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

Janina Dill* Marnie Howlett† Carl Müller-Crepon‡

February 25, 2025

Abstract

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

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

*Blavatnik School of Government, University of Oxford and Nuffield College. Corresponding author: janina.dill@bsg.ox.ac.uk. We thank the Ilko Kucheriv "Democratic Initiatives" Foundation and the Kyiv International Institute of Sociology for invaluable support in carrying out this research and acknowledge generous research funding from the John Fell OUP Research Fund. We also thank Ukrainian colleagues who provided feedback on the survey. All remaining errors are ours.

†Oxford School of Global and Area Studies and Department of Politics and International Relations, University of Oxford

‡Department of Government, London School of Economics and Political Science.

1 Introduction

How do Ukrainians view the costs and benefits of self-defense against Russia? In July 2022, we found that Ukrainians were categorically opposed to any strategy for conducting the war that opened the door to Russian political control or that involved territorial concessions. Through a conjoint survey experiment, we showed that Ukrainian respondents were remarkably insensitive to the costs of fighting Russia. Expectations of high numbers of civilian and military deaths and a risk of nuclear escalation barely depressed their support for strategies that were predicted to imply such costs. Moreover, we found that respondents made no trade-offs between the costs and benefits of different strategies for fighting the war and simply preferred strategies with acceptable outcomes, namely those that avoided concessions on political autonomy or territorial integrity. The surveyed Ukrainians took a categorical stance on resisting Russian aggression.

Two and a half years later, we set out to replicate this study to uncover the most current views of Ukrainians regarding their defensive war against Russia. In the summer of 2022, a successful Ukrainian counteroffensive (Watling, Danylyuk and Reynolds 2024) may have given respondents hope that Ukraine could win the war on the battlefield if it was willing to pay the price. Two years later, battle-lines have barely moved as Russian troops have fortified their defense around captured Ukrainian territories (Ludvik and Bahensky 2024). Moreover, the new U.S. administration undercut its long-standing partnership with Ukraine, with several high-ranking members, including the President, publicly making concessions on behalf of Ukraine. Indeed, the Trump administration initiated direct "peace" talks with Russia without involving Ukrainian representatives, raising the specter of a forced deal (Nixey 2025). In a frozen conflict with US military aid less certain, do Ukrainians still prefer self-defense at any cost?

In this short paper, we summarize the results of an in-person survey experiment conducted between December 2024 and January 2025, which replicates our previous study (Dill, Howlett and Müller-Crepon 2024*a*) and tests a modified version

with stronger treatments and a longer time-horizon. The remainder of this note therefore resembles the replicated study, with some adjustments that account for developments in the war from July 2022 to December 2024.[1] The main difference in the design of the replication study is that we administered the original conjoint design as Experiment I to only half of our respondents ($N_{Exp1} = 1290$), yielding a slightly larger sample than for our "Experiment 0" in July 2022 ($N_{Exp0} = 1160$). This original design asks respondents to choose between strategies of pursuing the war with a time-horizon of three months, possible territorial and political outcomes of successful self-defense, and costs in terms of civilian and military fatalities as well as nuclear escalation risks that were realistic in July 2022. To test the robustness of this design and its results, Experiment II ($N_{Exp2} = 1290$) features a time-horizon of one year, unchanged potential outcomes of self-defense, and substantially increased cost attributes that reflect the costs that the Ukrainian population has had to bear since the full-scale invasion in February 2022. This particularly includes a substantially increased number of civilian and military deaths and a growing risk of a nuclear attack.

Some further differences in the design of this replication study concern the sampling frame. Given the importance of the sizable population of internally displaced persons (IDPs) in Ukraine, we included them in the replication effort in difference to the survey in 2022. We were also able to conduct the survey in two additional eastern oblasti, but conducted interviews in 98% of the locations covered in 2022. We show that these changes did not substantively affect the results. We lastly preregistered testing the hypothesis of *categorical* resistance which an exploratory, non-preregistered analysis in the previous study found to be driving much of the response patterns.

The key findings of our survey experiments are as follows. Compared to July 2022 (Dill, Howlett and Müller-Crepon 2024*a*), Ukrainians in December 2024 and January 2025 still resist a Russian-controlled government even at very high costs

[1] Given the fast pace of developments, the content of this note contains text from the pre-analysis plans of the original and replication studies.

of the war. Territorial concessions exert a smaller but still sizable negative effect on ratings and choices of strategies, effects which remain larger than those of even the highest costs of fighting the war. Importantly, we find consistent findings in Experiments I and II that do not differ statistically from each other, suggesting that our findings are robust to significant increases in the costs of the war. We continue to find no evidence that Ukrainians' support for the war follows the logic of proportionality, meaning they do not make trade-offs between the costs and benefits of self-defense, accepting higher casualties for a better projected outcome or more painful concessions to reduce the costs of war. Instead, evidence indicates categorical choices against a Russian controlled government and in favor of full territorial integrity, though the latter pattern is weaker than in 2022.

Our estimation of heterogeneous treatment effects is overall similar to patterns found in 2022 and suggests more resistance to political and territorial concessions among the ethnically Ukrainian part of the sample, those less affected by the war, and those trusting the president or deeming victory in the war extremely important. We do not find evidence that changes in the effects of the conjoint attributes since 2022 correlate with locations' exposure to the war.

This note proceeds as follows. Section 2 presents the theoretical expectations as preregistered in December 2024 (Dill, Howlett and Müller-Crepon 2024*b*). Section 3 summarizes the experimental design and sampling frame. Section 4 discusses the main results and Sections 5 and 6 highlight heterogeneous treatment effects and discuss the null-finding on location-level effect changes, before we conclude.

2 Theoretical Expectations and Hypotheses

What are the benefits of Ukrainian self-defense? Rather than varying the likelihood of victory, we follow Dill, Howlett and Müller-Crepon (2024*a*) and vary the outcome of the war after three additional months (Experiment 1) and one additional year (Experiment 2) of fighting along two dimensions: political autonomy and territorial integrity. For some Ukrainians, the main goal may be a ceasefire

and continued Russian influence in Ukraine may be tolerable, while others may consider only a total withdrawal of Russian troops an acceptable outcome. In light of the previous results, we expect that a ceasefire with a Russian-controlled government attracts substantively less support than the withdrawal of Russian forces. Moreover, we expect that conceding Ukrainian neutrality is less popular than a restoration of Ukraine's sovereignty permitting the pursuit of NATO and EU membership.

