# Do Ukrainians Still Prefer Self-Defense Against Russia At Any Cost?

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**Abstract**

This note replicates and extends a conjoint survey experiment on Ukrainians' attitudes toward the costs and benefits of self-defense against Russia's aggression, conducted in July 2022 (Dill, Howlett and Müller-Crepon 2024*a*). Between December 2024 and January 2025, we presented the original and a modified experiment with stronger cost treatments to 2,580 Ukrainian citizens, sampled from largely the same locations as in 2022. We find continued categorical resistance to Russian control. Resistance to accepting political neutrality or conceding territory meanwhile has weakened. Ethnic Ukrainians, less war-affected respondents and those more trusting in Ukraine's president are comparatively more willing to resist Russia's aggression. Locations' exposure to the war is not associated with changes in Ukrainians' attitudes. Our findings help us better understand how the attitudes of conflict-affected populations evolve over time and shed light on public support for a potential political settlement in Ukraine.

**Keywords**: Attitudes toward war; self-defense; proportionality; conjoint design; Ukraine; replication

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How do Ukrainians view the costs and benefits of self-defense against Russia? In July 2022, Dill, Howlett and Müller-Crepon (2024*a*, short DHM) found that Ukrainians rejected Russian political control and territorial concessions, even if continued resistance against Russia was projected to be extremely costly. DHM's conjoint survey experiment particularly showed that Ukrainians did not trade off the costs against the benefits of fighting the war against Russia. Instead, Ukrainians categorically opposed political and territorial concessions regardless of the costs. In July 2022, the successful Ukrainian counteroffensive may have suggested that the war could end with a Ukrainian victory on the battlefield (Watling, Danylyuk and Reynolds 2024). Since then, however, the battle-lines have barely moved as Russian troops have fortified captured territories (Ludvik and Bahensky 2024). The costs of Ukraine's continued resistance meanwhile have climbed. In light of an estimated 80,000 Ukrainian soldiers killed and 12,000 civilian fatalities but relatively few territorial gains, have Ukrainians changed their views toward self-defense?

Answering this question helps us understand the prospects of a political settlement of the war, which, to be stable and legitimate, requires the support of the Ukrainian public. Answering this question *also* critically extends our understanding of the attitudes of war-affected populations. While rally-around-the-flag effects dominate wars' early stages (Mueller 1970), less is known about whether citizens' views soften or harden as conflicts continue and costs accumulate.

We study Ukrainians' views after nearly three years of full-scale war with a pre-registered replication-cum-extension of DHM,[1] fielded between 6 December 2024 and 9 January 2025 with 2,580 in-person respondents across non-occupied Ukraine. We administered Experiment I to 1,290 respondents who chose between strategies with varying territorial and political outcomes as well as civilian and military deaths and nuclear escalation risks over three additional months of fighting. As an extension, Experiment II among another 1,290 respondents featured unchanged potential outcomes of self-defense but substantially increased fatality

[1] Available as Dill, Howlett and Müller-Crepon (2024*b*).

and nuclear risk attributes over a time-horizon of one year.

We find that Ukrainians still resist a Russian-controlled government, even at very high costs. Territorial concessions exert slightly smaller effects than in July 2022, but these effects remain sizable and exceed the support=depressing effects of the highest levels of fatalities and nuclear escalation risk. We find more resistance to concessions among ethnic Ukrainians, less war-affected citizens, individuals with greater trust in Ukraine's president, and those who deem a Ukrainian victory extremely important. We find no evidence that changes in attributes' effects since 2022 correlate with locations' exposure to the war.

Importantly, the results from Experiments I and II do not differ statistically from each other, suggesting robustness to significant increases in the costs of the war. We find no evidence that Ukrainians follow a logic of proportionality by trading-off the costs and benefits of self-defense. Instead, our results show categorical opposition to a Russian-controlled government and support for full territorial integrity, although the latter pattern is weaker than in 2022.

## Theoretical Expectations

What are the benefits of Ukraine's ongoing self-defense? After almost three years of full-scale war, some Ukrainians may accept a deal with Russia that involves territorial concessions in exchange for peace. Others may accept only a total withdrawal of Russian troops from Ukraine's territory, even if it comes at significant human costs. In line with DHM, we expect that a ceasefire with a Russian-controlled government in Ukraine attracts substantively less support than conceding Ukrainian neutrality, and greatest support for the restoration of Ukraine's territorial sovereignty and the possibility of pursuing NATO and EU membership.

In addition to political autonomy, Ukrainians are also fighting for territorial integrity. DHM showed strong opposition to territorial concessions in July 2022. Yet, the question whether currently occupied parts of Ukraine can be recaptured looms large as the frontlines have hardly moved since 2022. We expect that territorial

concessions have a negative effect on support for a strategy and that Ukrainians are more likely to support conceding only Crimea than also conceding Donetsk and Luhansk.

When it comes to the costs of self-defense, we focus on the loss of life. We expect that higher Ukrainian civilian and military fatalities depress support for a strategy. DHM did not find that Ukrainian respondents prioritize sparing civilians over military personnel or vice versa, and we anticipate this holds true nearly three years later. A third cost that has been particularly salient internationally since the beginning of the full-scale invasion is the risk of nuclear escalation (Mearsheimer 2022). We expect that a higher risk of nuclear escalation reduces support for a strategy.

Preferences for war-fighting strategies can follow two alternative logics. A logic of proportionality implies trading off the anticipated costs of self-defense against the projected benefits. Just war theory demands that a defensive war must have a reasonable chance of succeeding. If the expected costs are disproportionate to the expected benefits of resistance, even wars with a just cause can become morally impermissible (Hurka 2005; McMahan 2010). International law is less clear about the implications of proportionality, but likewise demands accounting for the costs and benefits of self-defense (Haque 2012). In sum, the principle of proportionality suggests that the support-depressing effect of various costs should be weaker the more beneficial the expected outcome of self-defense is.

In contrast, a logic of categorical resistance makes support dependent on whether a strategy leads to a tolerable outcome, regardless of its costs. It is a rare position in moral philosophy that, in the face of evil, we must sometimes close our eyes to the consequences of resistance (Walzer 2008). DHM found that Ukrainians viewed their self-defense in categorical terms, holding a strong and homogeneous preference for resisting Russian aggression at any cost. If this logic still prevails, we expect that Ukrainians support strategies based on whether they have an acceptable outcome in terms of territory or political autonomy. They should therefore

seek to reduce costs only when categorically rejected or preferred outcomes are invariant in or not part of a choice set.[2]

Finally, as Ukraine's war of national survival continues, we explore changes in public opinion from July 2022. On the one hand, war fatigue and increased losses may have weakened the rally-around-the-flag effect; prior research shows that public support often decreases as wars drag on and more people are directly affected (Gartner and Segura 2021; Tellez 2019). This may lead some respondents to support strategies that effectively end the war, regardless of the consequences for Ukraine's political autonomy and territorial integrity. On the other hand, the effects of fighting against and being victimized by Russian forces may have hardened Ukrainians' attitudes and their rejection of political or territorial concessions (see e.g. Balcells 2012; Rozenas, Schutte and Zhukov 2017). Both outcomes are plausible and most likely to impact views of Ukrainians most affected by the war. Yet, they do potentially cancel each other out, such that we anticipate that, overall, Ukrainians will still oppose territorial or political concessions.

## Research Design

### Experimental Design

Building on DHM, we implemented two conjoint survey experiments that asked respondents to choose between different strategies for pursing the war against Russia. Conjoint designs can reduce social desirability biases (Horiuchi, Markovich and Yamamoto 2022), which is particularly important for war-time polls (Rickard et al. 2023). To further limit social desirability biases, all respondents registered their answers on tablets without enumerator involvement and details of the authors were only revealed at the end of the survey.

Each respondent was presented with one of two experimental designs. They were first asked to "[p]lease imagine that President Zelensky and his team are con-

[2] Appendix A contains the precise wording of all hypotheses.

sidering different military-political strategies for pursuing the war over the next 3 months" (Experiment I) or "[...] over the next year" (Experiment II). We then showed them four pairs of two strategies, differing in benefits (Attributes 1 and 5) and costs (Attributes 2–4) according to Table 1.[3]

Table 1: Attribute Levels

| Attribute | Level 1 | Level 2 | Level 3 |
|---|---|---|---|
| 1. Territorial concessions (I & II) | No concessions | Concede Crimea | Concede Crimea and Donetsk and Luhansk |
| 2. Civilian fatalities (I & II) | 6,000 | 12,000 | 24,000 |
| 3. Military fatalities | Low | Intermediate | High |
| I: | 6,000 | 12,000 | 24,000 |
| II: | 40,000 | 80,000 | 160,000 |
| 4. Nuclear strike | Low | Intermediate | High |
| I: | 0% | 5% | 10% |
| II: | 5% | 15% | 45% |
| 5. Likely outcome (I & II) | Full autonomy | Negotiated neutrality | Russian-controlled government |

*Note:* For the precise wording of attribute levels in Experiments I and II, see Tables A1 and A2, respectively.

Experiment I featured the same attribute levels as in DHM.[4] Experiment II tested robustness to higher costs of self-defense. We increased the time horizon from three months to one year, military fatalities from between 6,000 and 24,000 to 40,000 and 160,0000,[5] and nuclear escalation risk from between 0 and 15 percent to 5 and 45 percent. Doing so intensified the treatment without diverging from realistic projections updated since July 2022. Respondents were asked to score each strategy they were presented on a scale from 1 to 6, normalized to between 0 to 1, and to make a forced choice (0/1) between them.

[3] Attribute levels were independently drawn for each attribute. We randomized the order of Attributes 2–4 at the respondent-level.

[4] The only change is that we compare fatalities to the "first three months of the full-scale war" rather than "so far".

[5] By December 2024, cumulative Ukrainian military fatalities had amounted to approximately 80,000.

### Sampling and Survey Implementation

We follow DHM's sampling strategy (see Appendix B for details). The sample is stratified by regions (*oblasti*),[6] within which PSUs are sampled based on their population size and stratified by their rural and urban status. We revisited 98 percent of the PSUs sampled in 2022 (Sample A) and drew a largely overlapping set of PSUs that was representative of the larger set of regions covered by our replication (Sample B). Within each PSU, one chain for each experiment was sampled with demographic quotas to yield a representative sample.[7] Given the growing number of displaced persons since Russia's 2022 invasion, we included IDPs in the replication, unlike DHM. Of the contacted, quota-eligible individuals, 41 percent completed the survey.

Appendix B contains the demographic characteristics of our sample. Overall, we sampled more women (55 percent) than men due to Ukraine's ongoing sex-specific conscription laws. Respondents for Experiments I and II were virtually identical in their demographic composition. Compared to 2022, respondents in Sample A were slightly more educated (37 versus 33 percent had higher education) and less likely to have children (69 versus 73 percent).

Sample B differed slightly from Sample A as it covered additional eastern PSUs, thus containing more Russian-speaking respondents – 25 versus 21 percent of the interviews were conducted in Russian. Importantly, our respondents self-identified as ethnic Russians (≈4 percent) or have Russian as their mother-tongue (≈14 percent) as frequently as those in DHM. This highlights that any undercoverage of ethnic Russians (Rickard et al. 2023) has not increased over time. However, in line with other work showing a decrease in Russian language use in Ukraine since the full-scale invasion (Harding 2023; Kulyk 2024), respondents in the 2024/2025 Sample A were 9 percentage points less likely to conduct the interview in Russian than in 2022 (21 versus 30 percent).

[6] We exclude Donetsk, Luhansk, and Kherson oblasti and Crimea from the sample.
[7] Notably, underlying pre-war statistics have been updated based on telephone surveys.

### Ethical Considerations

Given the ongoing war, we paid particular attention to the ethics and sensitivity of the survey (Howlett and Lazarenko 2023). In line with the approved protocol of [redacted] University's ethical review board, all respondents provided their voluntary and informed consent prior to their participation. They were made aware that their information would remain anonymous and that they could withdraw at any time. We also prioritized the safety and security of enumerators, who were trained to ensure both respondents' and their own safety during data collection (Cronin-Furman and Lake 2018). Our Ukrainian partners were assured that slowed data collection or failure to complete interviews due to the security situation would (and did) not have monetary consequences for them. The authors were in regular contact with the surveyor, the Kyiv International Institute of Sociology, at all times while the survey was fielded.

### Estimation Strategy

Following DHM, we assessed the effect of each attribute level by estimating Average Marginal Component Effects (AMCEs). We present these alongside the co-occurence of adjusted Marginal Means estimates (Leeper, Hobolt and Tilley 2020). We tested hypotheses on interaction effects with AMCEs conditional on moderator values while also testing for statistically significant differences between them. Lastly, we applied DHM's ranking method to assess how far respondents made categorical choices between strategies with differing political and territorial concessions. Standard errors are clustered at the level of respondents throughout. Preregistered robustness checks following DHM are reported in Appendix F.

## Results

For the most part, we restrict this discussion to the results of both experiments compared to those from July 2022. The results we discuss use the "updated" Sample B

and the forced choice outcome, the combination which we deem most relevant for current assessments. Results from Sample A and for strategy scores coincide substantively, unless otherwise noted. The Appendix presents all additional results.

### Main Results

Figure 1 shows the main estimates for AMCEs and Marginal Means for respondents' forced choice between strategies of pursuing the war.[8] Although the modified Experiment II increases the costs of resistance substantively, it yields consistent results which do not overall differ from those of Experiment I.[9] We observe, if at all, a larger effect of high nuclear risk in Experiment II – yet the difference in AMCEs (4 percentage points) is small compared to the tripling of nuclear risk (15 versus 45 percent). We find no different effects of "high" military fatality levels. This suggests that our results are robust even to large increases in strategies' costs. It is thus unlikely that findings of categorical resistance are explained by cost attributes that "are too weak" to reach proportional equivalence with territorial and political concessions. The coincidence in the results of the two experiments also allows us to economize some analyses below by pooling both experiments and estimating (conditional) AMCEs and Marginal Means across both.

The main differences emerge between the results from 2022 (red) and those from 2024/2025 (green/blue). While we still observe large, negative effects of territorial and political concessions in Experiments I and II, their magnitude decreased consistently (by between 2 and 9 percentage points). We observe the largest decrease for concessions of Crimea and Luhansk and Donetsk oblasti, which triggered comparatively less resistance in Experiments I and II (average AMCE of -12 percentage points) than in 2022 (AMCE -20 percentage points). The average AMCE of a Russian-controlled government in Kyiv decreased by 5 percentage points from -36 percentage points in 2022 to around -31 percentage points in Experiments I and

[8] Note that low, intermediate, and high levels for military fatalities and nuclear risk imply different values for Experiments I and II, with the latter coming with higher numerical values (Table 1).

[9] An omnibus F-Test of differences in AMCEs between Experiments I and II yields p-values of .12 for the choice and .32 for the score outcomes, respectively.

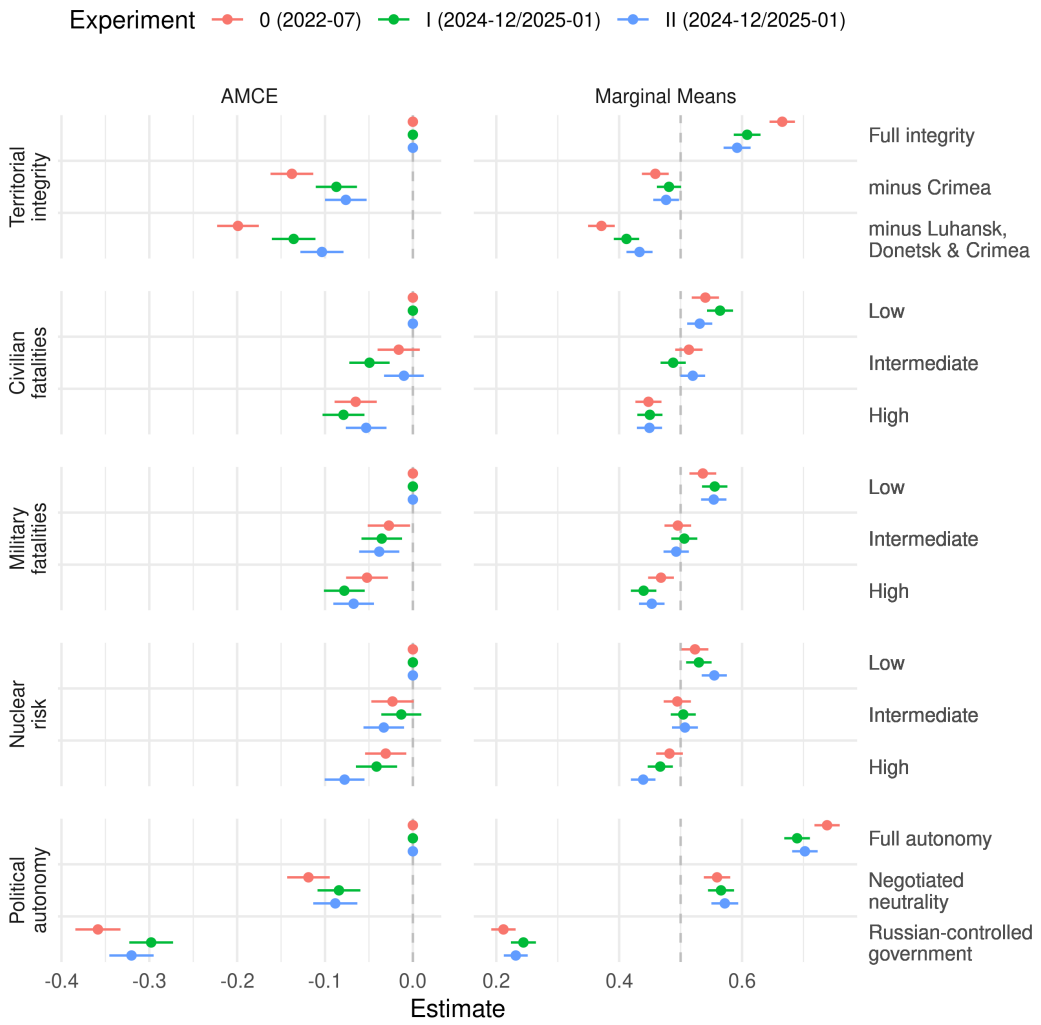


Figure 1: AMCEs and Marginal Means: Original results from July 2022 and Experiments I and II, Sample B

Note: Coefficients from July 2022 (red) coincide with Figures 2 and 3 in DHM.

II. The most prominent changes on the cost attributes concerned AMCEs for high military fatalities and a high nuclear risk (in particular in Experiment II), both increasing by between 2 and 5 percentage points.

## No Evidence for Proportional Resistance

Our findings replicate DHM's results in showing no evidence that respondents' forced choices of or scores for strategies reflect the logic of proportionality. Lower benefits of resistance in terms of territorial integrity and political autonomy do not

yield greater resistance to higher costs of the war. In turn, better territorial and political outcomes do not make respondents more willing to accept high costs. Figure 2 pools Experiments I and II and shows that AMCEs of cost attributes do not increase significantly or consistently with territorial or political outcomes of the war. While cost AMCEs slightly but insignificantly increase with lesser territorial integrity, results for decreasing levels of political autonomy point, if at all, in the opposite direction. An omnibus Wald test rejects significant subgroup differences with p-values of .35 and .60 for interactions with territorial integrity and political autonomy, respectively. Separate results for each experiment and from linear modeling of cost attributes conform to this pattern (see Appendix D).

