodation?
  - Very difficult
  - Somewhat difficult
  - Neither difficult nor easy
  - Somewhat easy
  - Very easy

18. [**MATRIX / SINGLE**] In the last 3 months, how often did you spend time (e.g. eat dinner together, visit each other at home, go to events together) with

- ... Ukrainians who are not part of your family?
- ... Germans who are not part of your family?
  - Never
  - Once in total
  - Once per month
  - Every other week
  - Once per week
  - A couple of times every week
  - Almost every day

19. [**SINGLE**] Next, we will ask you to watch a short video news report from [Name of source] and ask a few questions about it. But before that, we want to make sure you are filling out this survey carefully, so please choose rarely below.

- Very often
- Often
- Occasionally
- Rarely
- Never

20. Participants are randomly assigned to one of the four experimental conditions: Placebo control, Oppose treatment, Ambivalent treatment, or Support treatment.

21. [**2 factual questions about the video to check attention**]

22. [**MATRIX / SINGLE**] How likely would you say you wil ...

- Eventually, return to where you lived before the full-scale invasion of Ukraine.

- Remain in Germany in the long run.

- Try to relocate to a country other than Germany or Ukraine.

    – Extremely unlikely
    – Somewhat unlikely
    – Somewhat likely
    – Extremely likely

23. [**SINGLE**] How connected do you feel with Germany?

    - I feel an extremely close connection

    - I feel a very close connection

    - I feel a moderately close connection

    - I feel a weak connection

    - I do not feel a connection at all

24. [**SINGLE**] How often do you feel like an outsider in Germany?

    - Never

    - Rarely

    - Sometimes

    - Often

    - Always

25. [**SINGLE**] How would you describe the attitudes of local residents towards displaced people from Ukraine in the settlement where you live?

    - Very friendly

    - Somewhat friendly

    - Neither friendly nor unfriendly

    - Somewhat unfriendly

    - Very unfriendly

26. [**MATRIX / SINGLE**] To what extent do you agree with each of the following statements

    - "German government provides enough support to displaced people from Ukraine"

    - "German government provides enough military support to Ukraine to be able to win the war against Russia"

    - "I worry about anti-foreigner sentiment and xenophobia in Germany."

        – Strongly agree
        – Agree
        – Neither agree nor disagree
        – Disagree

– Strongly disagree

27. [**SINGLE**] Are you currently married?

   - Yes
   - No

28. [**SINGLE: If yes**] Does your spouse currently live with you?

   - Yes
   - No

29. [**SINGLE**] How many people, including yourself, live in your current household? Your household includes everyone with whom you share an apartment or house and to whom you are also related by birth, marriage, partnership, or adoption.

30. [**SINGLE**] Which of the following best describes your current employment status?

   - Employed in salaried work (including in the military)
   - Self-employed (including private entrepreneurs, "FOPs")
   - Have irregular, odd jobs
   - Full-time student
   - Run household
   - Pensioner
   - Unemployed
   - Other [specify]

31. [**SINGLE: If 1,2, or 3 chosen**] Which of the following statements best describes the language in which you interact as part of your work duties?

   - I primarily interact in Ukrainian to perform my work duties.
   - I primarily interact in Russian to perform my work duties.
   - I primarily interact in German, English, or other foreign languages to perform my work duties.
   - I have to interact both in Ukrainian or Russian languages as well as in foreign languages like German or English, to perform my work duties.

32. [**SINGLE**] Which of the following statements best describes the current financial situation of your family?

   - We have to borrow or save money to be able to buy enough food
   - We have enough money for food but have to borrow or save money to buy clothes and footwear
   - We have enough money for food and necessary clothing and footwear but have to borrow or save money to buy such things as dressy clothes, a mobile phone, a vacuum cleaner, and the like

- We have enough money for food, clothes, footwear, and other purchases but have to borrow or save money to buy expensive goods (such as TV-set, refrigerators, and the like)
- We have enough money for food, clothes, footwear, and expensive goods but have to borrow or save money to buy a car or an apartment
- We can make any purchases we would like to at any time

33. [**SINGLE**] What is the highest level of education you have completed?

- Primary education
- Secondary education
- Vocational education
- Bachelor's degree
- Master's degree
- Another post-graduate degree

34. [**SINGLE**] Which candidate did you vote for in the second round of the 2019 Ukrainian presidential elections?

- Petro Poroshenko
- Volodymyr Zelensky
- I did not vote

35. [**MULTIPLE**] Our survey comes to an end, but before, we wanted to ask what, in your opinion, was the main purpose of this study.

- To study what issues Ukrainians face in Germany
- To study the well-being and attitudes of Ukrainians residing in Germany
- To study Ukrainians' media consumption
- To study how media coverage affects the attitudes of Ukrainians
- To study the migration intentions of Ukrainians residing in Germany
- Other [write-in]