Besides political autonomy, Ukrainians are also fighting for territorial integrity. We expect that many citizens are opposed to making territorial concessions to Russia (Dill, Howlett and Müller-Crepon 2024*a*). Yet, the question whether currently occupied parts of Ukraine, such as the regions of Crimea, Donetsk, and Luhansk, can be recaptured looms large given that frontlines have hardly moved over the past two years. We expect that upfront concessions have a negative effect on support for a strategy and that Ukrainians are more likely to support conceding Crimea than conceding Crimea as well as Donetsk and Luhansk.

When it comes to the costs of self-defense, we focus on costs that are particularly important to Ukrainians, mainly the loss of and risk to life. We expect that higher death tolls among both Ukrainian civilians and Ukrainian fighters depress support for a strategy. In our previous experiment, we did not find that Ukrainian respondents prioritize sparing civilians over sparing those who defend the nation by fighting or vice versa. A third cost that has been particularly salient in international calls for concessions is the risk of nuclear escalation (Mearsheimer 2022). We hence expect that a higher risk of nuclear escalation has a negative effect on support for a strategy.

War support, particularly preferences for different potential strategies for fighting a war in light of their costs and benefits, can follow two alternative logics. A logic of proportionality implies that respondents make a trade-off between the anticipated costs of self-defense and the projected benefits. Just war theory demands that a defensive war must have a reasonable chance of succeeding. If the expected

costs of self-defense are disproportionate to the reasonably achievable benefits of resistance, even a war with a just cause can become morally impermissible (Hurka 2005; McMahan 2010). International law is less clear about what the principle of proportionality implies but likewise demands that a defending nation calculates the costs and benefits of resistance (Haque 2012).

The principle of proportionality suggests then that the support-depressing effect of various costs should be weaker, the more beneficial the expected outcome. This yields the expectation that the more desirable the projected outcome of a strategy after three months or a year, the weaker the negative effects of higher civilian and military death tolls and nuclear escalation risk. Similarly, the fewer territorial concessions a strategy involves, the weaker the support depressing effect of costs in civilian and military lives and nuclear risk. If attitudes follow a proportionality logic, in other words, we expect not only that costs depress war support while benefits enhance support for a strategy, but an interaction between the effects of costs and benefits.

In contrast, a categorical stance implies that war support depends on whether a strategy leads to a tolerable outcome, regardless of the costs. It is a rare position in moral philosophy associated predominantly with the famous just war theorist Michael Walzer; that in the face of evil, we must sometimes close our eyes to the consequences of resistance (Walzer 2008). We previously found that Ukrainians did not view their war of self-defense in consequentialist terms, constrained by the principle of proportionality. Instead, Dill, Howlett and Müller-Crepon (2024*a*) showed their strong and homogeneous preference for resisting Russian aggression at any cost. They were hence aligned with their President who, at the time, categorically stated, "[w]e will continue fighting for our land, whatever the cost". If this logic still prevails, we expect that that respondents would support strategies depending only on whether they have an acceptable outcome in terms of territory or political autonomy and seek to reduce costs only when the categorically rejected or preferred outcome is invariant in or not part of the choice set. [2]

[2]Appendix A contains the precise wording of all hypotheses which remain unchanged from the

3 Research design and sampling

Experimental design

We follow Dill, Howlett and Müller-Crepon (2024*a*) and implement two conjoint survey experiments that ask respondents to choose between different strategies to pursue the war against Russia over the coming months. The fully randomized nature of conjoint designs can reduce social desirability biases by offering many different reasons to choose for or against a given strategy. Addressing such biases is particularly important for war-time polls where stakes and fears of social sanction are high (Rickard et al. 2023). Previous research finds that conjoints are indeed successful in reducing social desirability biases (Horiuchi, Markovich and Yamamoto 2022). We do note though that the conjoint design is likely not fully immune to the issue, in particular where a war of defense has been fought at high military and civilian costs for almost three years. To further mitigate social desirability bias we therefor administered the survey through tablets, where respondents could register their preferences without involvement of the enumerator.

We present each respondent of our survey with one of two conjoint experiments which are close variants of each other. Each respondent first read a short vignette asking them to "[p]lease imagine that President Zelensky and his team are considering different military-political strategies for pursuing the war over the next 3 months" or "[...] over the next year", for Experiment I and II respectively. We then showed respondents four pairs of two strategies each (8 strategies in total) with different predicted consequences over this time horizon.

On the side of benefits of self-defense, consequences concern outcomes of the war regarding Ukraine's territorial integrity (Attribute 1) and its political autonomy (Attribute 5). We reflect the costs of self-defense in terms of civilian fatalities (Attribute 2), military fatalities (Attribute 3), and the risk of nuclear escalation (Attribute 4). Tables 1 and 2 show the attributes and attribute levels of the conjoint

original study with the exception of H7a and H7b on categorical resistance and additional hypotheses on affectedness by the war.

Table 1: 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 2: 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

profiles for Experiments I and II, respectively.

While Experiment I has the same attribute levels as the original conjoint in Dill, Howlett and Müller-Crepon (2024*a*),[3] Experiment II modifies the setup in 3 important ways to test whether results are robust to raising the costs of the pursuing self-defense against the invasion. We (1) increase the time horizon of strategies from three months to one year, (2) increase military fatalities, originally varying between 6'000 and 24'000, to vary between 40'000, 80'000, and 160'0000. Ukrainian military fatalities amount to approximately 80'000 since the start of the war such that the modified design represents a much stronger treatment. Lastly, (3) we increase the risk of a nuclear strike to vary between 5, 15, and 45 percent, again increasing the strength of the treatment without diverging, for ethical reasons, too far from expert assessments that have been updated since July 2022.

The attributes of each strategy in a conjoint pair are independently drawn from the set of 3 levels for each attribute. As in Dill, Howlett and Müller-Crepon (2024*a*), we randomize the order of Attributes 2 to 4 at the level of respondents.

Respondents were lastly asked to score each strategy on a scale from 1 to 6 which we normalize to 0 to 1 and to make a forced choice (0/1) between them. We hence have two outcomes of interest, a rating and a forced-choice outcome.

Sampling and Survey Implementation

As in the original study, the sampling strategy for the survey follows a randomized, four-stage design in each region (oblast). First, we stratify our sample by oblasts 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 Sociology since the beginning of the war. We exclude Donetsk, Luhansk, and Kherson oblasti and Crimea from the sample. Second, within each oblast we stratify by urban/rural PSUs (voting precincts), allocating a total of 128 PSUs. Third, within each stratum, PSUs are selected randomly

[3]The only changes in the text reflect that fatality levels are compared to the "first three months of the war" rather than "so far" as was stated originally in 2022.