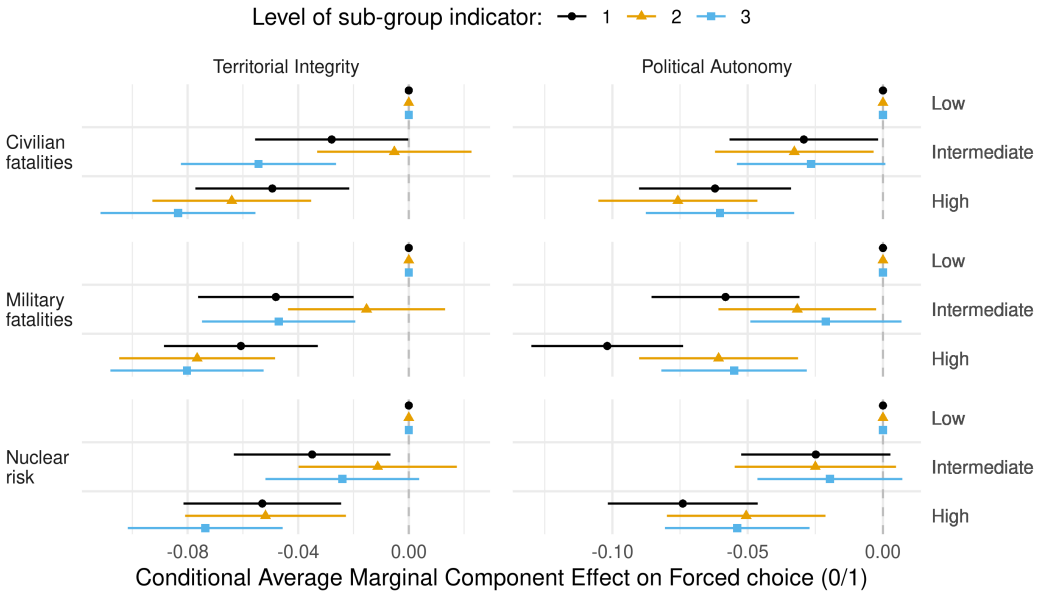


Figure 2: Stable effects of cost attributes 2-4 across levels of territorial integrity and political autonomy, pooling Experiments I & II, Sample B.

## Evidence for Continuing Categorical Resistance

Instead of following a logic of proportionality, Ukrainians' response patterns are still largely consistent with a logic of categorical resistance. A first test of that hypothesis compares the AMCEs of cost attributes in pairs with and without variation in attributes on territorial integrity and political autonomy. Closely resembling

DHM's results, we observe small AMCEs of cost attributes (<6 percentage points) as long as respondents can choose between better or worse territorial and political outcomes. Once the benefits of resistance do not vary, however, respondents place important weight on war costs.

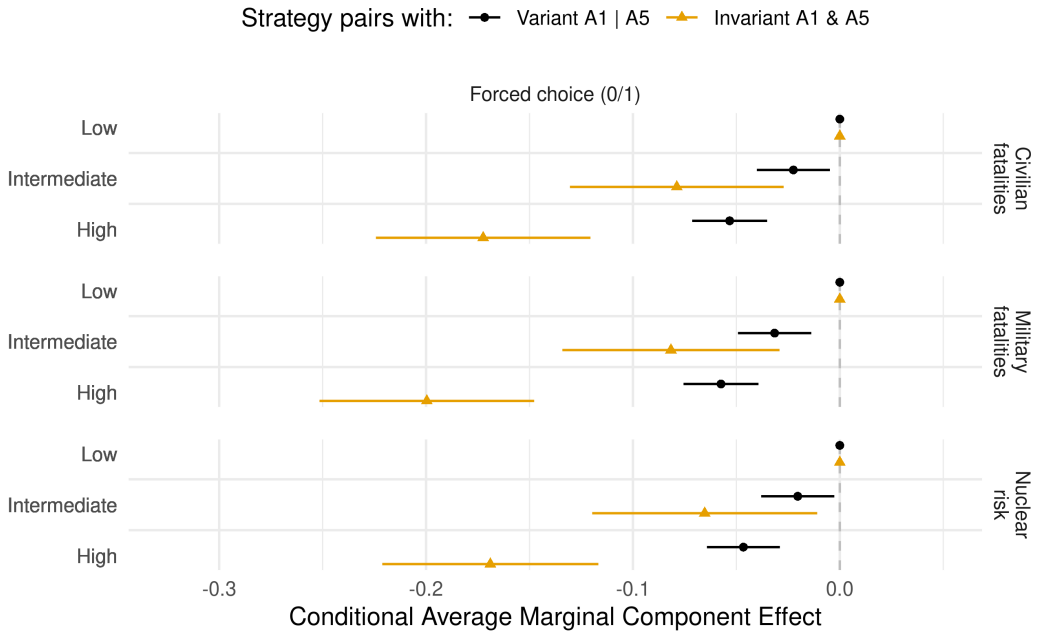


Figure 3: Effects of cost attributes 2-4 with and without pair-level variation in territorial integrity and political autonomy attributes, pooling Experiments I & II.

Note: Using Sample B. An omnibus Wald test of subgroup differences yields an F-statistic of 12.4, $p < .001$.

Using the ranking method introduced by DHM, we find respondents still prioritize the same three attributes as in 2022: resistance to a Russian-controlled government, a strong preference for full territorial integrity, and a rejection of negotiated neutrality over maintaining political autonomy. Yet, because the AMCEs of territorial concessions and neutrality are smaller than in 2022, the statistical power beyond the second rank decreases such that ranks cannot be distinguished in a statistically significant manner.

When given the possibility to reject a Russian-controlled government, 76 percent of respondents in Experiment I and 77 percent in Experiment II do so (Figure A37). This is only marginally lower than the 79 percent, who did so in 2022. The

coinciding results between Experiments I and II underscores the findings' robustness.

Yet, once the Russian-controlled government is taken off the table in column 2 in Figure 4, results become more varied. Compared to 2022, the replication shows reduced concerns over territorial concessions and political autonomy. While these are still sizable (with 65 percent choosing full territorial integrity regardless of the costs), these conditional effects are smaller than in 2022, with changes mostly due to increased concerns for military fatalities and nuclear escalation.

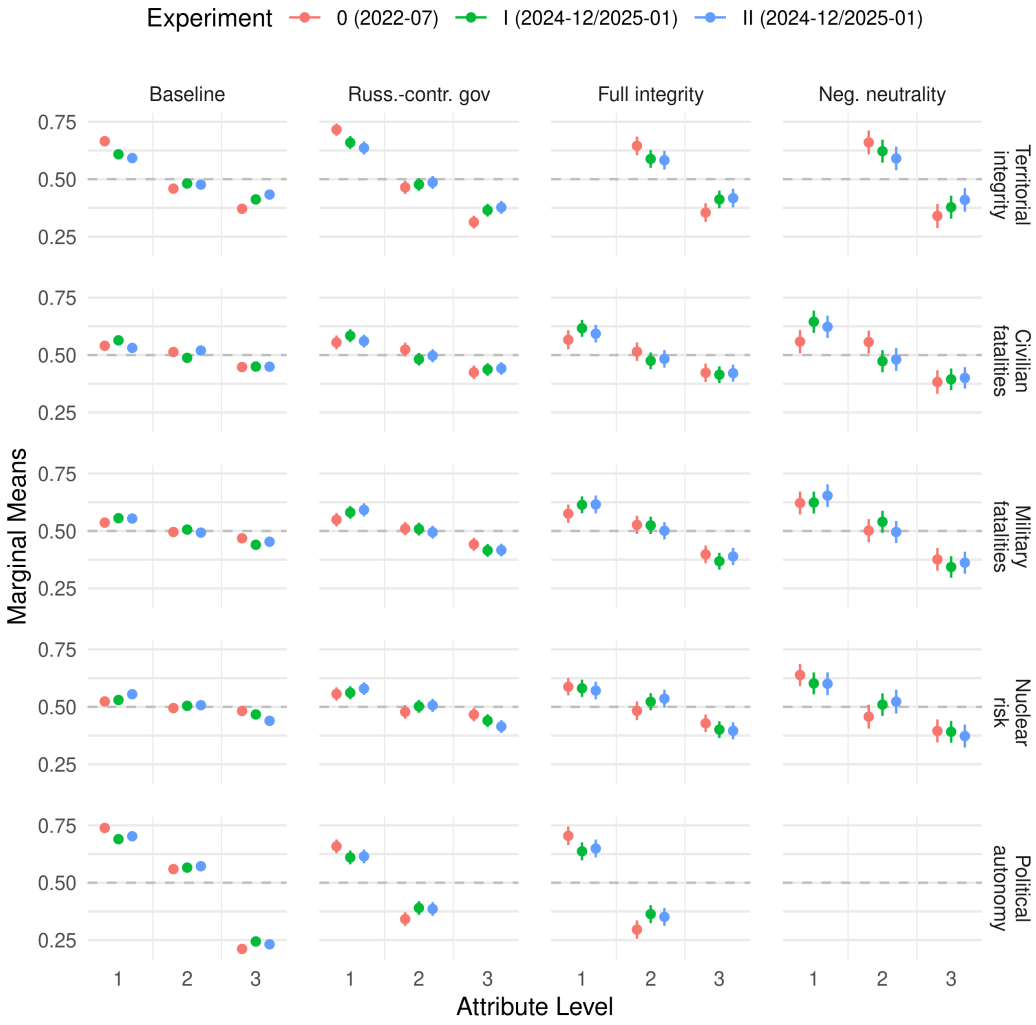


Figure 4: Nested Marginal Means, all experiments

## Heterogeneous Treatment Effects

We here summarize heterogeneous treatment effects along a number of demographic variables, measures of war-affectedness, and political attitudes (see also Appendix G).

First, our results differ between ethnic Ukrainians and Russians, as measured by self-identification, mother-tongue, and interview language. Compared to ethnic Ukrainians, the ethnic Russians in our sample exhibit no statistically significant or only comparatively small negative AMCEs on territorial concessions, a substantively weaker rejection of a Russian-controlled government, and no significant rejection to negotiated neutrality compared to political autonomy.[10] This divergence holds even when only comparing respondents within the same location, suggesting that this finding is not due to fewer Russian-speakers living in Ukraine's western regions, where resistance against concessions is highest.

Second, and similar to results in 2022, respondents with a higher score on DHM's war-affectedness index are less resistant to territorial and political concessions while not reacting differently to war costs. This finding is particularly driven by respondents from Ukraine's eastern oblasti and those first invaded by Russian forces in February 2022. This finding holds when only comparing AMCEs among respondents with the same mother-tongue.

Third, and consistent with DHM, we find that respondents who deem Ukraine's victory "extremely important" and those trusting their president more are less willing to settle for territorial and political compromises.

Lastly, we estimated the effect of local war exposure on changes in AMCEs within locations since 2022 to test whether increases in war affectedness come with a stronger or weaker rejection of concessions. We did so by accounting for fixed location- and experiment-level attribute effects, thus only capturing changes in AMCEs that are due to changes in locations' characteristics over time. Reported

[10]Note that there is no statistically significant change in these patterns since 2022, but we have low statistical power when comparing AMCIEs over time.

in Appendix H, we do not find that locations' exposure to shelling (1) and greater changes in respondents' reported affectedness (2), or even that of their family members (3), are systematically correlated with greater positive or negative changes in AMCEs. Empirically, however, that this null-finding might be due to the use of repeated PSU-level cross-sectional data rather than true panel data. Theoretically, it might be due to a hardening of identities canceling out greater sensitivity towards the costs of war.

## Conclusion

Do Ukrainians accept that, for their country, territorial integrity is "unrealistic" as suggested by the US Secretary of Defense?[11] Are they ready to give up on prospects of national sovereignty in return for lowering the costs of war? Whether a democratically accountable Ukrainian government can and should afford to consent to any such concessions as part of a negotiated settlement depends on what Ukrainians want.

In late 2024, we assessed Ukrainians' attitudes toward the war with a replication-cum-extension of DHM's conjoint survey experiment from July 2022.We find that Russian control of Ukraine's government remains a red line that Ukrainians oppose as strongly as ever. They still prefer resistance at any cost. Yet, we also show that after nearly three years of full-scale war, opposition to territorial concessions and political neutrality has weakened slightly. While some Ukrainian citizens seem more accepting of territorial concessions or political neutrality than in 2022, ethnic Ukrainians, those less affected by the war, and respondents more trusting in Ukraine's president still strongly oppose concessions.

Our findings suggest that populations' attitudes towards a war of national survival can remain largely stable over time. In Ukraine, they also reveal that despite mounting costs of the war, Ukrainians do not accept concessions that open the door

[11] Opening Remarks by Secretary of Defense Hegseth at Ukraine Defense Contact Group, February 12, 2025.

to them “being Russian one day.”

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# Supplementary Material

# Do Ukrainians Still Prefer Self-Defense Against Russia At Any Cost?

## Table of Contents

# A Hypotheses:

With the exception of H7a and H7b, the hypotheses that emerge from the above reasoning are the same as those of the original study (Dill, Howlett and Müller-Crepon 2024).

H1: Upfront territorial concessions have a negative effect on support for a strategy.

H2: A higher civilian death toll has a negative effect on support for a strategy.

H3: A higher military death toll has a negative effect on support for a strategy.

H4: A higher likelihood of a nuclear strike on Ukraine has a negative effect on support for a strategy.

H5: The outcome ceasefire/Russian-controlled government has a negative effect; the outcome of withdrawal/sovereignty has a positive effect (compared to withdrawal/neutrality) on support for a strategy.

H6a (proportionality – political autonomy): The more political autonomy the projected outcome affords (ceasefire/Russian-controlled government $<$ withdrawal/neutrality $<$ withdrawal/sovereignty) the weaker the negative effects of the three cost attributes on support for a strategy.

H6b (proportionality – territorial integrity): The more territorial integrity the projected outcome affords (conceding Crimea + Donetsk/Luhansk $<$ conceding only Crimea $<$ no concessions) the weaker the negative effects of the three cost attributes on support for a strategy

H7a (categorical resistance – political autonomy): The negative effects of the three cost attributes increase in size if strategies in a pair do not differ in the level of political autonomy they afford.

H7b (categorical resistance – territorial integrity): The negative effects of the three cost attributes increase in size if strategies in a pair do not differ in the level of territorial integrity they afford.

## A.1 Heterogeneous Effects:

H8a (affectedness and cost-sensitivity): The cost attributes have larger effects among more affected respondents.

H8b (affectedness and cost-sensitivity): More affected respondents are less likely to adopt a categorical stance.

H9a (affectedness and cost-insensitivity): The cost attributes have smaller effects

among more affected respondents.

H9b (affectedness and in cost-sensitivity): More affected respondents are more likely to adopt a categorical stance.

Table A1: Experiment 1: Attribute Levels

| Attribute | Level 1 | Level 2 | Level 3 |
|---|---|---|---|
| 1. Upfront concessions | No concessions | Recognize Crimea as part of Russia | Recognize Crimea and Donetsk and Luhansk regions as part of Russia |
| 2. Projected number of civilian casualties in the next 3 months | Approximately 6,000 (About half of the total number of people killed in the first three months of the full-scale war) | Approximately 12,000 (The figure is close to the total number of people killed in the first three months of the full-scale war) | Approximately 24,000 (About twice the total number of people killed in the first three months of the full-scale war) |
| 3. Projected number of military casualties in the next 3 months (Armed Forces of Ukraine, National Guard and Police, SSU Security Services of Ukraine, Territorial Defense, and volunteer battalions) | Approximately 6,000 (About half of the total number of people killed in the first three months of the full-scale war) | Approximately 12,000 (The figure is close to the total number of people killed in the first three months of the full-scale war) | Approximately 24,000 (About twice the total number of people killed in the first three months of the full-scale war) |
| 4. Likelihood of a nuclear strike on Ukraine by Russia | None (0%) | Low (Approximately 5%) | Moderate (Approximately 10%) |
| 5. Likely outcome after 3 months | Withdrawal of Russian troops and preservation of sovereignty (includes possibility to join the EU and/or NATO) | Withdrawal of Russian troops and negotiated neutral status of Ukraine (no possibility to join the EU and/or NATO) | A ceasefire and a Russian-controlled government in Kyiv |

Table A2: Experiment 2: Attribute Levels

| Attribute | Level 1 | Level 2 | Level 3 |
|---|---|---|---|
| 1. Upfront concessions | No concessions | Recognize Crimea as part of Russia | Recognize Crimea and Donetsk and Luhansk regions as part of Russia |
| 2. Projected number of civilian casualties (killed) in the next year | Approximately 6,000 (About half of the total number of people killed since the full-scale invasion) | Approximately 12,000 (The figure is close to the total number of people killed since the full-scale invasion) | Approximately 24,000 (About twice the total number of people killed since the full-scale invasion) |
| 3. Projected number of military casualties (killed) in the next year (Armed Forces of Ukraine, National Guard and Police, SSU Security Services of Ukraine, Territorial Defense, and volunteer battalions) | Approximately 40,000 (About half of the total number of people killed since the full-scale invasion) | Approximately 80,000 (The figure is close to the total number of people killed since the full-scale invasion) | Approximately 160,000 (About twice the total number of people killed since the full-scale invasion) |
| 4. Likelihood of a nuclear strike on Ukraine by Russia | Low (Approximately 5%) | Moderate (Approximately 15%) | High (Approximately 45%) |
| 5. Likely outcome after 3 months | Withdrawal of Russian troops and preservation of sovereignty (includes possibility to join the EU and/or NATO) | Withdrawal of Russian troops and negotiated neutral status of Ukraine (no possibility to join the EU and/or NATO) | A ceasefire and a Russian-controlled government in Kyiv |

# B Sampling and Summary Statistics

## B.1 Sampling

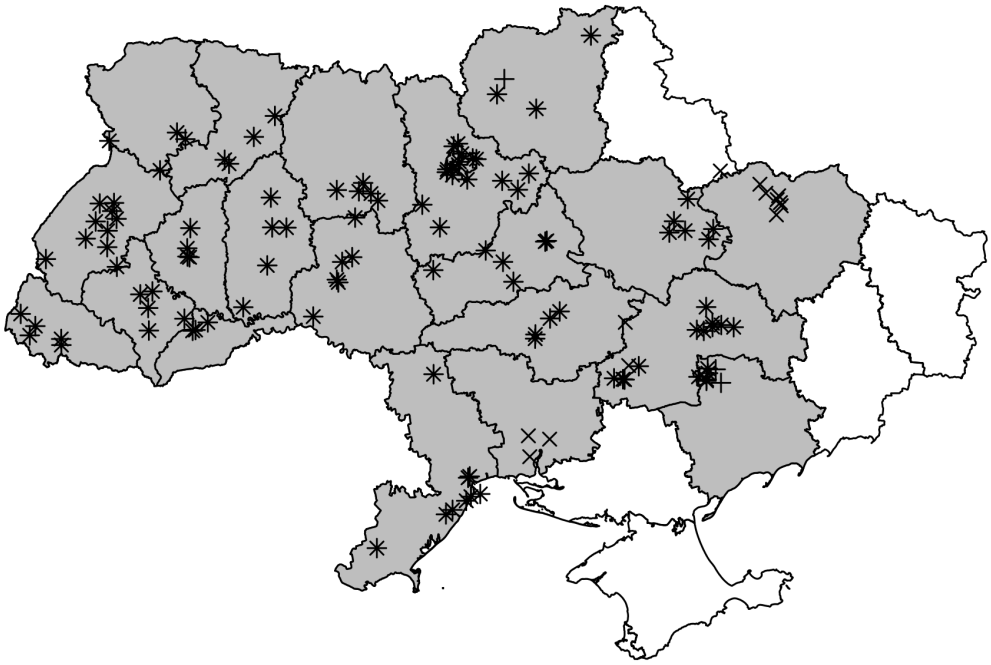
First, we stratified our sample by oblasti proportionally to the last available electoral statistics from 2019 as well as data on population movements constructed by from 10 telephone surveys conducted by the Kyiv International Institute for Sociol-

ogy since the beginning of the war. We excluded Donetsk, Luhansk, and Kherson oblasti and Crimea from the sample. Second, within each oblast, we stratified by urban/rural PSUs (voting precincts), allocating a total of 128 PSUs. Third, within each stratum, PSUs were selected randomly with a probability proportional to their size. We made use of the full (random) sample of PSUs already sampled in 2022 (Dill, Howlett and Müller-Crepon 2024), of which we were able to revisit 114 out of 116 PSUs,[1] henceforth Sample A. While Sample A is useful for replication purposes, it is not necessarily representative of the 2024 population. We thus added an additional 14 PSUs to construct a sample designed to be representative of the population in 2024, in particular to cover previously unsurveyed Mykolaiv and Kharkiv oblasti. This produced Sample B with 125 PSUs.[2] Figure A1a shows the location of PSUs in relation to the incidence of violent attacks by Russia since the beginning of the full-scale war in Figure A1b.

Fourth, within each selected PSU, we interviewed along two chains – one for each experimental design – with 10 respondents each. For each chain, we interviewed respondents starting at a randomized address. Only 1 respondent was surveyed per household if they met the required quota. Of the 6,306 individuals who were present in their household and met the quota, 44 percent refused to be interviewed, 4 percent were excluded due to physical, mental, or language problems, and 11 percent started but interrupted the interview. 41 percent or a total of 2,580 of all contacted, quota-meeting individuals completed the survey.

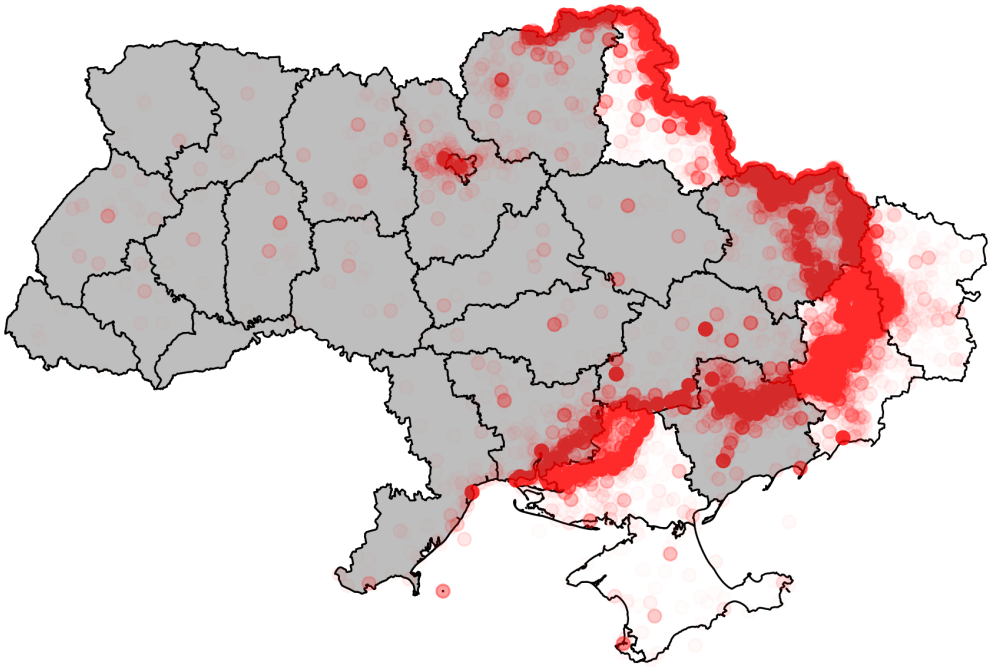
[1] Two PSUs in Dnipropetrovsk had to be dropped due to safety concerns and the consequences of the destruction of the Kakhovka dam.

[2] 3 PSUs are in Sample A but not Sample B.



(a) 128 sampled locations, + denotes Sample A; × denotes Sample B

Note: Included oblasti in grey. PSUs plotted with random displacement by up to .2 degrees in every direction.



(b) Conflict events (battles, remote violence, and one-sided violence) by the Russian Armed Forces and its allies, February 2022 to December 2024.

Note: Data from Raleigh et al. (2010).

Figure A1: Primary sampling units and conflict events

## B.2 Summary Statistics

Table A3: Respondent-level summary statistics: Demographics

| Statistic | N | Mean |
|---|---|---|
| **Gender** | | |
| Male | 1138 | 0.45 |
| Female | 1382 | 0.55 |
| **Age** | | |
| 18-29 | 422 | 0.17 |
| 30-39 | 454 | 0.18 |
| 40-49 | 533 | 0.21 |
| 50-59 | 419 | 0.17 |
| 60+ | 692 | 0.27 |
| **Children** | | |
| No | 781 | 0.31 |
| Yes | 1739 | 0.69 |
| **Education** | | |
| Complete general secondary education | 380 | 0.15 |
| Vocational and technical education | 389 | 0.15 |
| Secondary special education | 748 | 0.30 |
| Higher Education | 941 | 0.37 |
| Basic general secondary education (up to grade 9 or below) | 62 | 0.02 |
| **Econ. depriv.** | | |
| no | 1140 | 0.46 |
| yes | 1361 | 0.54 |
| **Rural Urban** | | |
| Rural | 1209 | 0.48 |
| Urban | 1311 | 0.52 |
| **Interview language** | | |
| Ukrainian | 1889 | 0.75 |
| Russian | 631 | 0.25 |
| **Native language** | | |
| Other | 78 | 0.03 |
| Russian | 353 | 0.14 |
| Ukrainian | 2041 | 0.83 |
| **Ethnic identity** | | |
| Other | 55 | 0.02 |
| Russian | 107 | 0.04 |
| Ukrainian | 2354 | 0.94 |

Table A4: Respondent-level summary statistics: Affectedness

| Statistic | N | Mean |
|---|---|---|
| **Affectedness score** | | |
| low | 875 | 0.35 |
| medium | 784 | 0.32 |
| high | 815 | 0.33 |
| **East vs. West** | | |
| East | 951 | 0.38 |
| West | 1569 | 0.62 |
| **Oblast first attacked** | | |
| No | 1228 | 0.49 |
| Yes | 1292 | 0.51 |
| **Self war-affected** | | |
| no | 1245 | 0.50 |
| yes | 1249 | 0.50 |
| **Family war-affected** | | |
| no | 762 | 0.31 |
| yes | 1731 | 0.69 |
| **Any oneside violence** | | |
| no | 1996 | 0.79 |
| yes | 524 | 0.21 |
| **Any battles** | | |
| no | 1772 | 0.70 |
| yes | 748 | 0.30 |
| **Any shelling** | | |
| no | 947 | 0.38 |
| yes | 1573 | 0.62 |

Table A5: Respondent-level summary statistics: Political attitudes

| Statistic | N | Mean |
|---|---|---|
| **Ukr. nation at stake** | | |
| no | 1138 | 0.49 |
| yes | 1186 | 0.51 |
| **Importance of victory** | | |
| All other | 504 | 0.20 |
| Extremely important | 2016 | 0.80 |
| **Trust in president** | | |
| high | 1218 | 0.52 |
| low | 1119 | 0.48 |

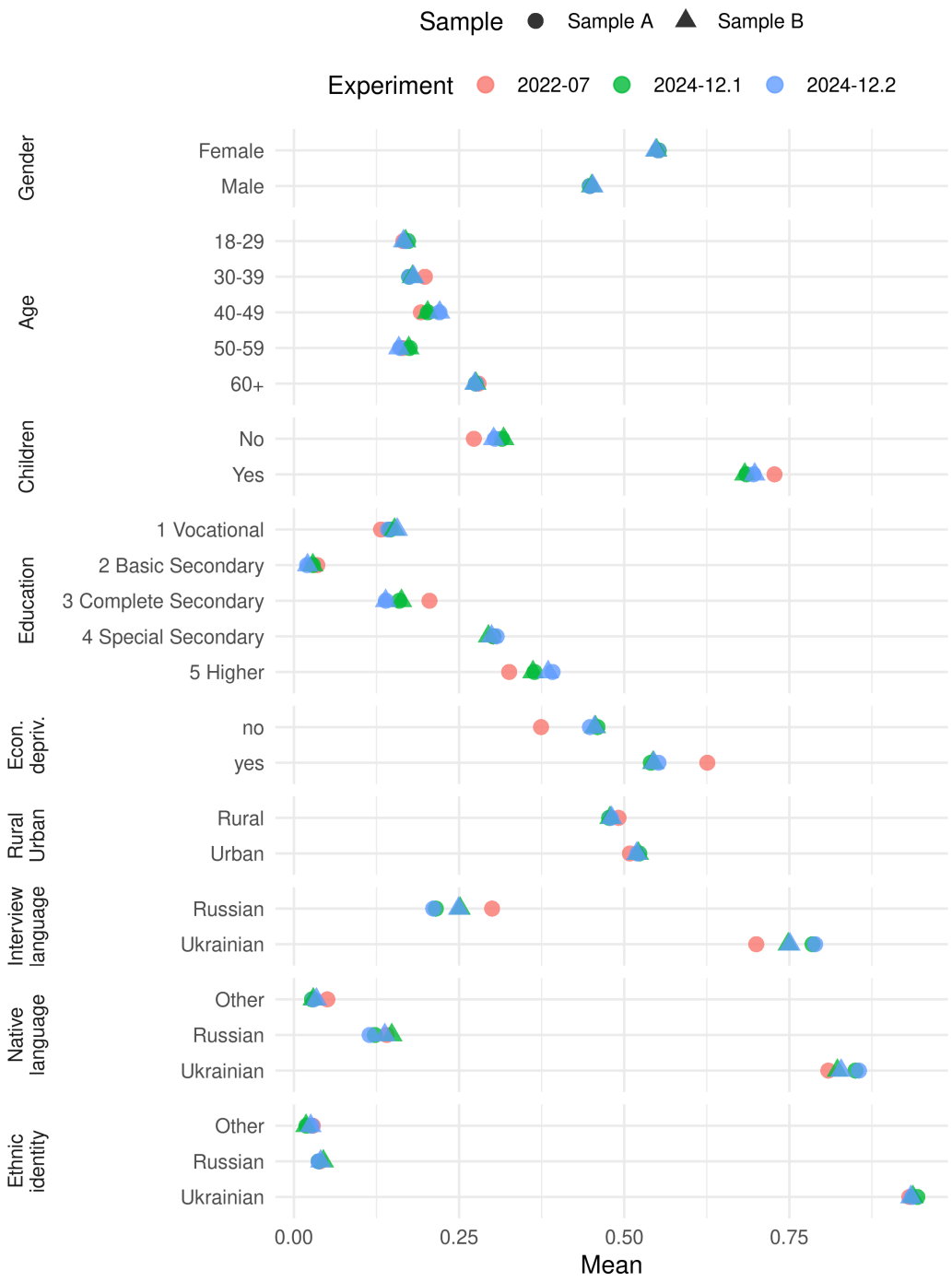



Figure A2: Demographic comparison between Samples A and Sample B as well as Experiments

# C Additional Results

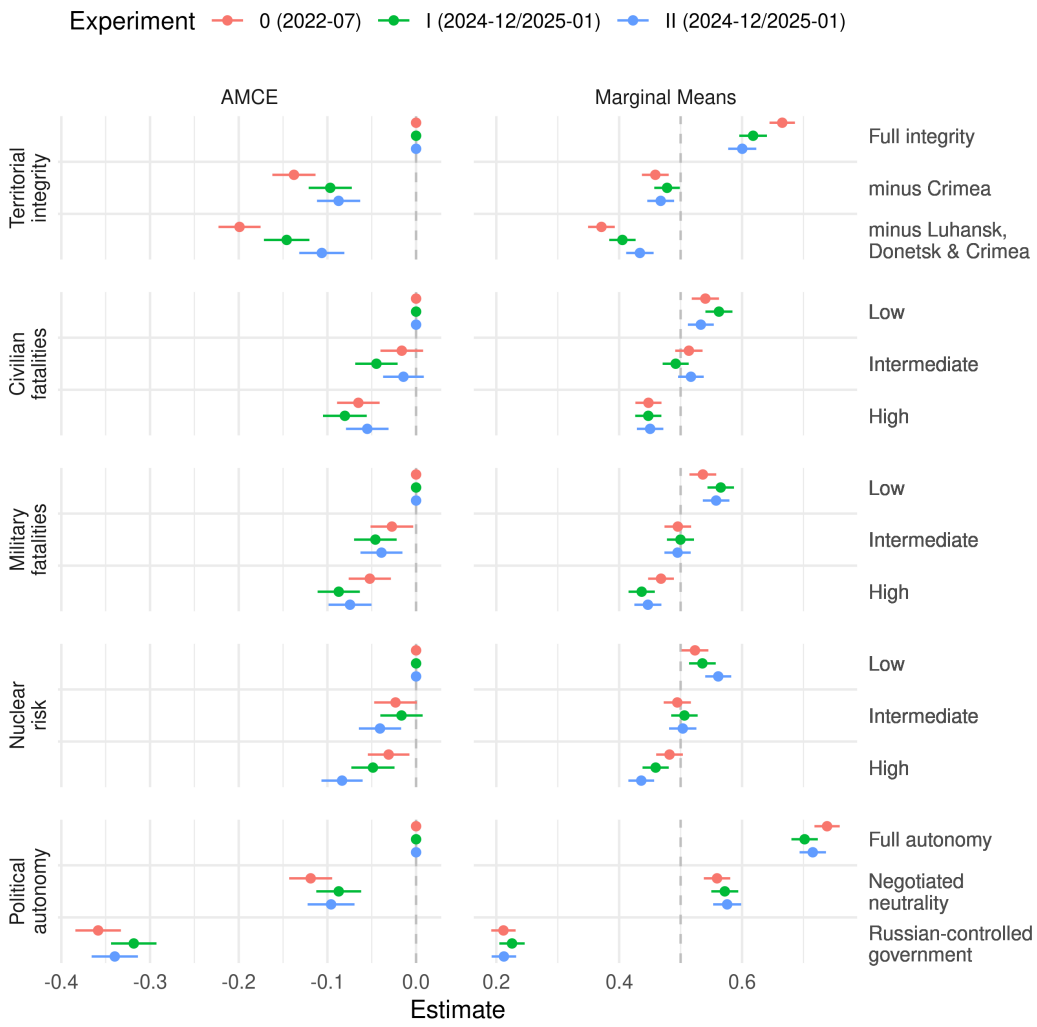



Figure A3: AMCEs and Marginal Means for forced choice outcome: Original results (July 2022) and Experiments I and II, Sample A

Note: Coefficients from July 2022 (red) coincide with Figures 2 and 3 in Dill, Howlett and Müller-Crepon (2024).

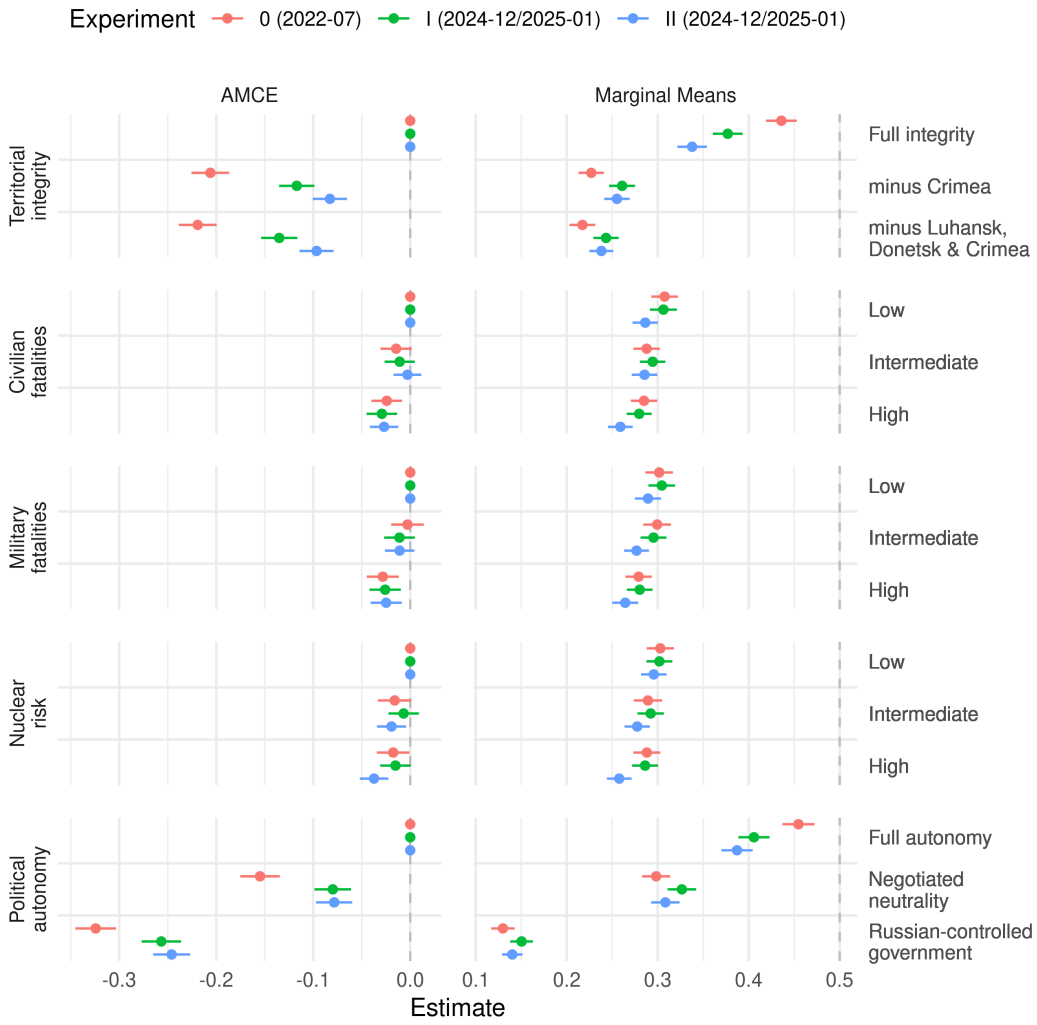



Figure A4: AMCEs and Marginal Means for strategy scores: Original results (July 2022) and Experiments I and II, Sample A

Note: Coefficients from July 2022 (red) coincide with Figures 2 and 3 in Dill, Howlett and Müller-Crepon (2024).