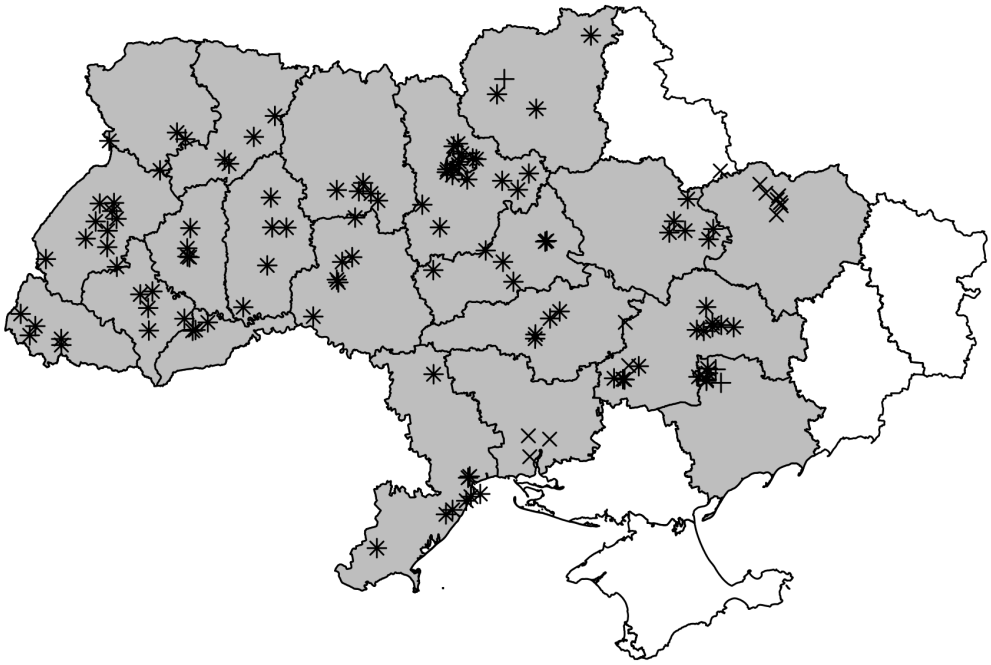
with a probability proportional to their size. We make use of the full (random) sample of PSUs already sampled in 2022 (Dill, Howlett and Müller-Crepon 2024*a*) of which we were able to revisit 114 out of 116 PSUs,[4] henceforth Sample A. While Sample A is useful for replication purposes it is not necessarily representative of the 2024 population. We thus add 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 produces Sample B with 125 PSUs.[5] Figure 1a shows the location of PSUs in relation to the incidence of violent attacks by Russia since the beginning of the war in Figure 1b.

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

Appendix B contains the demographic characteristics of our sample. Overall, we sample slightly more women (55%) than men due to ongoing conscription. 38% of the sample live in Ukraine's East. We also find that the samples for Experiments I and II are virtually identical in their demographic composition. As would be expected, Sample B differs slightly from Sample A due to the inclusion of additional PSUs in the east. In particular, Sample B contains slightly more Russian-speaking respondents than Sample A with 25 vs. 21% interviews conducted in Russian. Lastly, Sample A differs from the sample interviewed in July 2022 among other reasons due to the inclusion of IDPs. Compared to the 2022 sample, respondents in Sample A are slightly more educated (37 vs. 33% higher education), are less likely

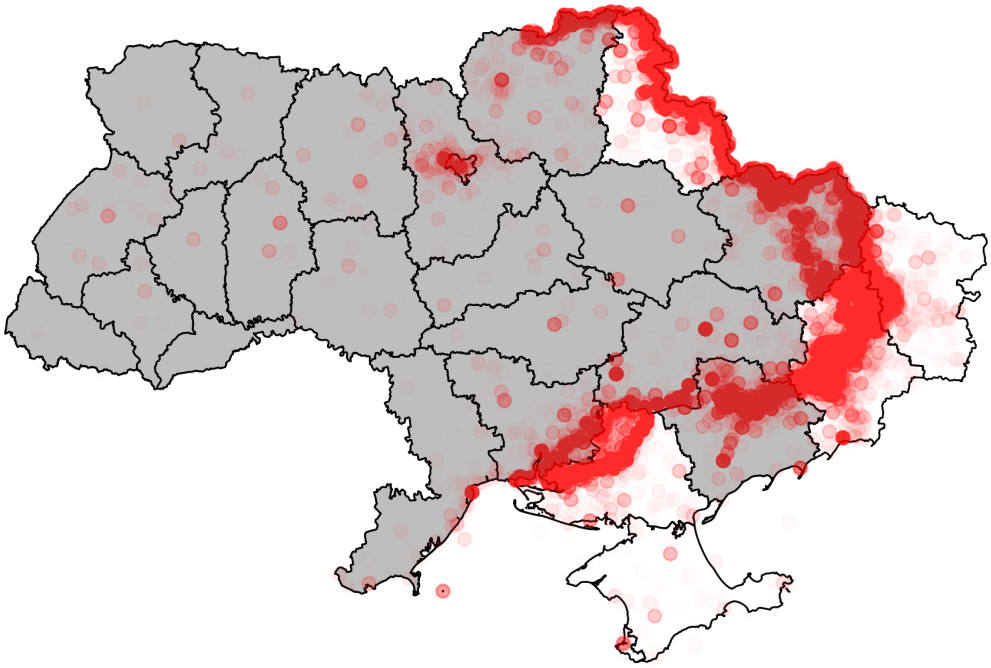
[4]Two PSUs in Dnipropetrovsk had to be dropped due to safety concerns and the consequences of the destruction of the Kakhovka dam.

[5]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 Army and its allies, February 2022 to December 2024.

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

Figure 1: Primary sampling units and conflict events

to have children (69 vs 73%).

Importantly, we sample as high a share of respondents who report to self-identify as ethnic Russians (≈4%) and have Russian as their mother-tongue (≈14%) in 2024/2025 as in 2022. This highlights that any undercoverage of this crucial demographic (see e.g. Rickard et al. 2023) has not increased over time. However, likely due to increasing social biases that lead to increasing use of Ukrainian as a lingua franca, respondents in the 2024/2025 Sample A were 9 percentage points less likely to conduct the interview in Russian than in 2022 (21% vs 30%).

Ethical considerations

Given the ongoing war, a great deal of attention was paid to the ethics and sensitivity of the survey and its implementation (Howlett and Lazarenko 2023). In line with the approved protocol of Oxford University's ethical review board, all respondents provided their voluntary and informed consent prior to their participation, and were made aware that their information would remain anonymous and that they could withdraw from the study at any time. We also prioritized the safety and security of all research stakeholders throughout the entire research process. Our Ukrainian partners were thus assured that the requirement of more time, or failure, to complete interviews due to the security situation would (and did) not have any monetary consequences for them. All enumerators were also trained to ensure both respondents' and their own safety during data collection (Cronin-Furman and Lake 2018) and one of the authors was in regular contact with firm implementing the survey, the Kiyv International Institute of Sociology (KIIS), at all times while the survey was fielded.

Estimation strategy

Our estimation strategy follows closely Dill, Howlett and Müller-Crepon (2024*a*). To assess the effect the baseline effect of each attribute level, we estimate Average Marginal Component Effects (AMCEs) with the first level of each attribute serv-

ing as the baseline category. We present these alongside co-occurence adjusted Marginal Means estimates (Leeper, Hobolt and Tilley 2020) which are more intuitive in their interpretation. We test hypotheses on interaction effects with AMCEs conditional on moderator values while testing for statistically significant differences between them. Lastly, we apply the ranking method presented in Dill, Howlett and Müller-Crepon (2024*a*) to assess in how far respondents make categorical choices between strategies with differing political and territorial concessions. Standard errors are clustered at the level of respondents throughout.

4 Results

For the most part, we restrict the discussion to results of both experiments in comparison with 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 respondents' scores coincide substantively, unless otherwise noted. The Appendix presents all additional results for reference.

Main results

Figure A4 presents the main estimates for AMCEs and Marginal Means for respondents' forced choice between strategies of pursuing the war. Note that low, intermediate, and high levels for military fatalities and nuclear risk imply very different values for Experiments I and II, with the latter treating respondents with much stronger costs of the war (see Tables 1 and 2).

Even though the modified Experiment II increases the costs of resistance substantively, it yields consistent results which do not overall differ in a statistically significant manner from results of Experiment I. We observe, if at all, a more negative reaction to the high nuclear risk attribute level in Experiment II compared to the original design – yet even that difference in AMCEs is small (4ppts) compared to the tripling of the treatment from a nuclear risk of 15 to 45%. We find no dif-

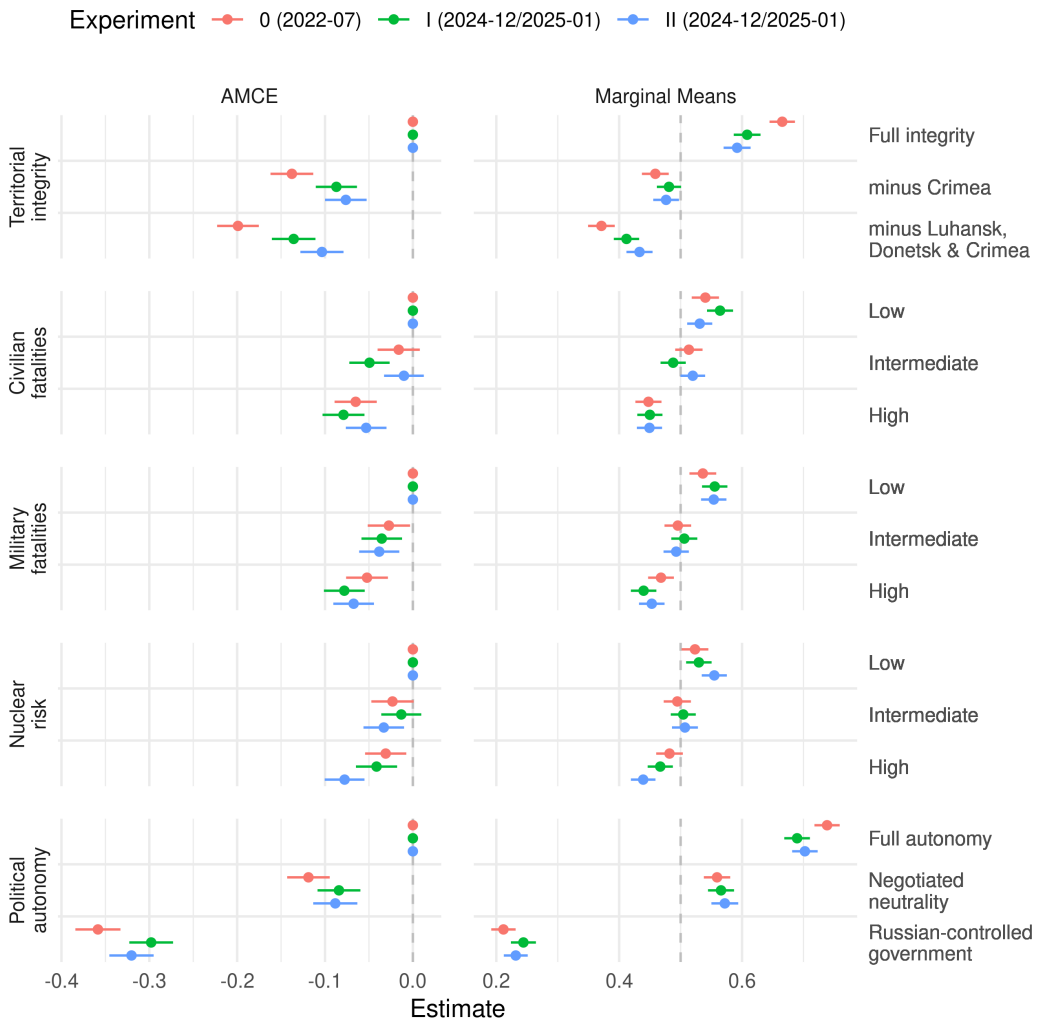


Figure 2: AMCEs and Marginal Means: Original results (July 2022) and Experiments I and II, Sample B

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

ferences in reactions to the differing "high" military fatality levels (24 vs 160k). An omnibus F-Test rejects the null of differences in AMCEs between Experiments I and II with un-adjusted p-values of .12 for the choice and .32 for the score outcomes, respectively. This suggests that the results of the experimental design are robust to large increases in strategies' costs. This increases our confidence that findings of categorical resistance are not explained by treatments on cost attributes that "are too weak" to reach proportional equivalence with the territorial and political con-

sequences of the war. The coincidence in results of the two experiments also allows us to economize some analyses and discussion and increasing statistical precision by pooling both experiments and estimating (conditional) AMCEs and Marginal Means across both.