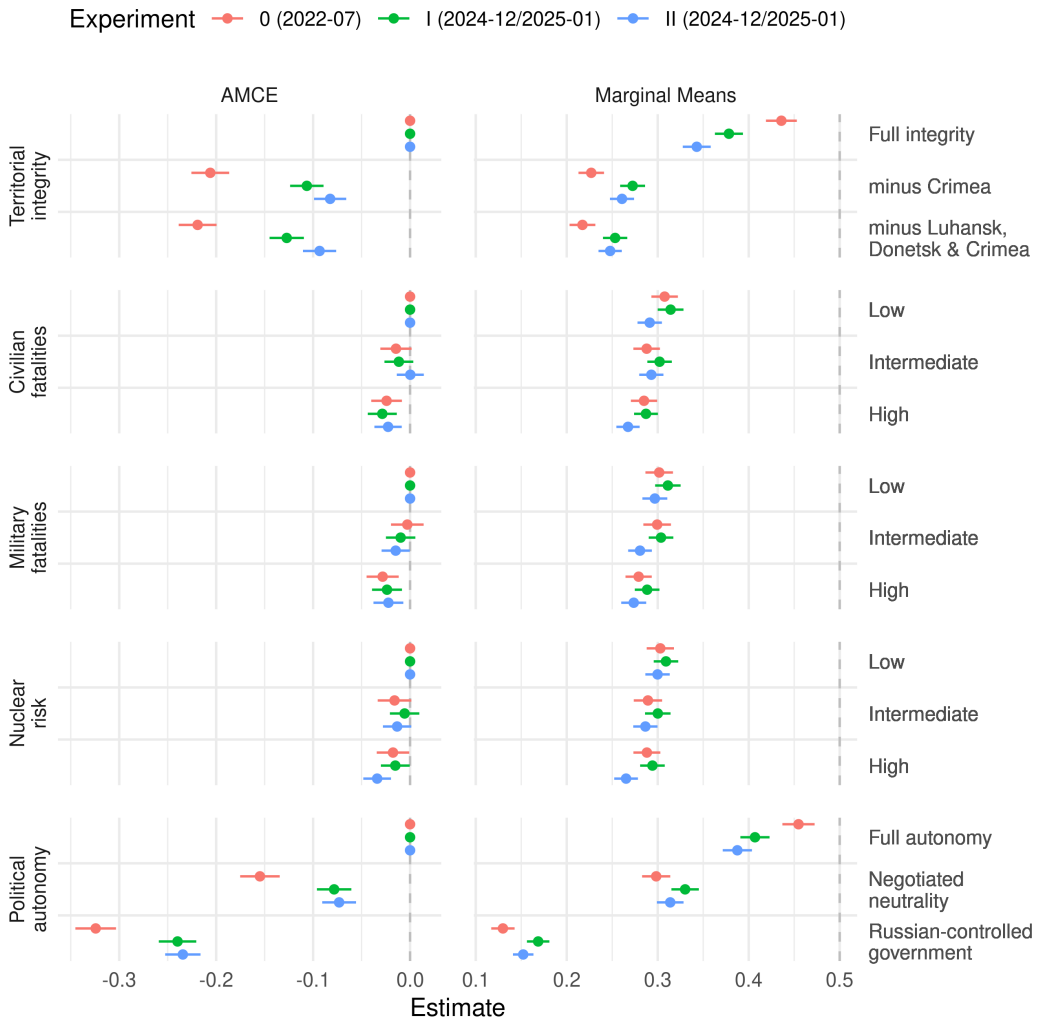



Figure A5: AMCEs and Marginal Means for strategy scores: Original results (July 2022) and Experiments I and II, Sample B

Note: Coefficients from July 2022 (red) coincide with Figures 2 and 3 in Dill, Howlett and Müller-Crepon (2024).

# D Proportionality: Additional Results

## D.1 Forced Choice Outcomes

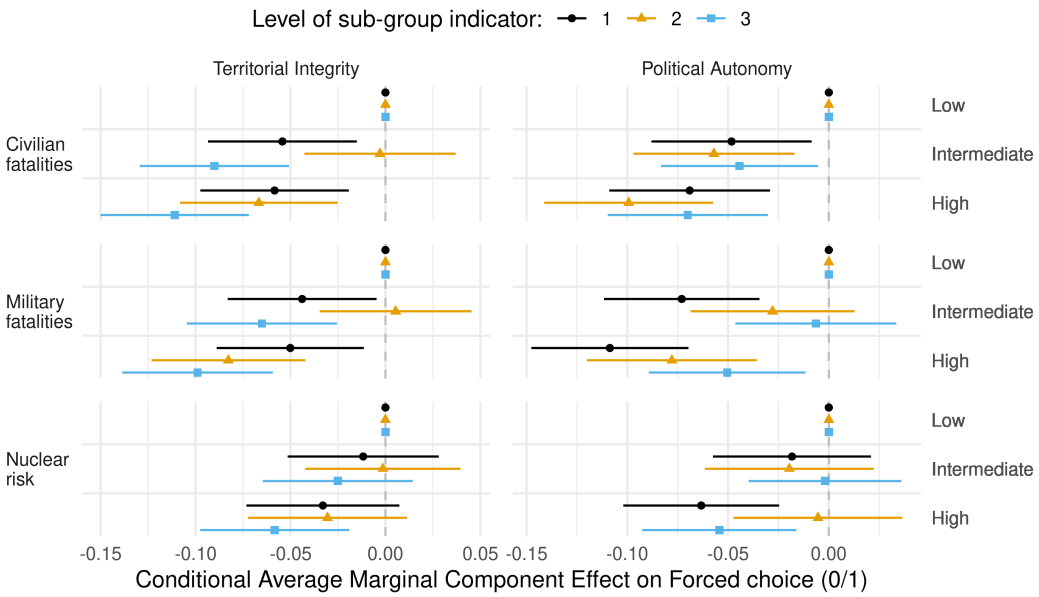



Figure A6: Experiment I, Forced Choice – No evidence for proportionality: Stable effects of cost attributes 2-4 across levels of territorial integrity and political autonomy.

Note: Using 2024 sample

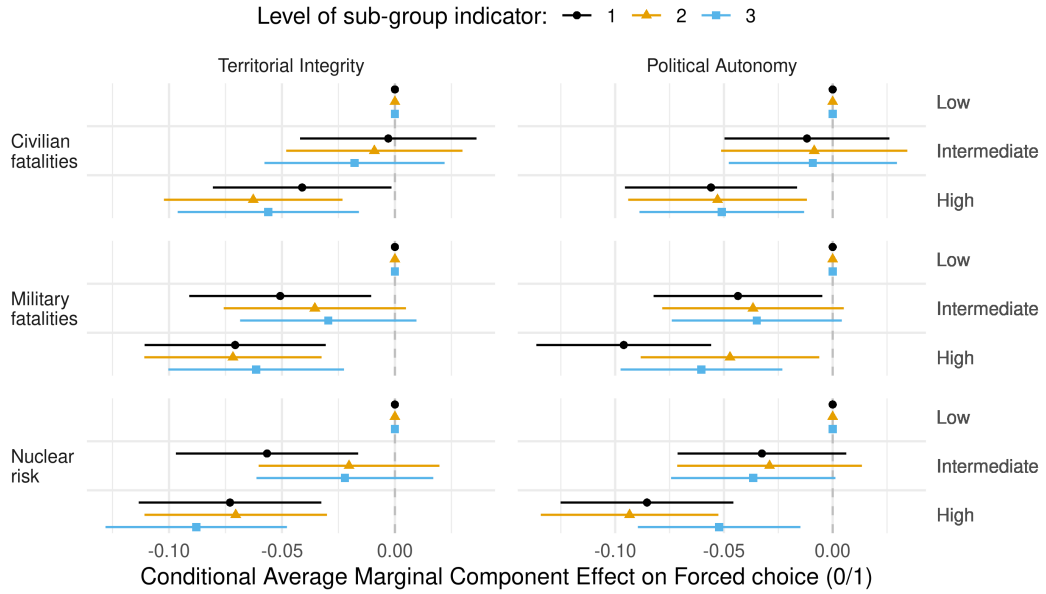



Figure A7: Experiment II, Forced Choice – No evidence for proportionality: Stable effects of cost attributes 2-4 across levels of territorial integrity and political autonomy.

Note: Using 2024 sample

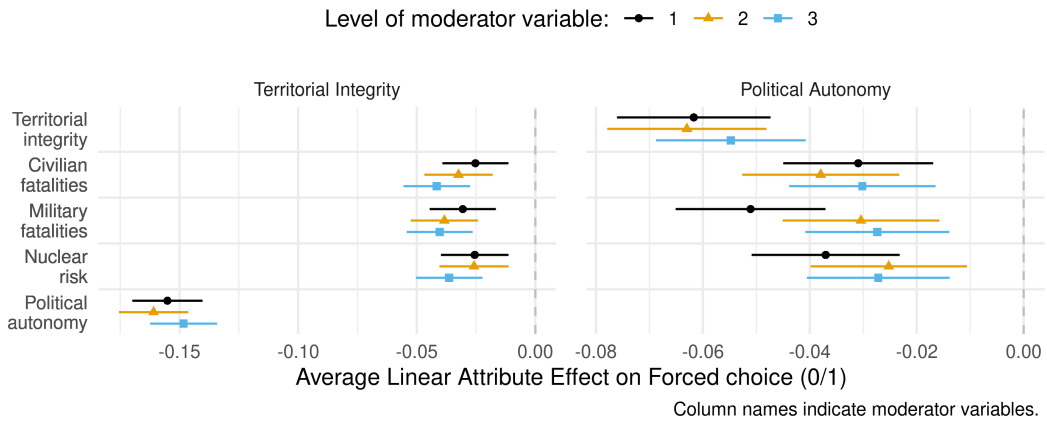



Figure A8: Conditional linear attribute effects on forced `choices`, by attributes 1 and 5 (see column title), pooling Experiments I and II.

## D.2 Scoring Outcomes

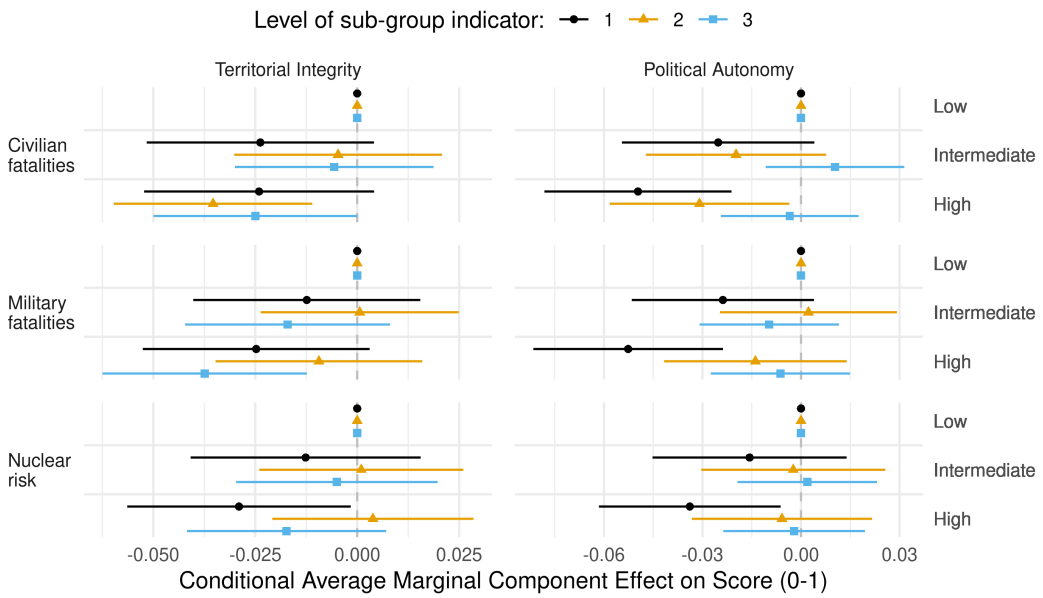



Figure A9: Experiment I, Scores – No evidence for proportionality: Stable effects of cost attributes 2-4 across levels of territorial integrity and political autonomy.

Note: Using 2024 sample

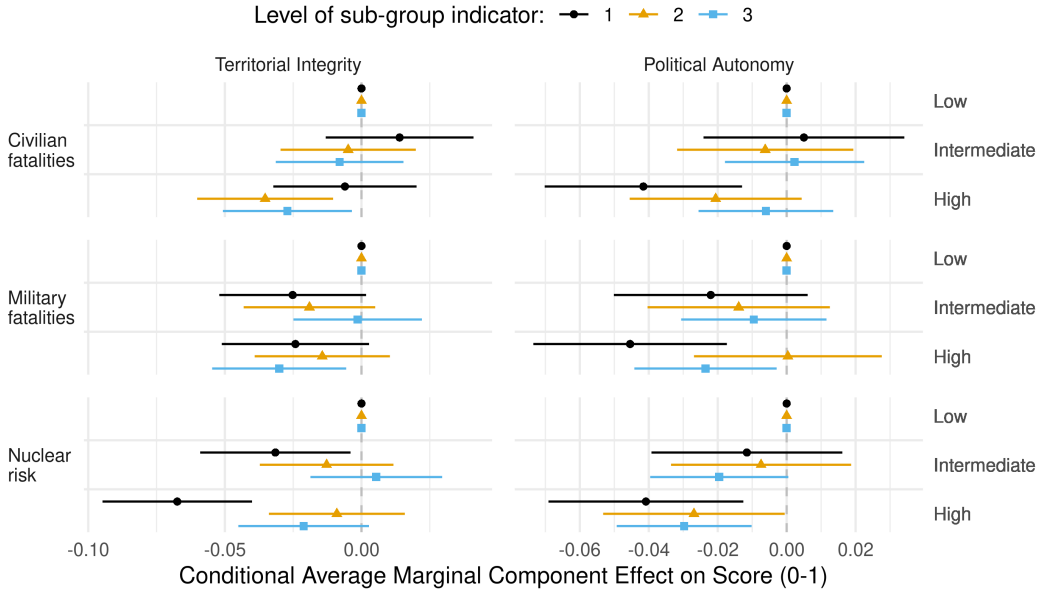



Figure A10: Experiment II, Scores – No evidence for proportionality: Stable effects of cost attributes 2-4 across levels of territorial integrity and political autonomy.

Note: Using 2024 sample

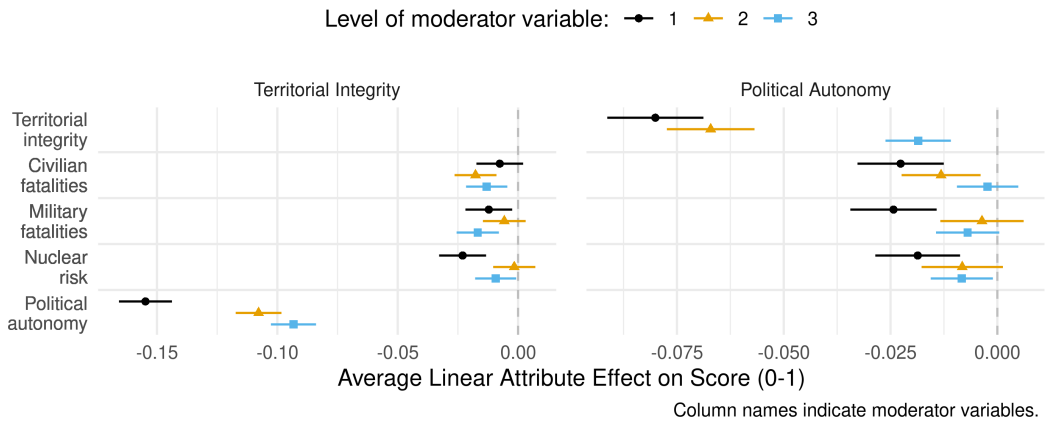



Figure A11: Conditional linear attribute effects on `scores`, by attributes 1 and 5 (see column title), pooling Experiments I and II.

# E Categorical Resistance: Additional Results

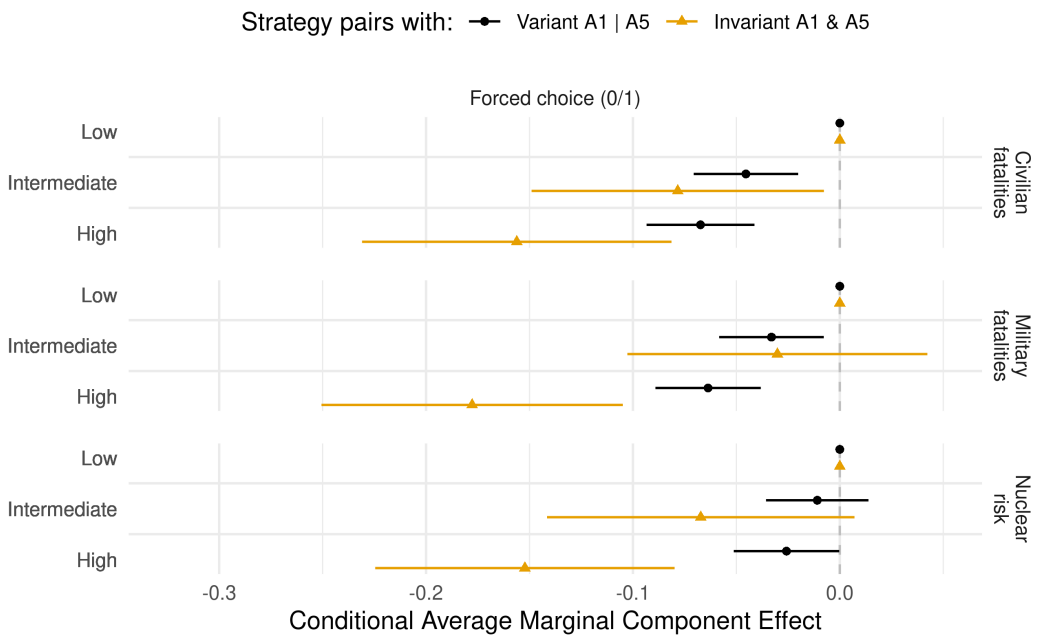



Figure A12: Experiment I: Effects of cost attributes 2-4 with and without pair-level variation in territorial integrity and political autonomy attributes.

Note: Using 2024 sample.

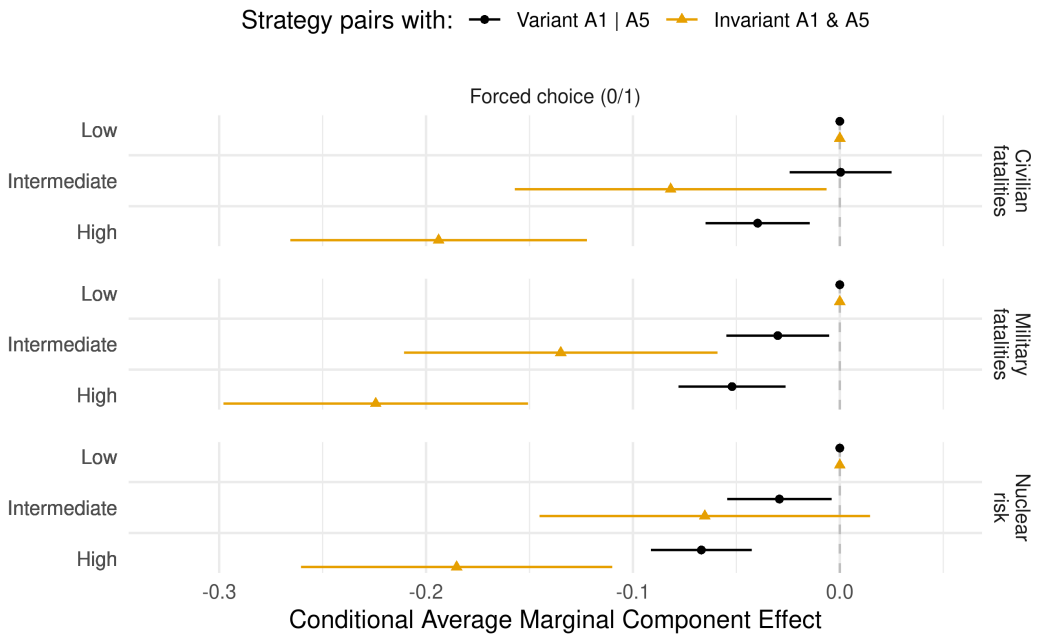



Figure A13: Experiment III: Effects of cost attributes 2-4 with and without pair-level variation in territorial integrity and political autonomy attributes.

Note: Using 2024 sample.

# F Robustness Checks of Main Analysis

For completeness, we conduct the same robustness checks as Dill, Howlett and Müller-Crepon (2024) using Sample B and pooling Experiments I and II, all reported in Appendix F. Changing our estimation method to estimating Average Feature Choice Probabilities (Abramson et al. 2020), modeling attribute levels linearly, or using logistic regressions does not change the main results. Similarly, weighting observations by the size of their household to correct for the likely oversampling of smaller households and changing the clustering of standard errors does not affect our results. Lastly, and in difference to Dill, Howlett and Müller-Crepon (2024), we do find some evidence of order effects among the cost attributes for which we randomized the order in which they are shown to respondents. Cost attributes that are shown higher up appear to have slightly larger effects than those shown in lower positions.