The main differences emerge between results from 2022 (red) and those from the new wave of experiments in 2024/2025 (green/blue). We still observe large, negative effects of territorial and political concessions in Experiments I and II. Yet, their magnitude has decreased consistently by between 2 and 9 percentage points. We observe the largest decrease for concessions of Crimea and Luhansk/Donetsk which triggered comparatively less resistance in Experiments I and II (avg. AMCE of -12ppts) than in 2022 (AMCE -20ppts). The average AMCE of a Russian-controlled government decreased by 5ppts from -36ppts in 2022 to -31ppts in Experiments I and II. The most prominent changes on the cost attributes concern 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

Replicating the null-finding in Dill, Howlett and Müller-Crepon (2024*a*), we find no evidence that respondents forced choices of or scores for strategies reflect the logic of proportionality. In particular, such a logic would imply that lower benefits of resistance in terms of territorial integrity and political autonomy yield greater resistance to higher costs of the war, while better territorial and political outcomes should make respondents more willing to accept high costs. Yet, respondents choices to do not follow such a pattern. Figure 3 pools Experiments I and II and shows that AMCEs of cost attributes do not increase significantly or consistently with worse 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 points, if at all, in the opposite direction of less concern for the costs of the war. An omnibus Wald test rejects significant subgroup

differences with p-values of .35 and .60 for the interactions with levels of territorial integrity and political autonomy, respectively. Separate results for each experiment as well as from modeling cost attribute levels linearly to increase statistical power conform to this pattern (see Appendix D).

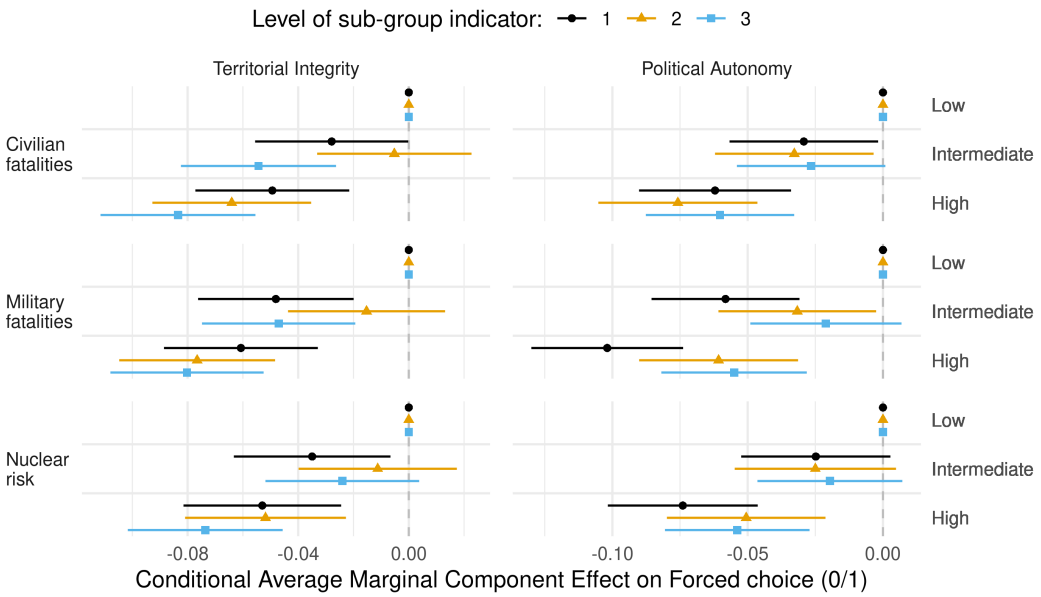


Figure 3: Stable effects of cost attributes 2-4 across levels of territorial integrity and political autonomy, pooling Experiments I & II.

Note: Using 2024 sample. An omnibus Wald test of significant subgroup differences yields p-values of .35 and .60 for the interactions with levels of territorial integrity and political autonomy, respectively.

Evidence for continuing categorical resistance

Instead of following a logic of proportionality, response patterns are still largely consistent with a logic of categorical resistance. A first test of that hypothesis consists in comparing the AMCEs of cost attributes in pairs with and without variation in attributes on territorial integrity and political autonomy. Closely resembling the original results, we observe that concerns for the costs of the war are comparatively unimportant (AMCEs <6ppts) as long as respondents can choose between better or worse territorial and political outcomes. Once the benefits of resistance to not vary, however, respondents do place importance weight on the costs of the war.

Using the ranking method introduced by Dill, Howlett and Müller-Crepon

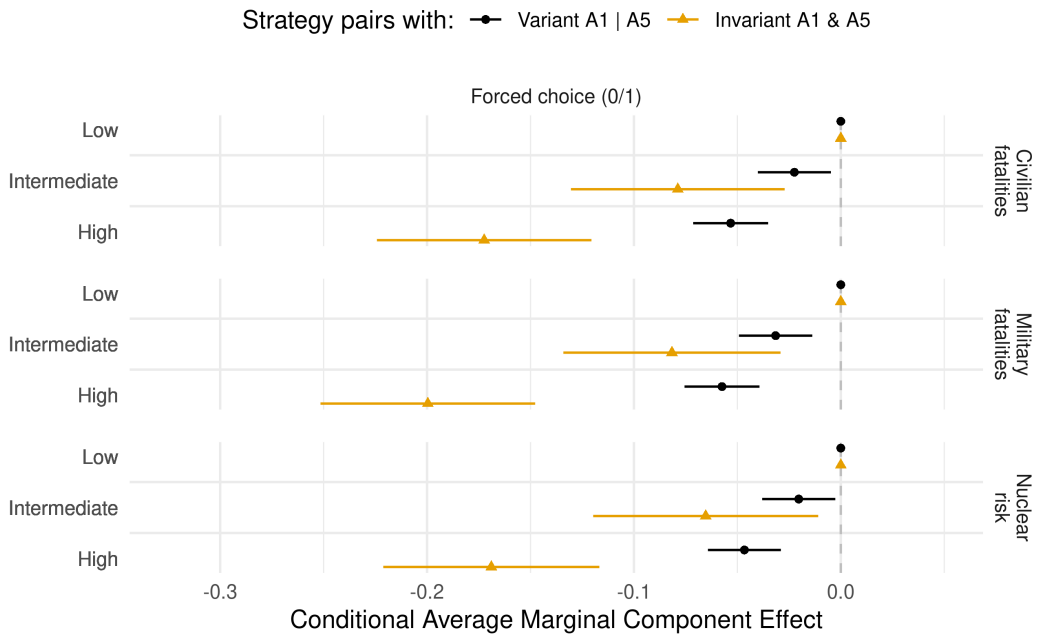


Figure 4: Effects of cost attributes 2-4 with and without pair-level variation in territorial integrity and political autonomy attributes, pooling Experiments I & II.