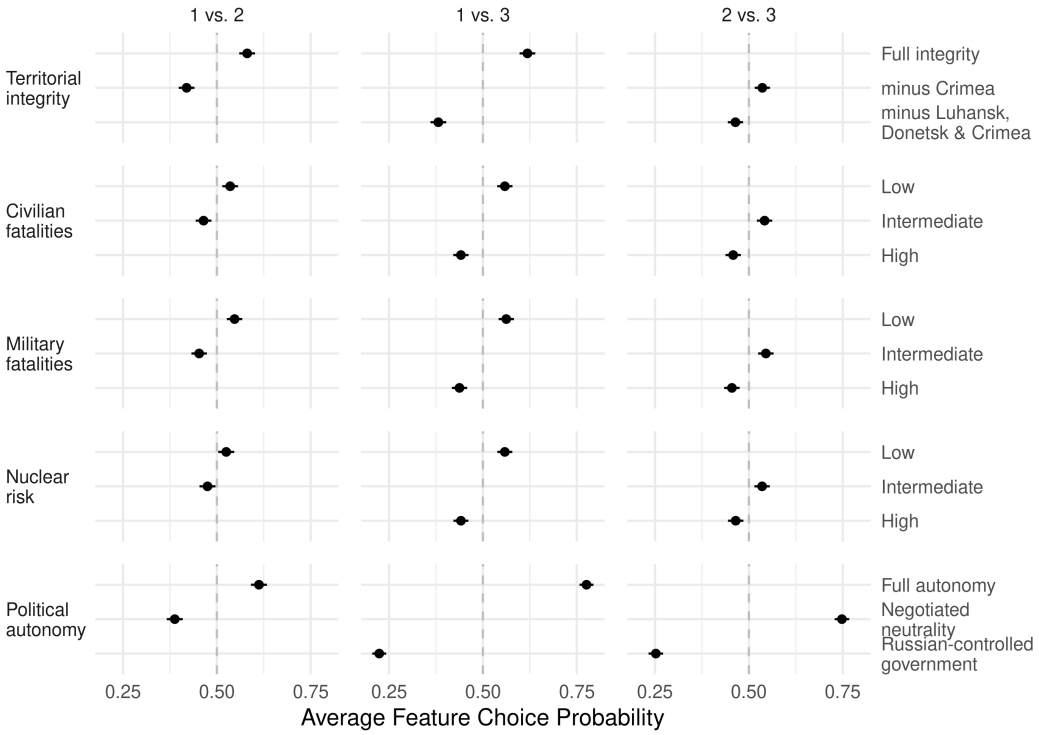



Figure A14: Average feature choice probabilities (Abramson et al. 2020)

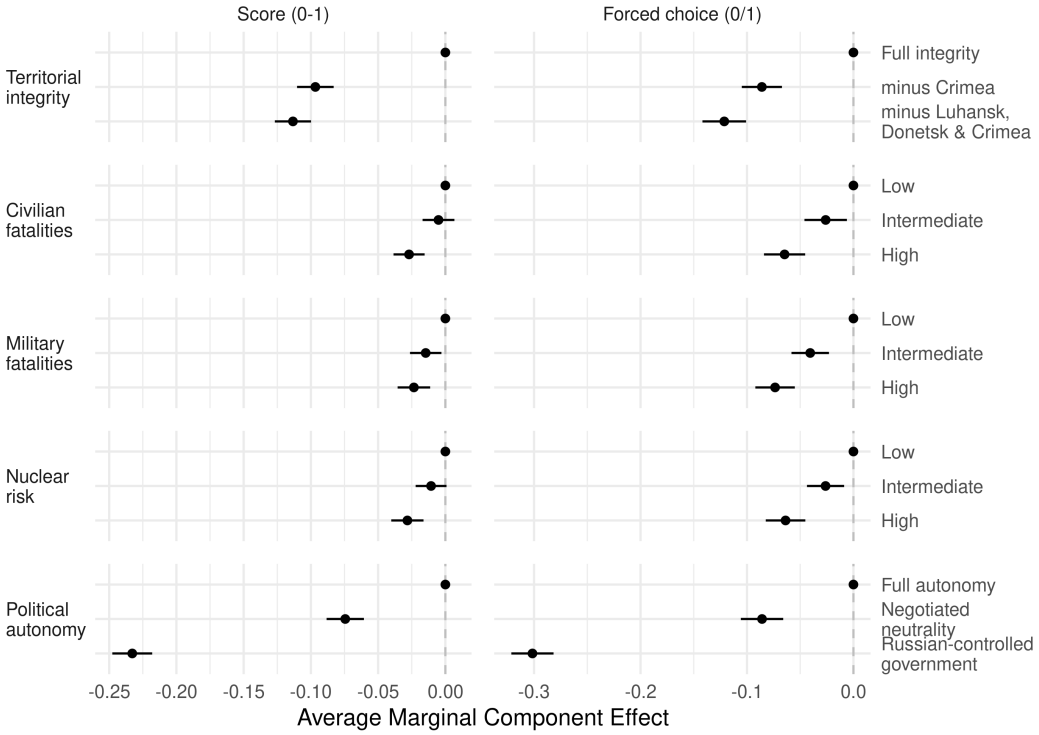



Figure A15: AMCEs using weights proportional to the size of households

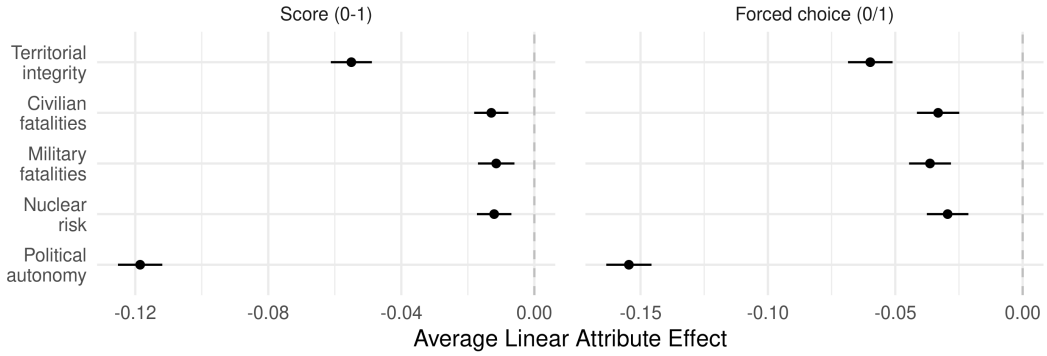



Figure A16: Average linear attribute effects, taking each attribute as a linear scale

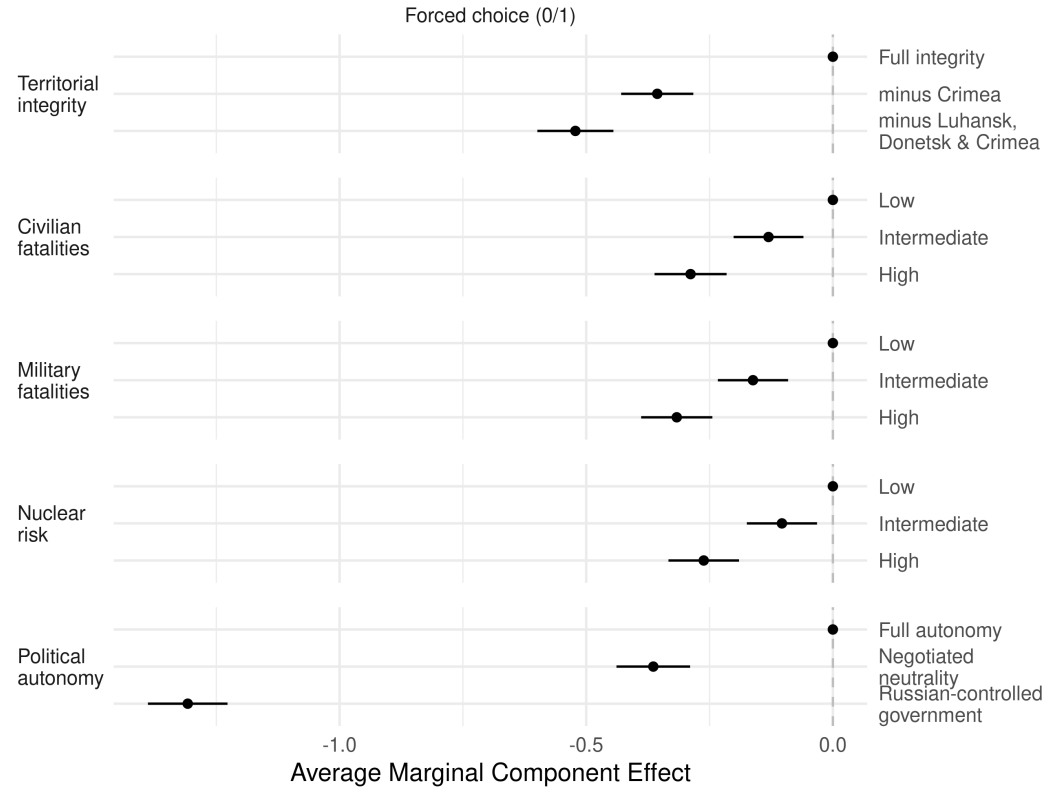
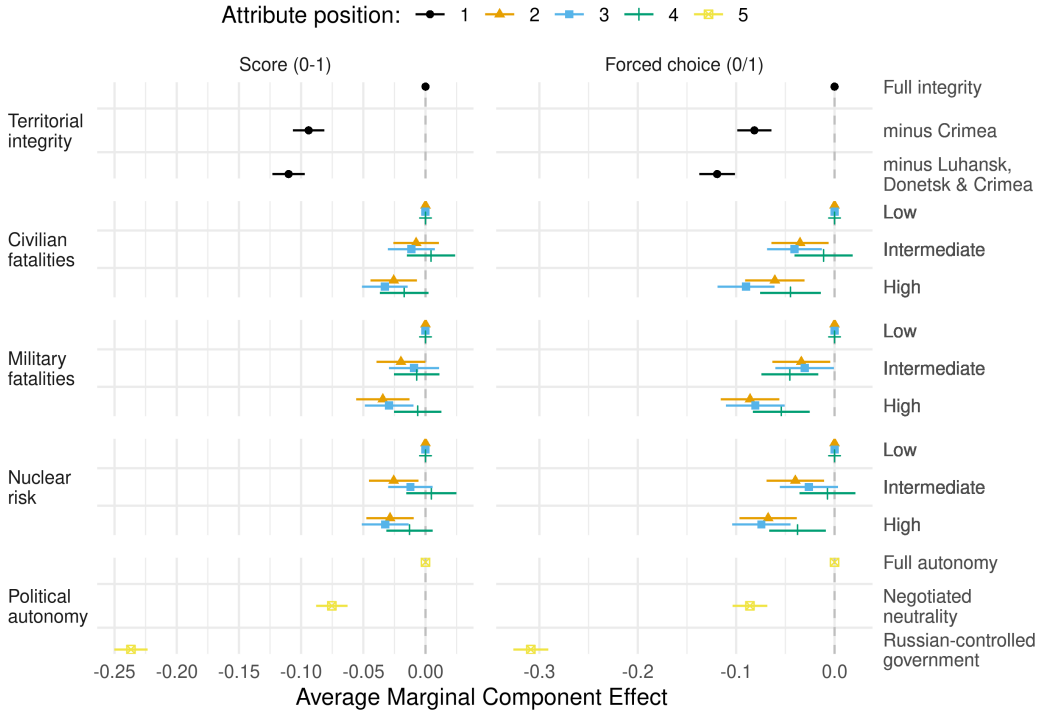



Figure A17: AMCEs on `choice` outcome using logistic regression models


Column names indicates outcome variable.

Figure A18: Clustering standard errors not at all, on the level of pairs, respondents, and PSUs.




Position of attributes 2-4 varied randomly between respondents.

Figure A19: Order Effects

# G Heterogeneous Effects

## G.1 Summary

Table A6: Experiment 2022-07: Omnibus Wald-test result for joint nullity of heterogenous effects by moderator

| | Score (0-1) | | | Forced choice (0/1) | | |
|---|---|---|---|---|---|---|
| Moderator | F-Stat | $p$ | Adj. $p$ | F-Stat | $p$ | Adj. $p$ |
| **Demographics** | | | | | | |
| Gender | 0.62 | 0.80 | 1 | 0.60 | 0.82 | 1 |
| Age (5 groups) | 0.69 | 0.93 | 1 | 1.08 | 0.33 | 1 |
| Children: yes/no | 1.53 | 0.12 | 1 | 0.57 | 0.84 | 1 |
| Level of education | 0.59 | 0.98 | 1 | 1.69 | 0.004 | 0.16 |
| Economic deprivation | 1.45 | 0.15 | 1 | 2.42 | 0.01 | 0.29 |
| Rural / Urban | 1.87 | 0.04 | 1 | 0.86 | 0.57 | 1 |
| Interview language | 2.87 | 0.001 | 0.06 | 3.17 | 0.0005 | 0.02 |
| Native language | 2.30 | 0.001 | 0.03 | 2.36 | 0.001 | 0.02 |
| Ethnic identity | 1.54 | 0.06 | 1 | 1.97 | 0.01 | 0.24 |
| **Affectedness** | | | | | | |
| Affectedness score | 1.77 | 0.02 | 0.74 | 2.59 | 0.0001 | 0.01 |
| East vs. West | 1.45 | 0.15 | 1 | 1.33 | 0.21 | 1 |
| Oblast first attacked | 2.63 | 0.003 | 0.14 | 3.51 | 0.0001 | 0.005 |
| Self war-affected | 1.16 | 0.31 | 1 | 0.57 | 0.84 | 1 |
| Family war-affected | 1.11 | 0.35 | 1 | 1.56 | 0.11 | 1 |
| Any one-sided violence | 2.06 | 0.02 | 0.96 | 1.43 | 0.16 | 1 |
| Any battles | 2.49 | 0.01 | 0.22 | 1.61 | 0.10 | 1 |
| Any shelling | 3.02 | 0.001 | 0.03 | 1.43 | 0.16 | 1 |
| **Attitudes** | | | | | | |
| Importance of victory | 5.98 | 0 | 0.0000 | 4.89 | 0.0000 | 0.0000 |
| Survival of nation at stake | 3.83 | 0.0000 | 0.001 | 2.60 | 0.004 | 0.15 |
| Trust in president | 5.06 | 0.0000 | 0.0000 | 4.43 | 0.0000 | 0.0001 |

Note: Adjusted p-values based on a Bonferroni adjustment for 40 hypotheses.

Table A7: Pooled Experiments I and II: Omnibus Wald-test result for joint nullity of heterogenous effects by moderator

| | Score (0-1) | | | Forced choice (0/1) | | |
|---|---|---|---|---|---|---|
| Moderator | F-Stat | $p$ | Adj. $p$ | F-Stat | $p$ | Adj. $p$ |
| **Demographics** | | | | | | |
| Gender | 0.78 | 0.65 | 1 | 2.28 | 0.01 | 0.49 |
| Internal migrant | 1.69 | 0.08 | 1 | 0.68 | 0.74 | 1 |
| Age (5 groups) | 1.19 | 0.19 | 1 | 1.37 | 0.06 | 1 |
| Children: yes/no | 2.75 | 0.002 | 0.09 | 2.25 | 0.01 | 0.54 |
| Level of education | 1.10 | 0.30 | 1 | 0.92 | 0.62 | 1 |
| Economic deprivation | 2.12 | 0.02 | 0.83 | 0.92 | 0.52 | 1 |
| Rural / Urban | 0.89 | 0.54 | 1 | 0.88 | 0.55 | 1 |
| Interview language | 8.72 | 0 | 0 | 8.64 | 0 | 0 |
| Native language | 4.54 | 0 | 0 | 3.85 | 0 | 0.0000 |
| Ethnic identity | 2.07 | 0.003 | 0.14 | 1.90 | 0.01 | 0.38 |
| **Affectedness** | | | | | | |
| Affectedness score | 4.28 | 0 | 0.0000 | 3.67 | 0.0000 | 0.0000 |
| East vs. West | 5.63 | 0.0000 | 0.0000 | 5.05 | 0.0000 | 0.0000 |
| Oblast first attacked | 7.50 | 0 | 0 | 5.77 | 0 | 0.0000 |
| Self war-affected | 0.91 | 0.52 | 1 | 1.19 | 0.29 | 1 |
| Family war-affected | 1.88 | 0.04 | 1 | 1.79 | 0.06 | 1 |
| Any one-sided violence | 3.19 | 0.0004 | 0.02 | 2.32 | 0.01 | 0.43 |
| Any battles | 4.37 | 0.0000 | 0.0002 | 3.95 | 0.0000 | 0.001 |
| Any shelling | 6.25 | 0 | 0.0000 | 1.61 | 0.10 | 1 |
| **Attitudes** | | | | | | |
| Importance of victory | 10.71 | 0 | 0 | 7.76 | 0 | 0 |
| Survival of nation at stake | 3.59 | 0.0001 | 0.004 | 1.10 | 0.36 | 1 |
| Trust in president | 4.43 | 0.0000 | 0.0001 | 6.68 | 0 | 0 |

Note: Adjusted p-values based on a Bonferroni adjustment for 42 hypotheses.

Table A8: Experiment 2024-12.1: Omnibus Wald-test result for joint nullity of heterogenous effects by moderator

| | Score (0-1) | | | Forced choice (0/1) | | |
|---|---|---|---|---|---|---|
| Moderator | F-Stat | $p$ | Adj. $p$ | F-Stat | $p$ | Adj. $p$ |
| **Demographics** | | | | | | |
| Gender | 0.72 | 0.71 | 1 | 2.22 | 0.01 | 0.60 |
| Internal migrant | 0.64 | 0.78 | 1 | 1.54 | 0.12 | 1 |
| Age (5 groups) | 0.90 | 0.65 | 1 | 1.34 | 0.07 | 1 |
| Children: yes/no | 1.82 | 0.05 | 1 | 1.91 | 0.04 | 1 |
| Level of education | 1.65 | 0.01 | 0.27 | 0.70 | 0.92 | 1 |
| Economic deprivation | 1.93 | 0.04 | 1 | 0.62 | 0.80 | 1 |
| Rural / Urban | 1.08 | 0.37 | 1 | 0.68 | 0.74 | 1 |
| Interview language | 6.04 | 0 | 0.0000 | 4.53 | 0.0000 | 0.0001 |
| Native language | 3.63 | 0.0000 | 0.0000 | 3.77 | 0.0000 | 0.0000 |
| Ethnic identity | 2.50 | 0.0002 | 0.01 | 3.69 | 0.0000 | 0.0000 |
| **Affectedness** | | | | | | |
| Affectedness score | 3.81 | 0.0000 | 0.0000 | 2.87 | 0.0000 | 0.001 |
| East vs. West | 2.93 | 0.001 | 0.05 | 2.30 | 0.01 | 0.45 |
| Oblast first attacked | 6.35 | 0 | 0.0000 | 4.02 | 0.0000 | 0.001 |
| Self war-affected | 0.43 | 0.93 | 1 | 1.10 | 0.36 | 1 |
| Family war-affected | 0.85 | 0.58 | 1 | 1.82 | 0.05 | 1 |
| Any one-sided violence | 2.91 | 0.001 | 0.05 | 2.12 | 0.02 | 0.83 |
| Any battles | 5.00 | 0.0000 | 0.0000 | 3.51 | 0.0001 | 0.01 |
| Any shelling | 5.02 | 0.0000 | 0.0000 | 1.61 | 0.10 | 1 |
| **Attitudes** | | | | | | |
| Importance of victory | 4.84 | 0.0000 | 0.0000 | 4.54 | 0.0000 | 0.0001 |
| Survival of nation at stake | 3.11 | 0.001 | 0.02 | 1.82 | 0.05 | 1 |
| Trust in president | 2.13 | 0.02 | 0.82 | 3.88 | 0.0000 | 0.001 |

Note: Adjusted p-values based on a Bonferroni adjustment for 42 hypotheses.