Note: Using 2024 sample. An omnibus Wald test of significant subgroup differences yields and F-statistic of 12.4, $p < .001$.

(2024*a*) we find a the same ranking among the three most important 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% of respondents in Experiment I and 77% in Experiment II do so (Figure 6). This is only marginally lower than the 79% who followed the same choice in 2022. The coincidence of results between the original and modified design with much higher costs of the war underscores the robustness of that finding.

Yet, once the Russian-controlled government is taken off the table in column 2 in Figure 5, results become more varied. The replication shows in particular reduced concerns over territorial concessions and political autonomy. While these are still

sizable (with, e.g., 65% choosing full territorial integrity regardless of the costs), these concerns are smaller than in 2022 when they guided most of the respective choices. These reductions come for the most part due to respondents' increased concerns for military fatalities and for the risk of nuclear escalation.

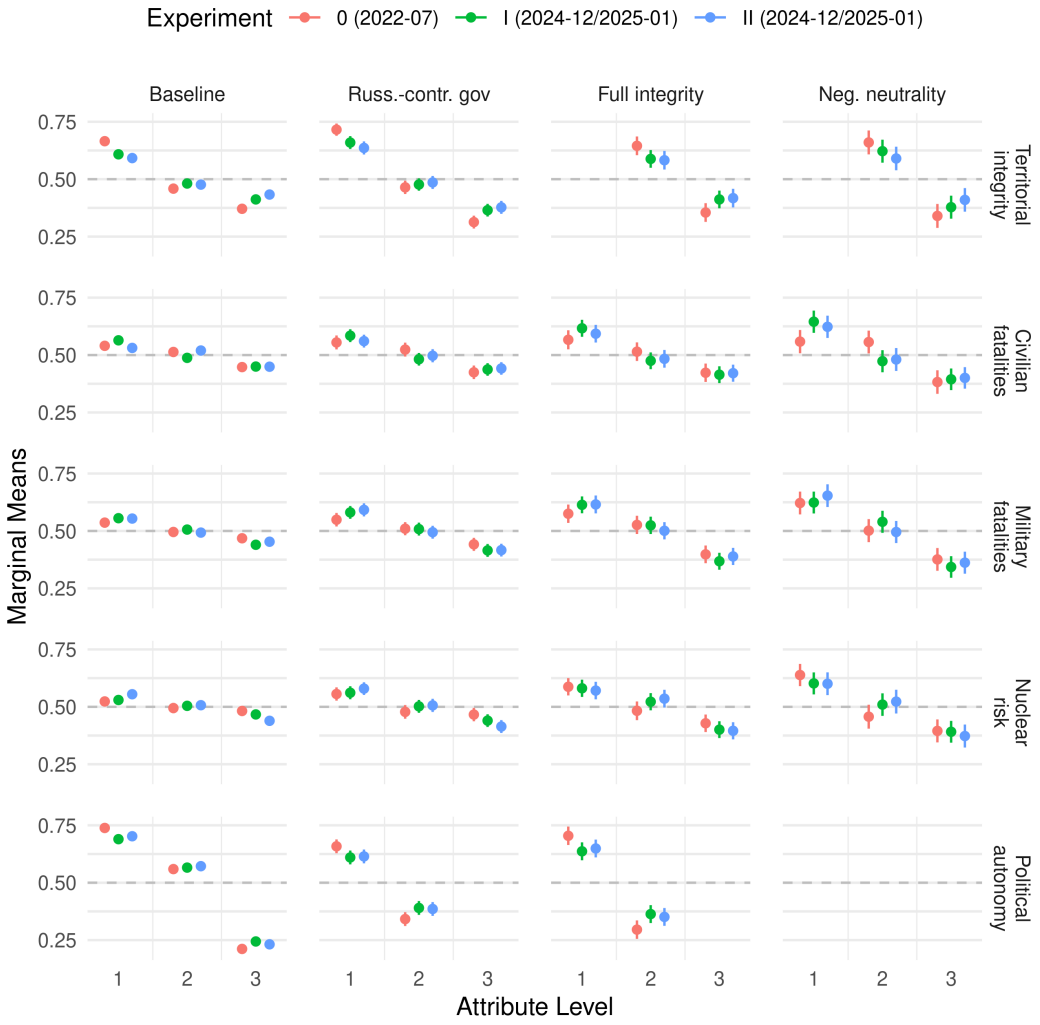


Figure 5: Nested Marginal Means, all experiments

5 Heterogeneous treatment effects

We analyze heterogeneous treatment effects along a number of demographic variables, measures of affectedness by the war, and political attitudes. Appendix G presents the relevant results, which we here summarize. It must be noted that the

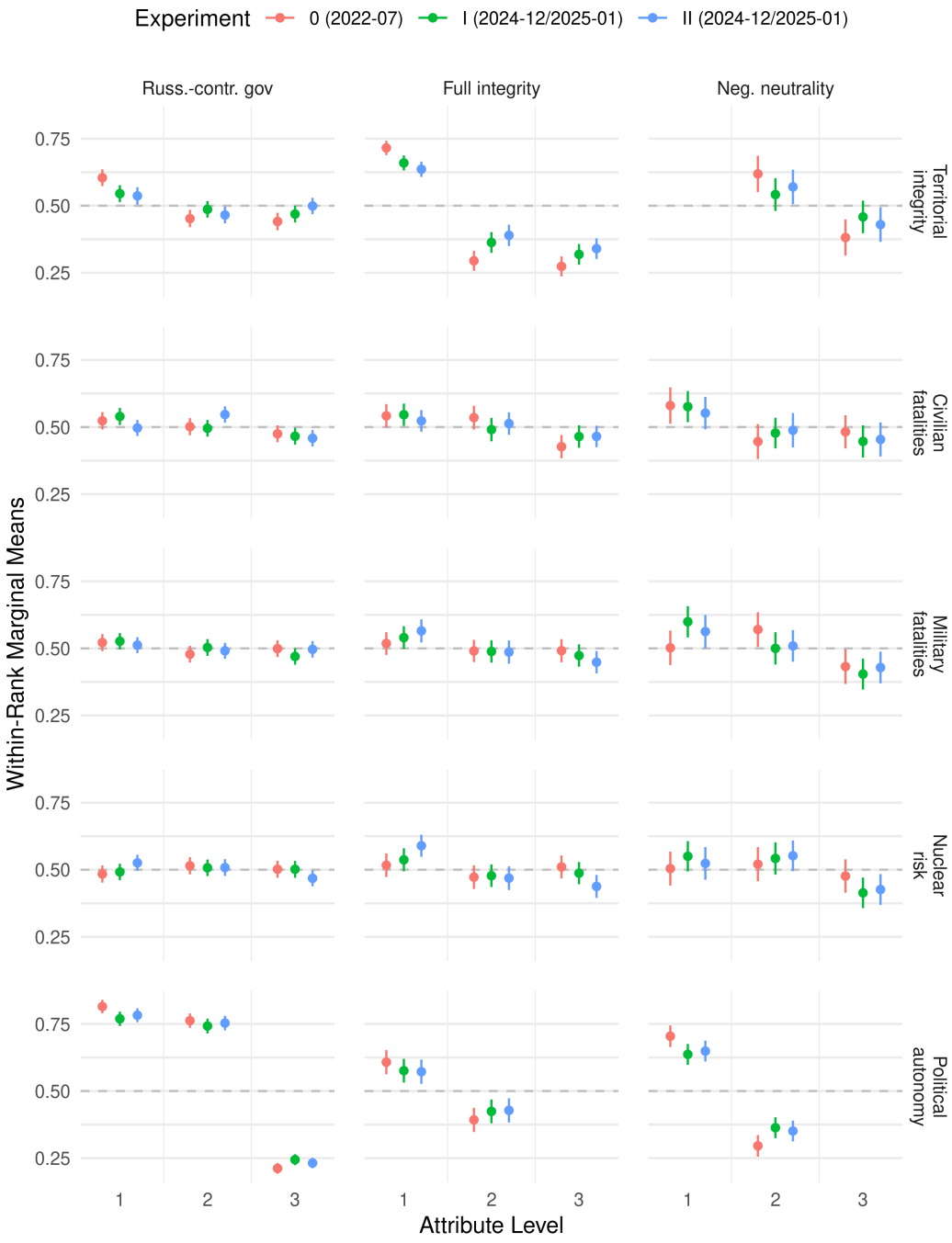


Figure 6: Within-Rank Marginal Means, all experiments

patterns in heterogeneous treatment effects are only to be understood *descriptively*, given that our research design does not allow for estimating causal interaction effects for respondents' characteristics.

Importantly, we do not find diverging effects between IDPs and non-IDPs in our sample. While the number of the former is small (N=121), they exhibit response patterns consistent with those of all other respondents. This suggests that findings in 2022 were not substantively biased by the exclusion of IDPs.

Three additional patterns are striking. First, respondents who answered the survey in Russian (N=631), self-identify as ethnic Russians (N=107), or speak Russian as their native language (N=353) 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 of negotiated neutrality compared to political autonomy. Their answers differ significantly from those of ethnic Ukrainians and Ukrainian-speakers ($p< .01$). We find that this interethnic divergence holds even when only comparing the AMCEs of respondents interviews in the same location. The finding is thus not just reflective of the fact that less Russian-speakers live in Western Ukraine where resistance against concessions is highest.

While the AMCEs for territorial integrity and political autonomy appear numerically larger in 2024/2025 than in 2022, this change is not statistically significantly different from 0. This is due to the decrease in statistical power that comes with estimating and comparing AMCIEs.

Second and similar in direction to results in 2022, those more affected by the war as measured by an affectedness score (see Dill, Howlett and Müller-Crepon 2024*a*), are less resistant to territorial and political concessions while not differing in their reaction to the cost attributes. This finding is particularly driven by respondents from Eastern Ukraine (N=951) and regions invaded by Russian forces in the direct aftermath of the full-scale in invasion in February 2022 (N=1292). Additional findings show that this finding is, again, not just a reflection of the greater proportion

of Russian-speakers in those areas but holds when only comparing AMCEs among respondents with the same mother-tongue.

Third and largely echoing results from 2022, we find a greater willingness to settle for territorial and political compromises among respondents who do not deem Ukraine's victory in the war "extremely important" for themselves personally (N=504 or 20%) and those who do not trust their president (N=1119 or 42%).

6 Within location-changes over time

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 to increase 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.[6] 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. 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

[6]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.

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.

6.1 Robustness checks

For completeness, we conduct the same robustness checks as Dill, Howlett and Müller-Crepon (2024*a*) 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*a*), 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.

7 Conclusion

"They may make a deal, they may not make a deal. They may be Russian some day, or they may not be Russian some day."[7] With this statement about Ukrainians, President Trump alerted the world in February 2025 that he was pursuing a "deal" with Russia to end the war in Ukraine, without direct involvement of Ukraine's President Zelensky. He also thereby revealed that he was entering talks about the future of Ukraine without red lines. His Secretary of Defense, Pete Hegseth, subsequently made clear that the Trump administration will demand painful concessions from Ukraine to bring Russia's war to an end: "We want, like you, a sovereign and prosperous Ukraine. But we must start by recognizing that returning to Ukraine's pre-

[7] Agence France-Presse, 11. February 2025.

2014 borders is an unrealistic objective."[8] Hegseth also bluntly ruled out Ukraine's NATO membership, meeting a central Russian demand before formal negotiations had even begun.

Do Ukrainians accept that, for their country, territorial integrity is "unrealistic"? Are they ready to give up NATO membership and see their pursuit of strategic and political integration into the West curtailed? What do they think about living under Russian control? Whether a democratically accountable Ukrainian government can afford to consent to a deal depends on what Ukrainians want. If Ukraine is forced into a settlement that is wildly out of step with popular preferences, it may not be worth the paper it is printed on. Ukrainians may well find a way to keep fighting without US support, turning any peace plan into a de-stabilizing short-term pause than a sustainable end to the war. The views of the Ukrainian people are in particular critical for the moral and legal legitimacy of any negotiated settlement that compromises the country's political autonomy and territorial integrity as reward for Russia's aggression.

To assess Ukrainians' attitudes toward the war, we replicated a conjoint experiment from July 2022 (Dill, Howlett and Müller-Crepon 2024*a*) in December 2024 and January 2025. Our findings show that Russian control of Ukraine's government remains a red line that Ukrainians oppose as strongly as ever. They prefer resistance at any cost to a Belarus model of Russian influence. When the all-out war began in 2022, Ukrainians were equally united against territorial concessions and strenuously opposed to giving up possible NATO membership, regardless of the sacrifices that continued resistance would demand of them. Now, three years into the full-scale war, we find that opposition to such concessions has weakened – but by no means disappeared. In addition, we show some heterogeneity with ethnic Ukrainians, those less affected by the war, and politically more aligned with the government showing greater opposition to concessions. But while some Ukrainians are inching toward accepting territorial concessions and political neutrality,

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

they are far from ready to accept a deal that opens the door Ukrainians ″being Russian one day″.