Table A9: Experiment 2024-12.2: Omnibus Wald-test result for joint nullity of heterogenous effects by moderator

| | Score (0-1) | | | Forced choice (0/1) | | |
|---|---|---|---|---|---|---|
| Moderator | F-Stat | $p$ | Adj. $p$ | F-Stat | $p$ | Adj. $p$ |
| **Demographics** | | | | | | |
| Gender | 0.68 | 0.75 | 1 | 1.03 | 0.41 | 1 |
| Internal migrant | 2.88 | 0.001 | 0.06 | 0.73 | 0.70 | 1 |
| Age (5 groups) | 1.06 | 0.36 | 1 | 0.79 | 0.82 | 1 |
| Children: yes/no | 1.85 | 0.05 | 1 | 1.37 | 0.19 | 1 |
| Level of education | 0.68 | 0.94 | 1 | 1.18 | 0.20 | 1 |
| Economic deprivation | 1.56 | 0.11 | 1 | 0.87 | 0.56 | 1 |
| Rural / Urban | 0.94 | 0.49 | 1 | 1.31 | 0.22 | 1 |
| Interview language | 3.19 | 0.0004 | 0.02 | 5.19 | 0.0000 | 0.0000 |
| Native language | 2.60 | 0.0001 | 0.005 | 1.92 | 0.01 | 0.33 |
| Ethnic identity | 1.50 | 0.07 | 1 | 1.80 | 0.02 | 0.67 |
| **Affectedness** | | | | | | |
| Affectedness score | 1.70 | 0.03 | 1 | 1.88 | 0.01 | 0.43 |
| East vs. West | 3.13 | 0.001 | 0.02 | 4.06 | 0.0000 | 0.001 |
| Oblast first attacked | 2.10 | 0.02 | 0.89 | 2.67 | 0.003 | 0.12 |
| Self war-affected | 1.30 | 0.22 | 1 | 1.92 | 0.04 | 1 |
| Family war-affected | 1.93 | 0.04 | 1 | 0.80 | 0.63 | 1 |
| Any one-sided violence | 1.53 | 0.12 | 1 | 1.04 | 0.41 | 1 |
| Any battles | 1.67 | 0.08 | 1 | 1.75 | 0.06 | 1 |
| Any shelling | 2.06 | 0.02 | 1 | 0.86 | 0.57 | 1 |
| **Attitudes** | | | | | | |
| Importance of victory | 7.41 | 0 | 0 | 4.18 | 0.0000 | 0.0003 |
| Survival of nation at stake | 2.16 | 0.02 | 0.72 | 1.80 | 0.06 | 1 |
| Trust in president | 3.14 | 0.001 | 0.02 | 3.75 | 0.0000 | 0.002 |

Note: Adjusted p-values based on a Bonferroni adjustment for 42 hypotheses.

## G.2 By Internal Migration / IDP Status

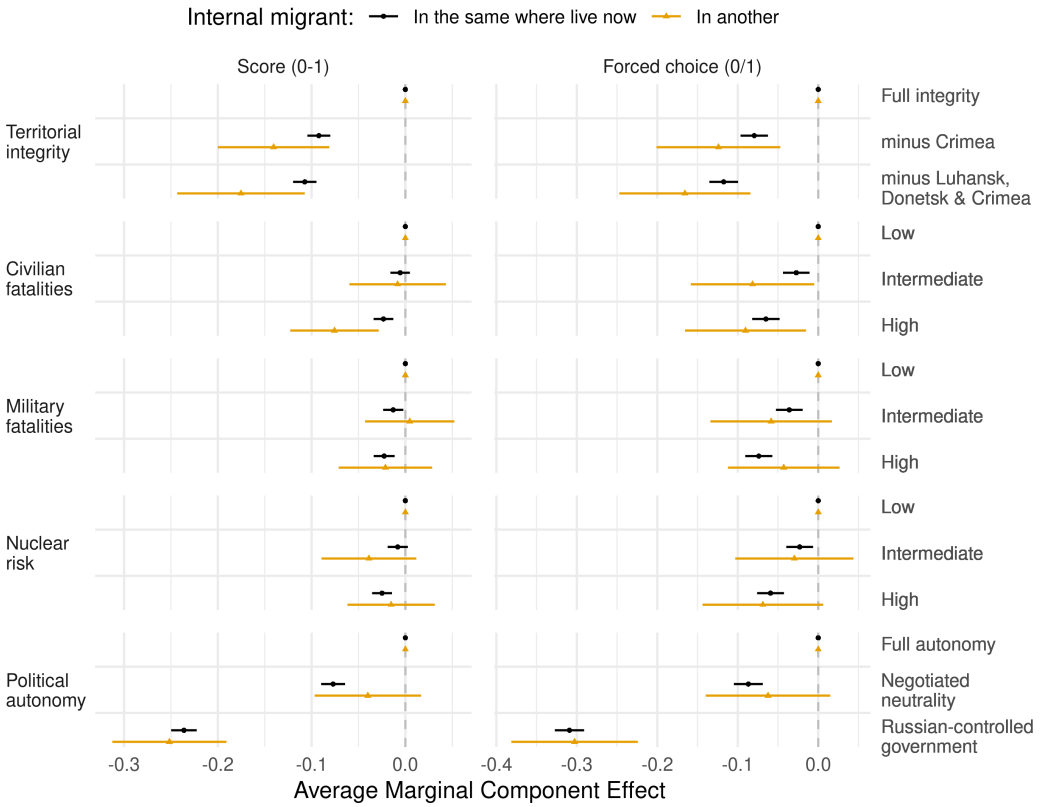



Figure A20: Pooled Experiments I and II: Moved since February 2022

## G.3 By Language and Ethnicity

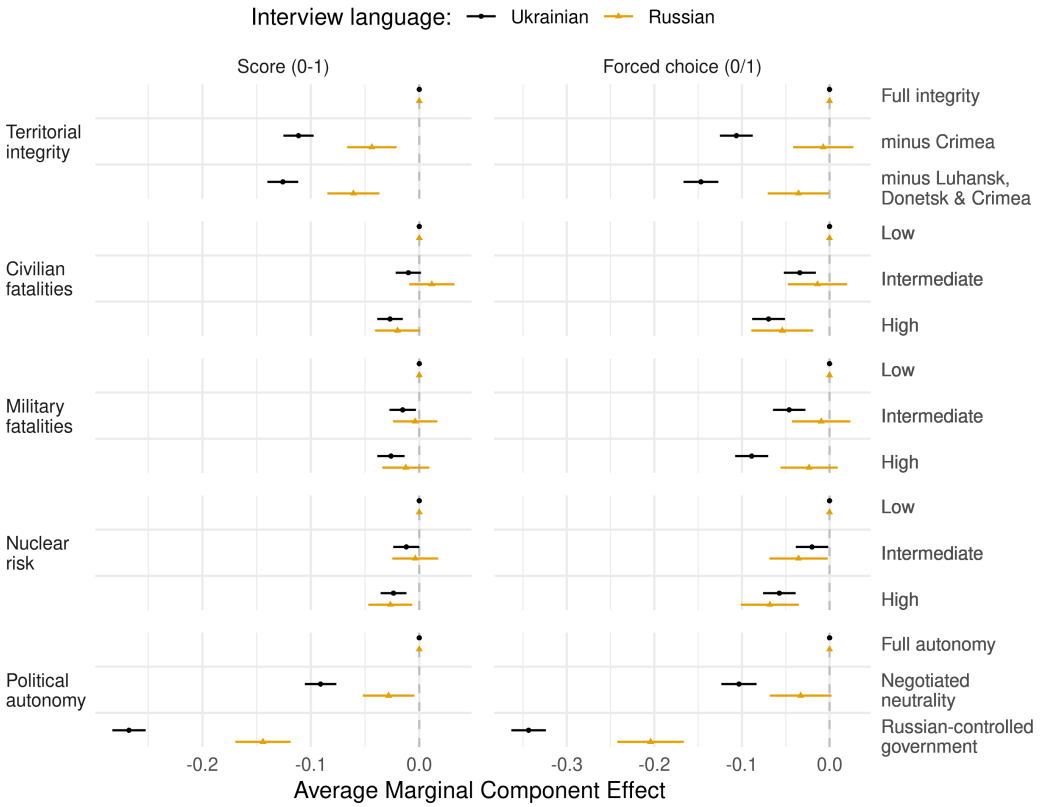



Figure A21: Pooled Experiments I and II: Interview language

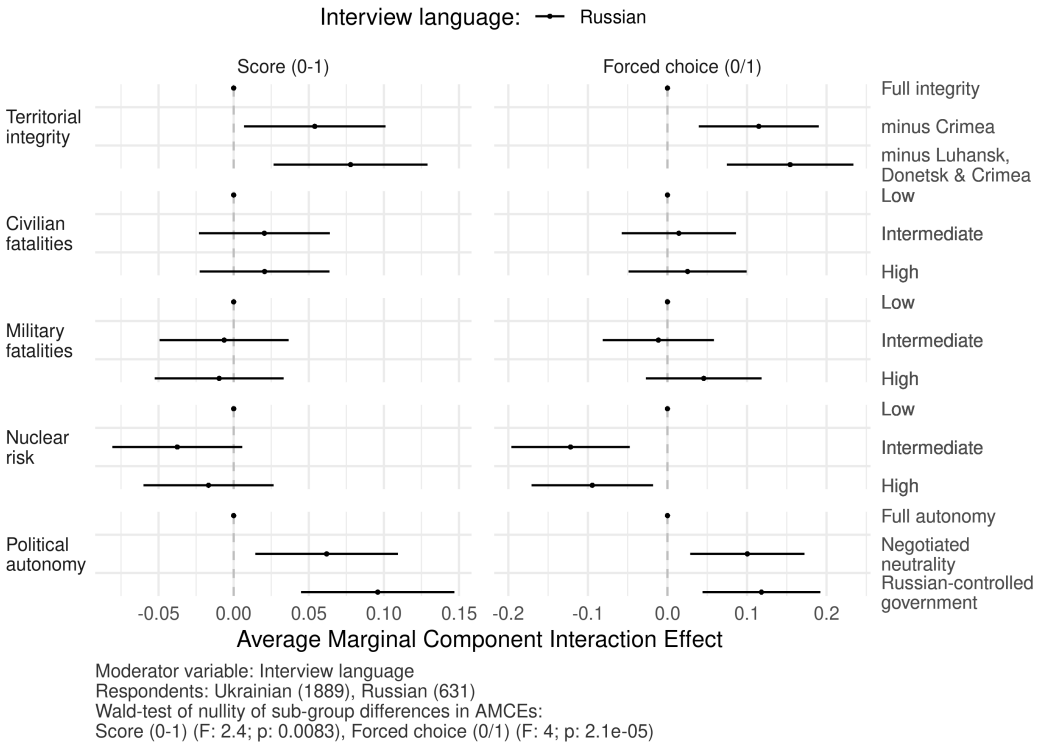



Figure A22: Pooled Experiments I and II: AMCIEs of conducting the interview in Russian (compared to Ukrainian) among respondents in the same PSU

Note: Estimated by adding a adding "fixed slopes" for every attribute level in every PSU.

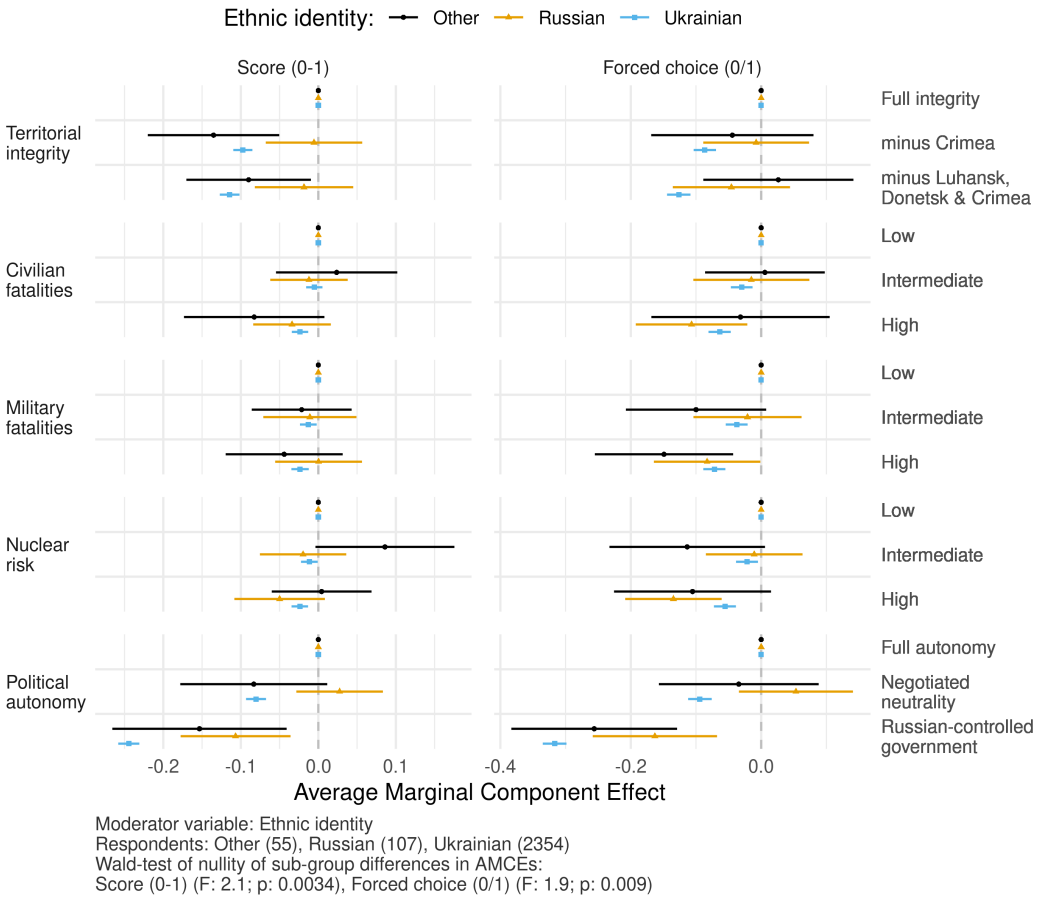



Figure A23: Pooled Experiments I and II: Respondent ethnicity

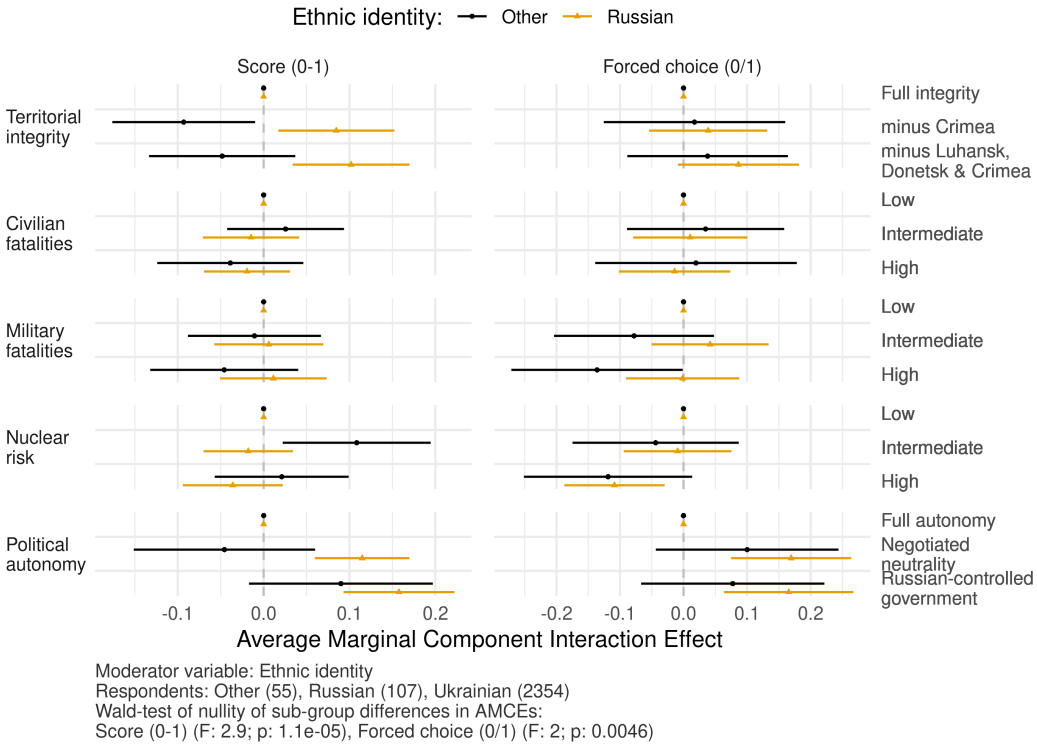
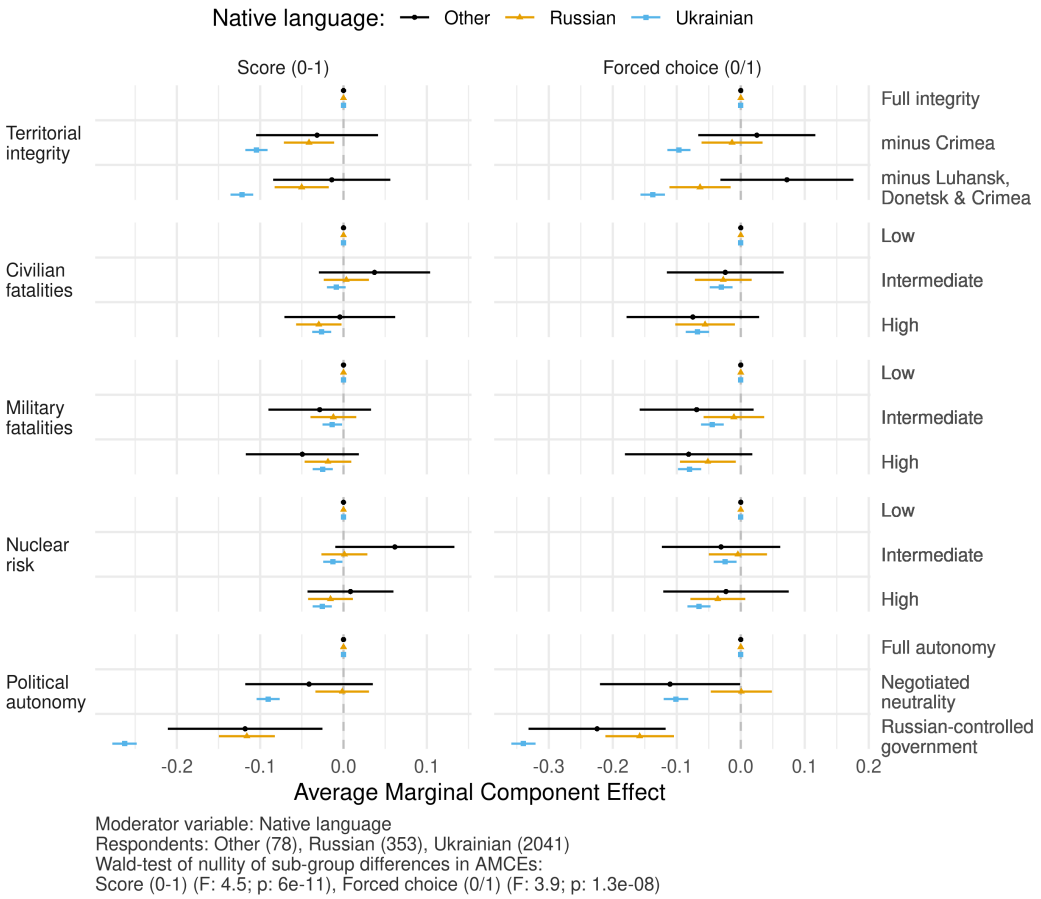



Figure A24: Pooled Experiments I and II: AMCIEs of non-Ukrainian ethnic self-identifications (compared to Ukrainian) among respondents in the same PSU

Note: Estimated by adding a adding "fixed slopes" for every attribute level in every PSU.




Moderator variable: Native language
Respondents: Other (78), Russian (353), Ukrainian (2041)
Wald-test of nullity of sub-group differences in AMCEs:
Score (0-1) (F: 4.5; p: 6e-11), Forced choice (0/1) (F: 3.9; p: 1.3e-08)

Figure A25: Pooled Experiments I and II: Respondent ethnicity

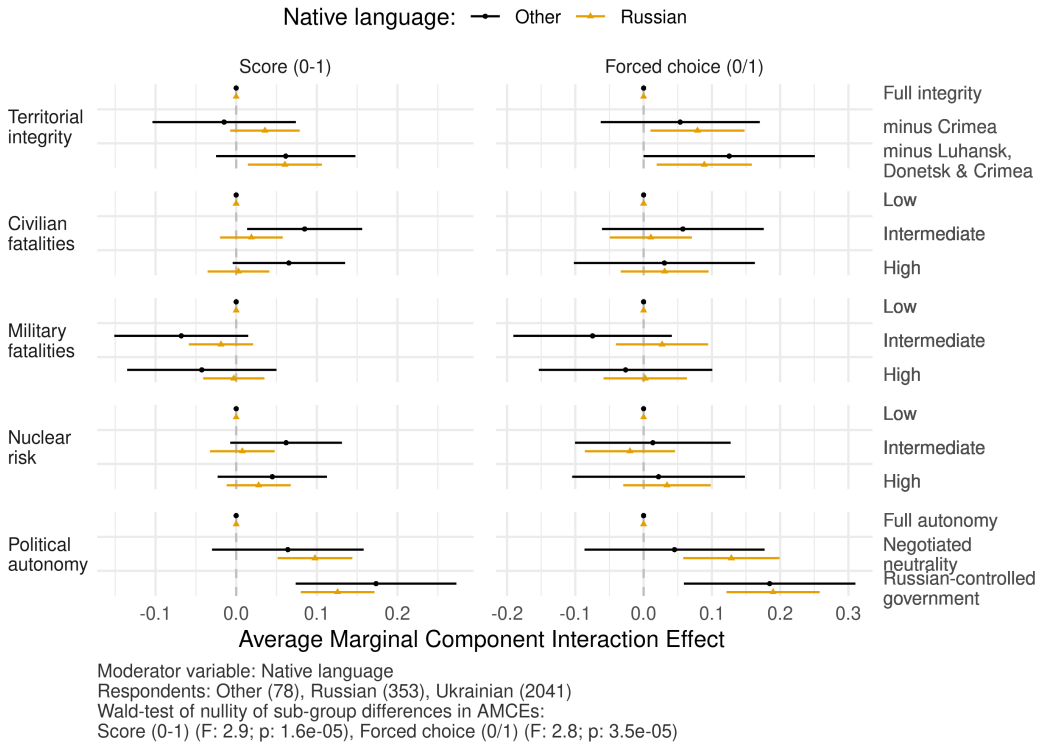



Figure A26: Pooled Experiments I and II: AMCIEs of non-Ukrainian mother-tongues (compared to Ukrainian) among respondents in the same PSU

Note: Estimated by adding a adding "fixed slopes" for every attribute level in every PSU.

## G.4 By Respondents' Affectedness

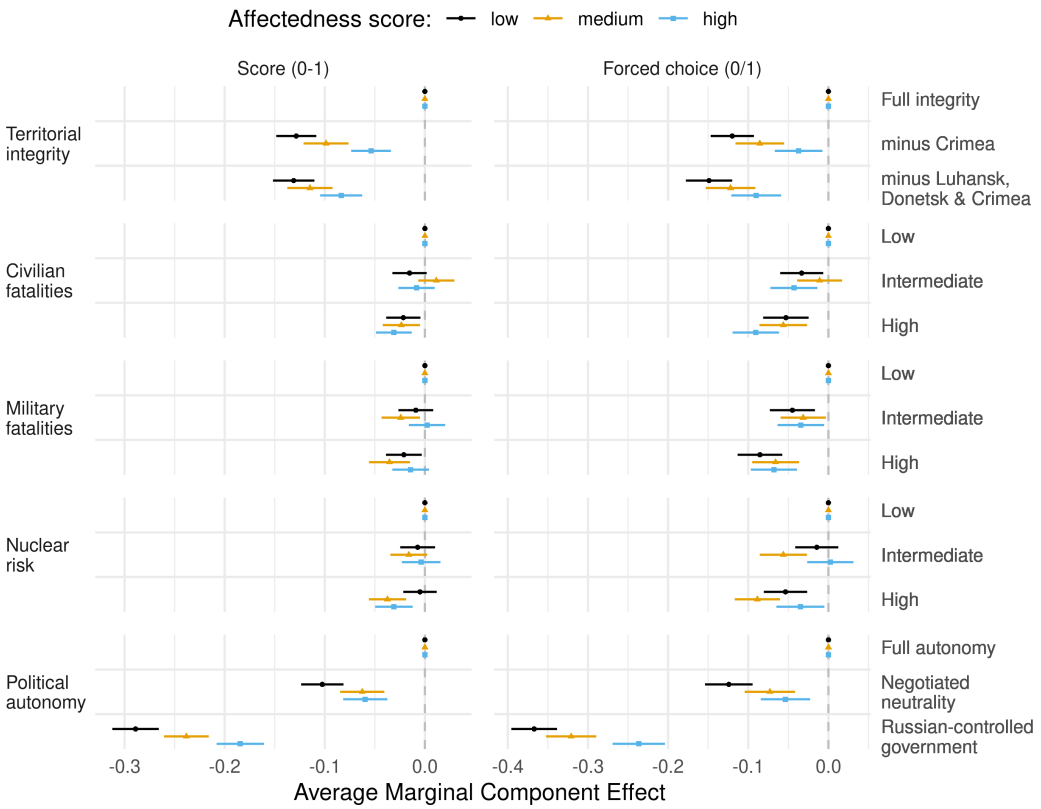



Figure A27: Pooled Experiments I and II: Affectedness score

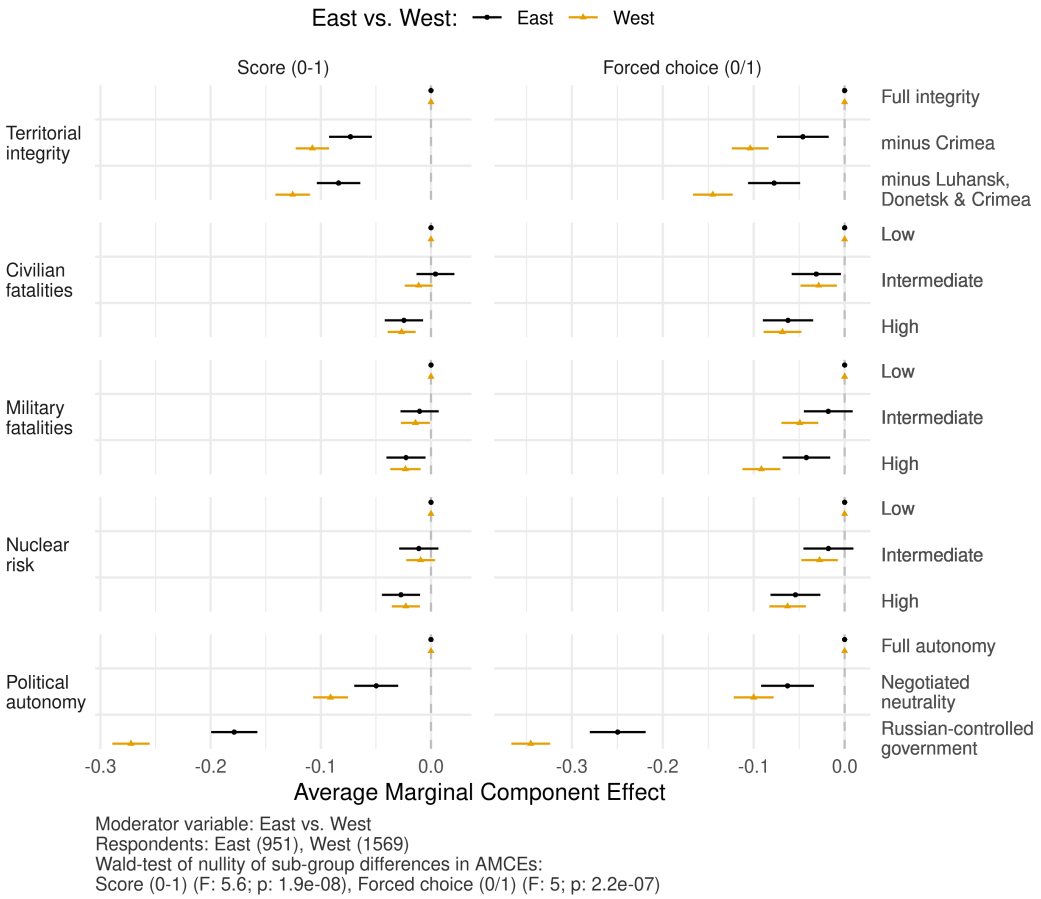



Figure A28: Pooled Experiments I and II: East vs West

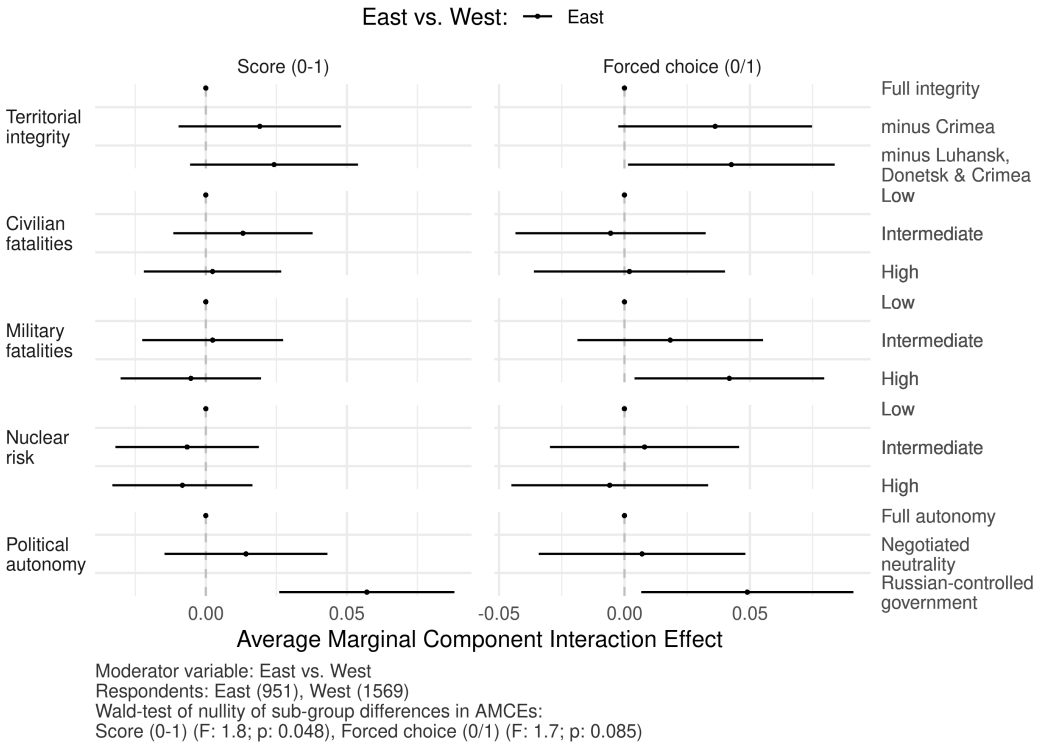



Figure A29: Pooled Experiments I and II: AMCIEs of the East (compared to the West) among respondents with the same mother-tongue

Note: Estimated by adding a adding "fixed slopes" for every attribute level in every mother tongue.

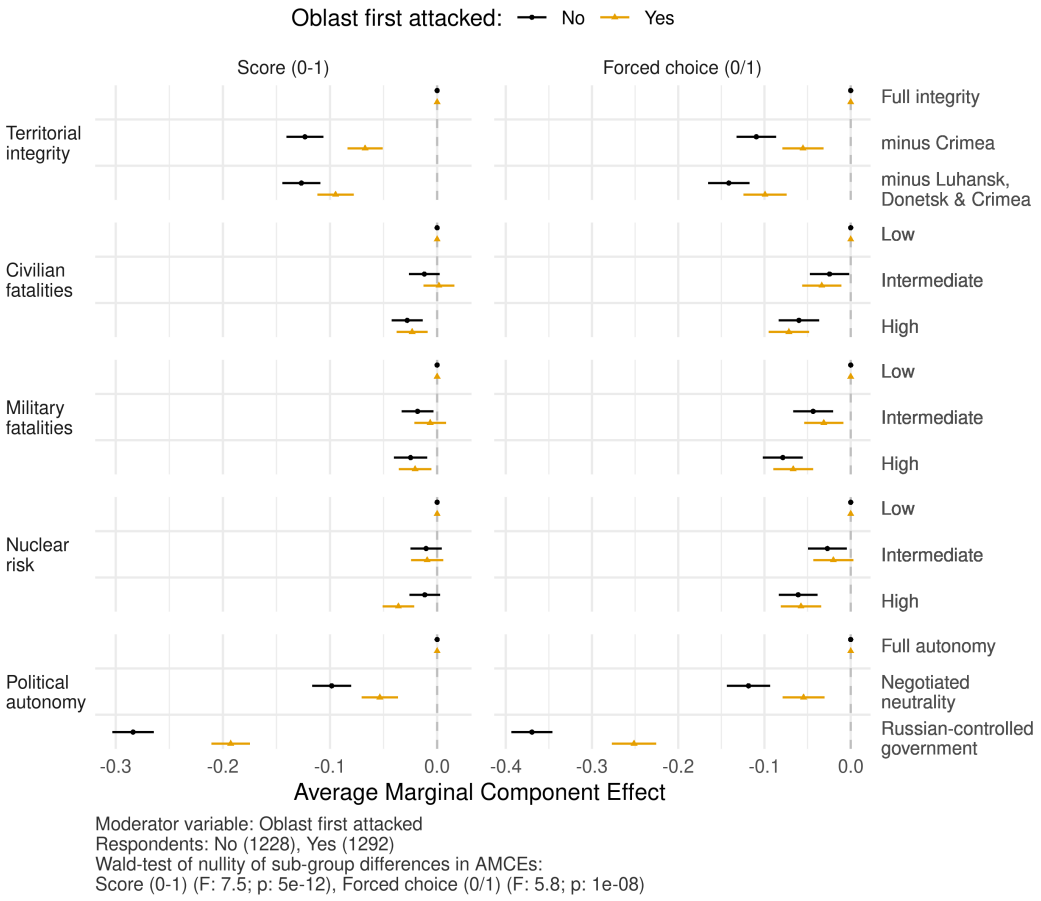



Figure A30: Pooled Experiments I and II: Oblast directly invaded by Russian forces

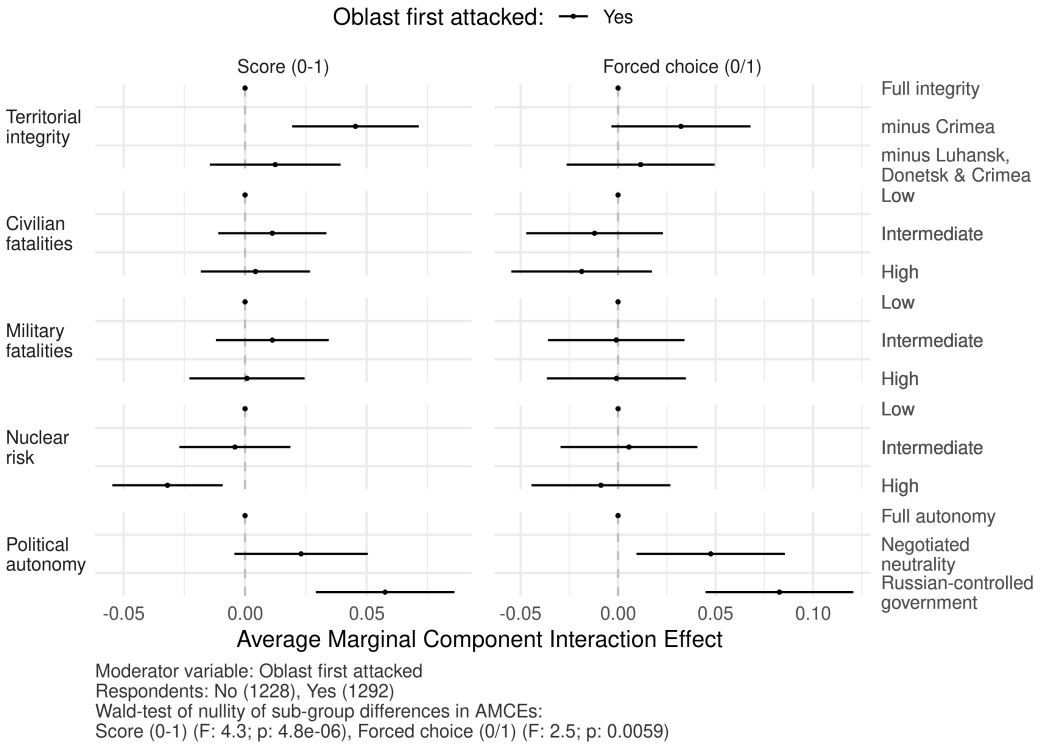
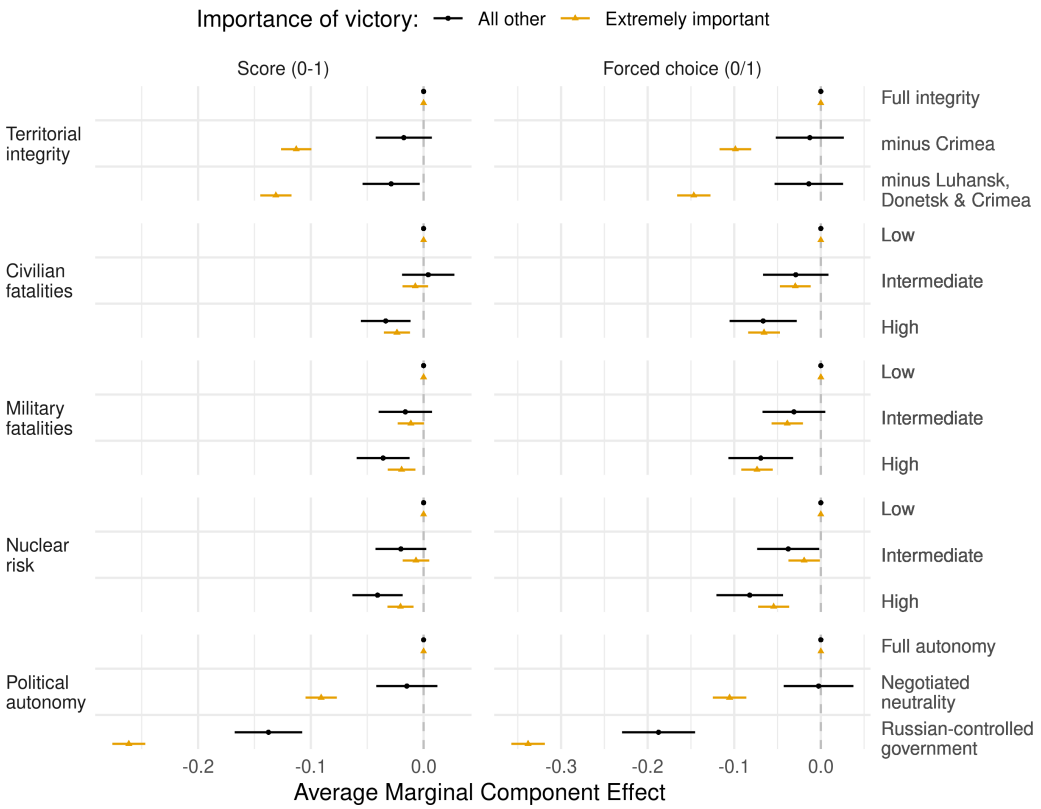



Figure A31: Pooled Experiments I and II: AMCIEs of living in an oblast directly invaded by Russian forces among respondents with the same mother-tongue

Note: Estimated by adding a adding "fixed slopes" for every attribute level in every mother tongue.

## G.5 By Respondents' Political Attitudes




Moderator variable: Importance of victory
Respondents: All other (504), Extremely important (2016)
Wald-test of nullity of sub-group differences in AMCEs:
Score (0-1) (F: 11; p: 2.3e-18), Forced choice (0/1) (F: 7.8; p: 1.6e-12)

Figure A32: Pooled Experiments I and II: By importance of victory

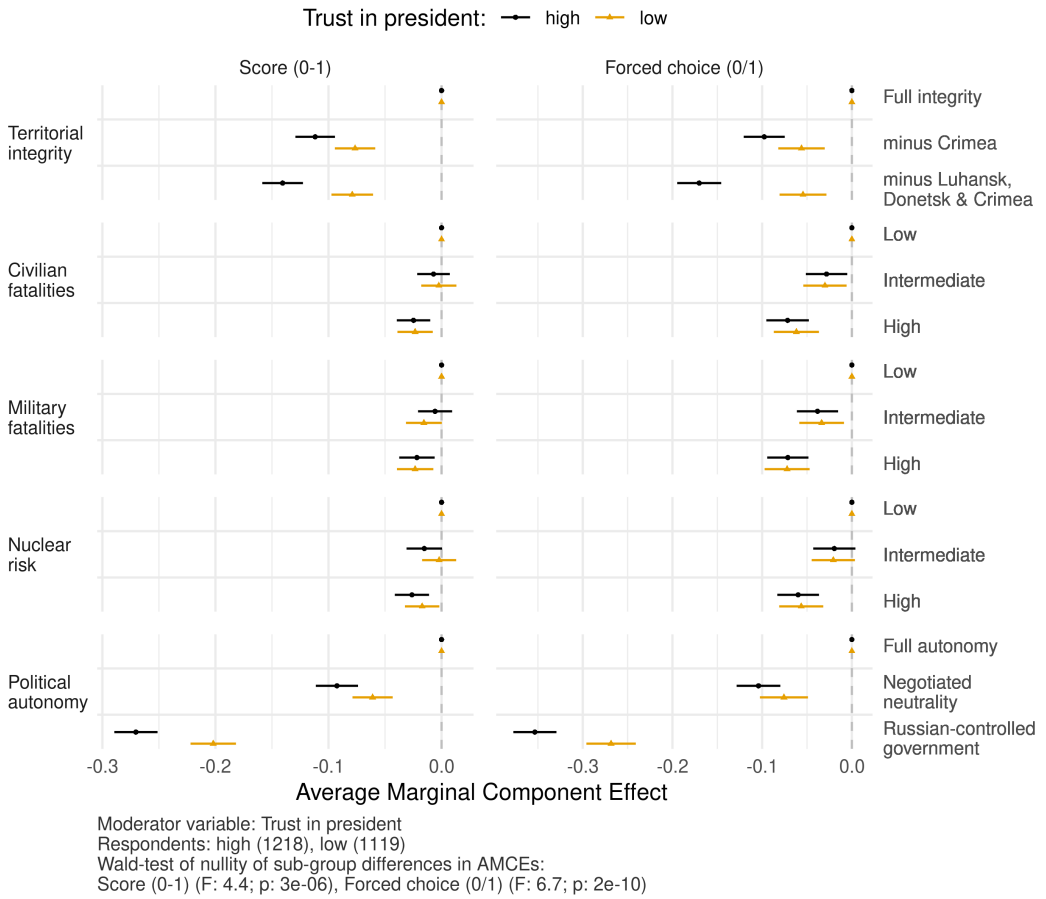



Figure A33: Pooled Experiments I and II: By trust in president

# H Within-Location Change in AMCEs

As preregistered, we assess whether greater local exposure to the war correlates with changes in AMCEs *within* locations since 2022. This would be consistent with findings by Bartusevičius et al. (2023) who reported from a survey in spring 2022 that respondents' resistance to Russia increases with exposure to the war. To study this question, we account for fixed location- and experiment-level attribute effects, thus only capturing changes in AMCEs that are due to changes in locations' characteristics over time. Reported in Appendix H, we do not find that locations' (1) exposure to shelling, and greater changes in their respondents' (2) reported affectedness or (3) that of their family members is systematically correlated with greater positive or negative changes in AMCEs.[3] To avoid false positive findings, we refrain from interpreting marginally significant changes that are not consistently estimated across outcomes and measures of exposure to violence.

This analysis comes with a number of important caveats that preclude a clear conclusion of the effect of exposure to violence on responses in our experiment.

[3]Diverging from the pre-registration, we do not assess the correlation of changes in AMCEs with PSU-level occupation by Russian forces since only 3 PSUs were occupied at any point since February 2022.

Clearly, using repeated cross-sections from the same locations is fraught with more inferential problems than using individual-level panel data. In particular, our samples in 2022 and 2024/2025 differed slightly in their composition. Respondents might also have moved in or out of the locations in which we sample, often as a result of the violence brought on by the war. Lastly, the exposure to violence at the local level might have been caused by some factors which themselves could affect attitudes toward the war, for instance, changes in the strategic value of a settlement.

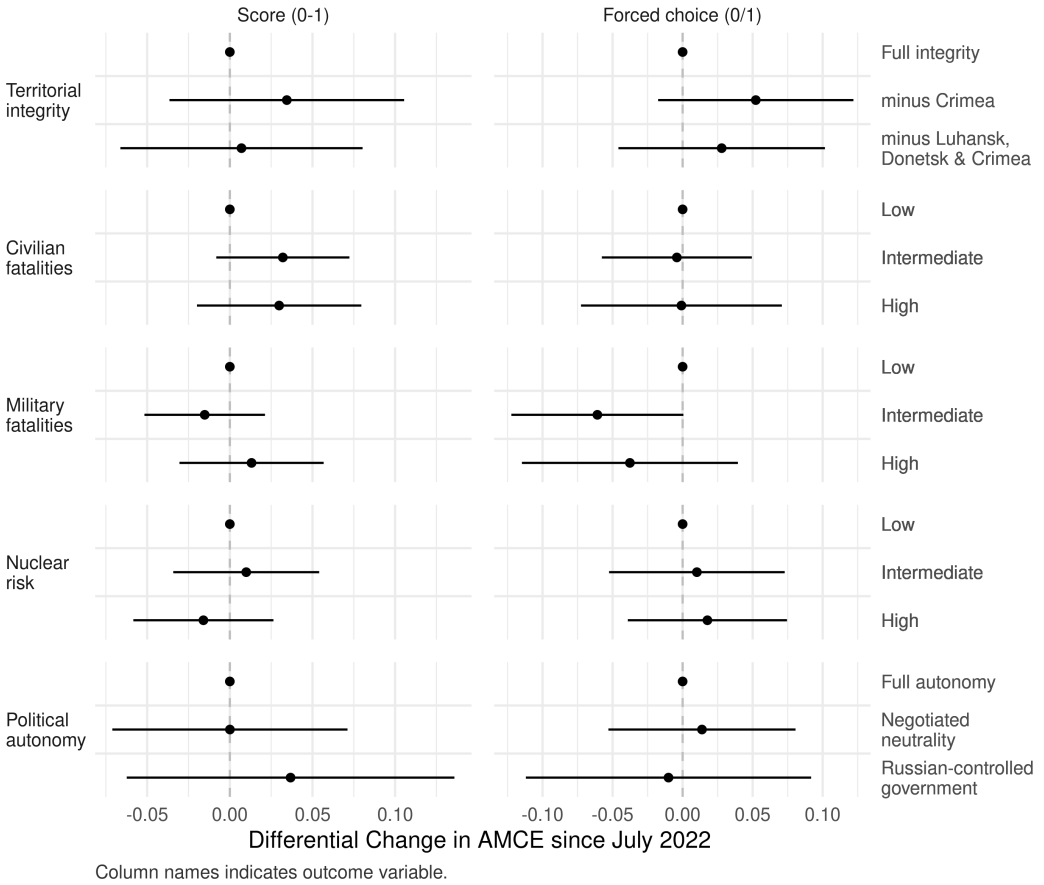



Figure A34: Association of close-by shelling events (0/1) over the past 24 months before December 2024 and within location changes in AMCEs

Note: Pooling Experiments 0, I, and III. Estimated by adding a adding "fixed slopes" for every attribute level in every PSU and experiment.

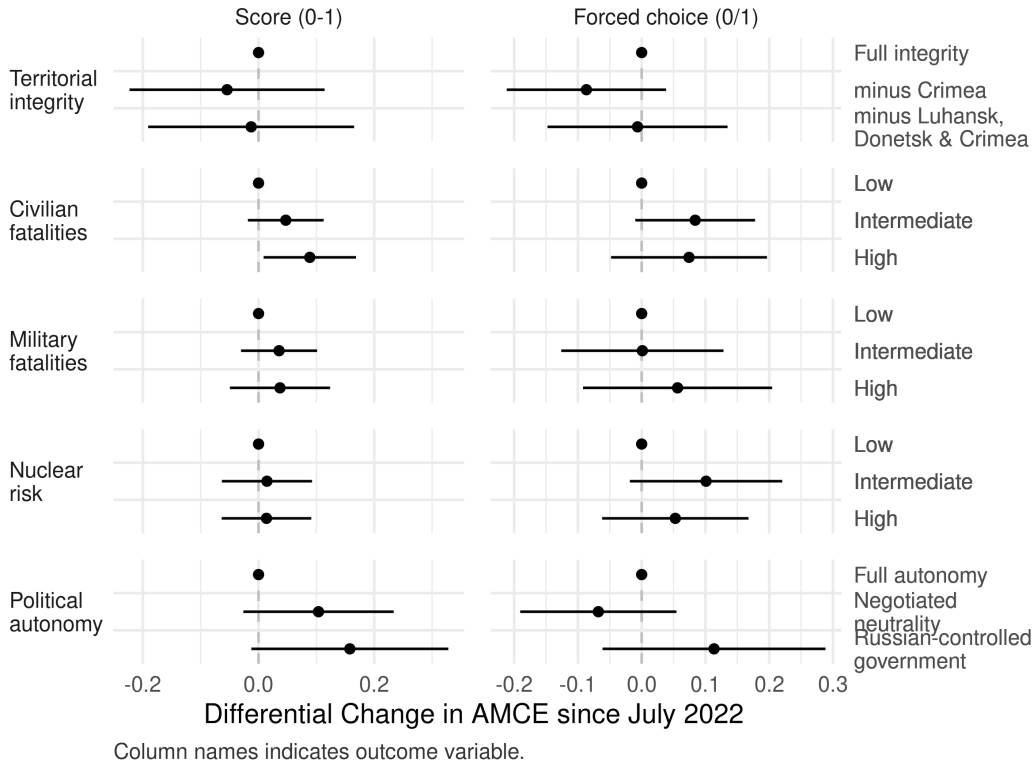



Figure A35: Association of changes in respondents' average affectedness and within location changes in AMCEs

Note: Pooling Experiments 0, I, and II. Estimated by adding a adding "fixed slopes" for every attribute level in every PSU and experiment.

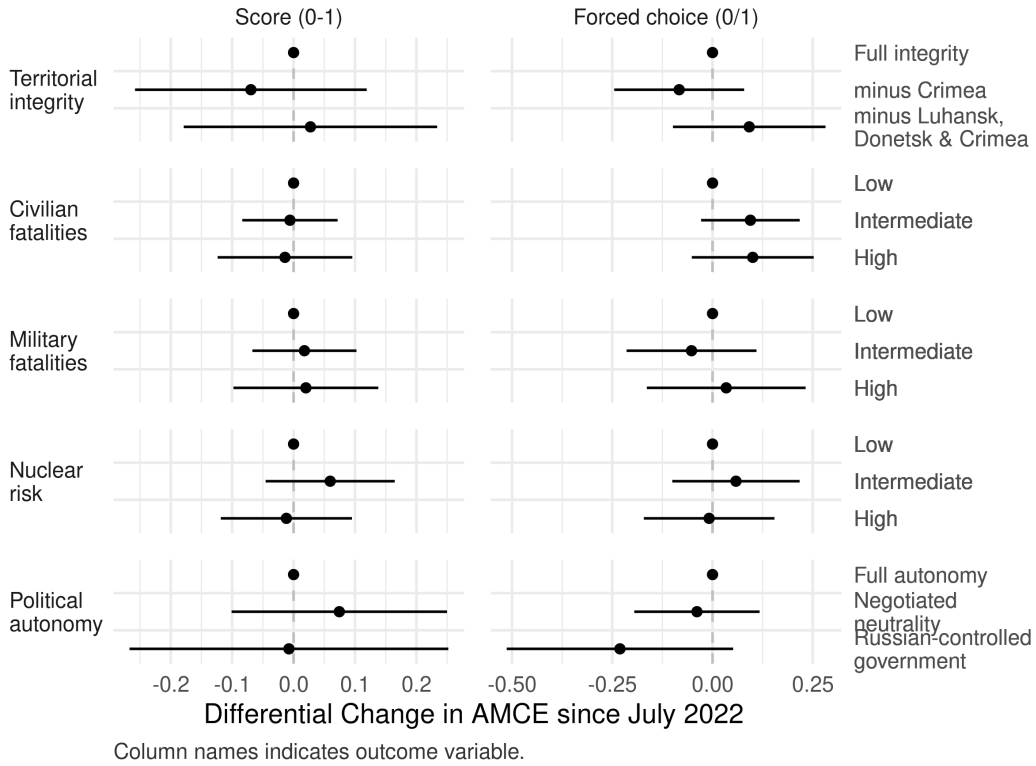



Figure A36: Association of changes in the average affectedness of respondents' family members and within location changes in AMCEs

Note: Pooling Experiments 0, I, and II. Estimated by adding a adding "fixed slopes" for every attribute level in every PSU and experiment.

# I Attribute Ranking and Categorical Resistance

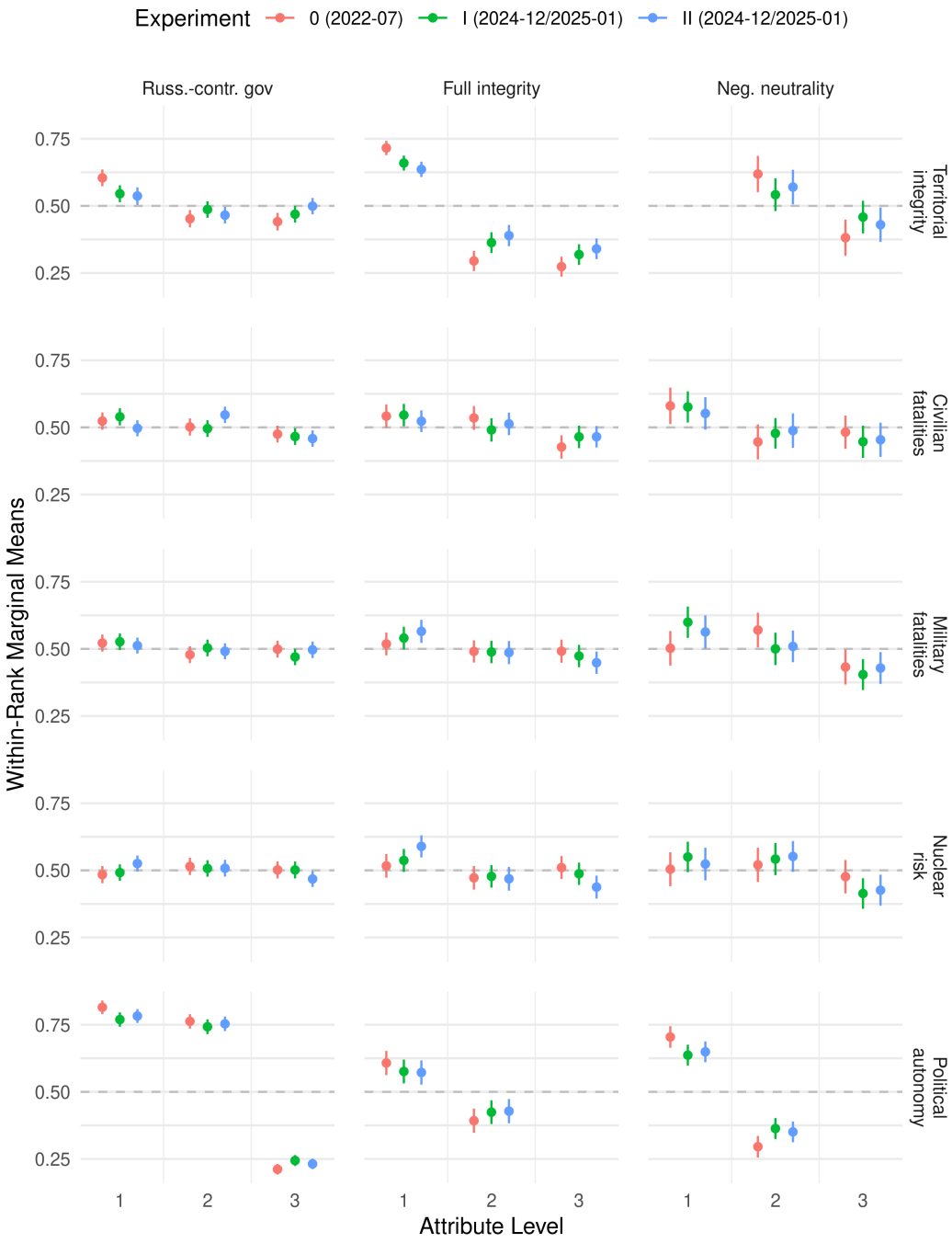



Figure A37: Within-Rank Marginal Means, all experiments

# J References (Appendix)

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Bartusevičius, Henrikas, Florian Van Leeuwen, Honorata Mazepus, Lasse Laustsen and Andreas Forø Tollefsen. 2023. "Russia's attacks on civilians strengthen Ukrainian resistance." *PNAS nexus* 2(12):pgad386.

Dill, Janina, Marnie Howlett and Carl Müller-Crepon. 2024. "At Any Cost: How Ukrainians Think about Self-Defense Against Russia." *American Journal of Political Science* 68(4):1460–1478.

Raleigh, Clionadh, Andrew Linke, Håvard Hegre and Joakim Karlsen. 2010. "Introducing ACLED: an armed conflict location and event dataset: special data feature." *Journal of Peace Research* 47(5):651–660.