References

Abramson, Scott F, Korhan Kocak, Asya Magazinnik and Anton Strezhnev. 2020. "Improving preference elicitation in conjoint designs using machine learning for heterogeneous effects." *Unpublished Working Paper* .

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.

Cronin-Furman, Kate and Milli Lake. 2018. "Ethics abroad: Fieldwork in fragile and violent contexts." *PS: Political Science & Politics* 51(3):607–614.

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

Dill, Janina, Marnie Howlett and Carl Müller-Crepon. 2024*b*. "Do Ukrainians Continue to Prefer Self-Defense Against Russia At Any Cost?" *OSF Pre-Analysis Plan. Available at* `https://osf.io/myqw9.` .

Haque, Adil Ahmad. 2012. "Proportionality (in war)." *International Encyclopedia of Ethic* .

Horiuchi, Yusaku, Zachary Markovich and Teppei Yamamoto. 2022. "Does conjoint analysis mitigate social desirability bias?" *Political Analysis* 30(4):535–549.

Howlett, Marnie and Valeria Lazarenko. 2023. "How and when should we (not) speak?: Ethical knowledge production about the Russia–Ukraine war." *Journal of International Relations and Development* 26:722–732.

Hurka, Thomas. 2005. "Proportionality in the morality of war." *Philosophy & Public Affairs* 33(1):34–66.

Leeper, Thomas J, Sara B Hobolt and James Tilley. 2020. "Measuring subgroup preferences in conjoint experiments." *Political Analysis* 28(2):207–221.

Ludvik, Jan and Vojtech Bahensky. 2024. "The Russia-Ukraine frozen conflict: Evidence from an expert survey." *Comparative Strategy* 43(2):104–117.

McMahan, Jeff. 2010. *Humanitarian intervention, consent, and proportionality*. Oxford University Press New York pp. 44–72.

Mearsheimer, John J. 2022. "The causes and consequences of the Ukraine crisis." *The National Interest* 23:2022.

Nixey, James. 2025. "It's not too late for the US to back Ukraine – for its own benefit." Chatham House.

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.

Rickard, Kit, Gerard Toal, Kristin Bakke and John O'Loughlin. 2023. "Polling during wartime: Challenges and lessons from Ukraine.".

Walzer, Michael. 2008. *Arguing about War*. Yale University Press.

Watling, Jack, Oleksandr V Danylyuk and Nick Reynolds. 2024. "Preliminary Lessons from Ukraine's Offensive Operations, 2022–23." *London: Royal United Services Institute* .

Supplementary Material

At Any Cost:
How Ukrainians Think about Self-Defense Against Russia

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.

B Summary statistics

Table A1: 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 A2: 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 A3: 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

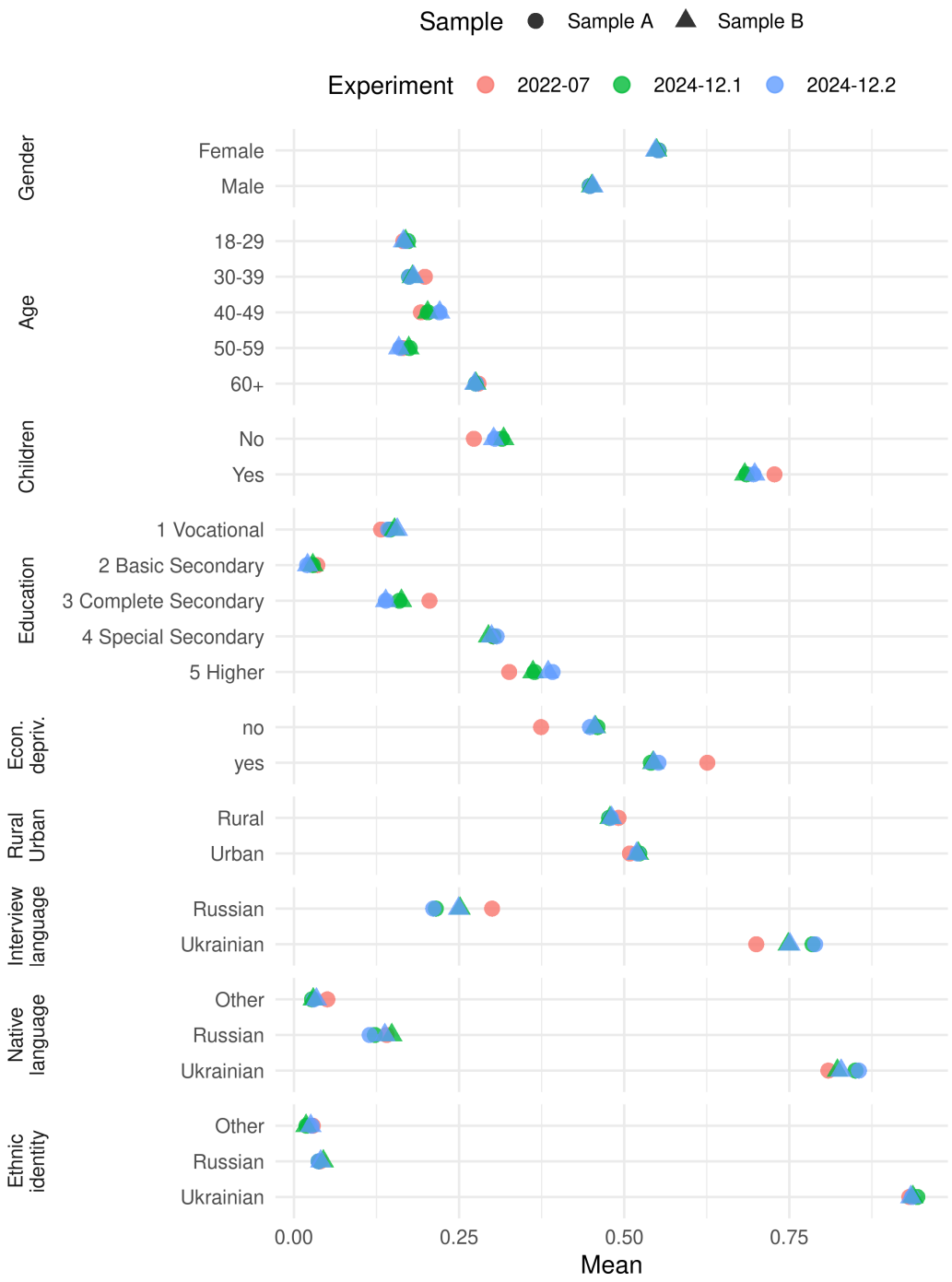


Figure A1: Demographic comparison between Samples A and Sample B as well as Experiments

C Additional results

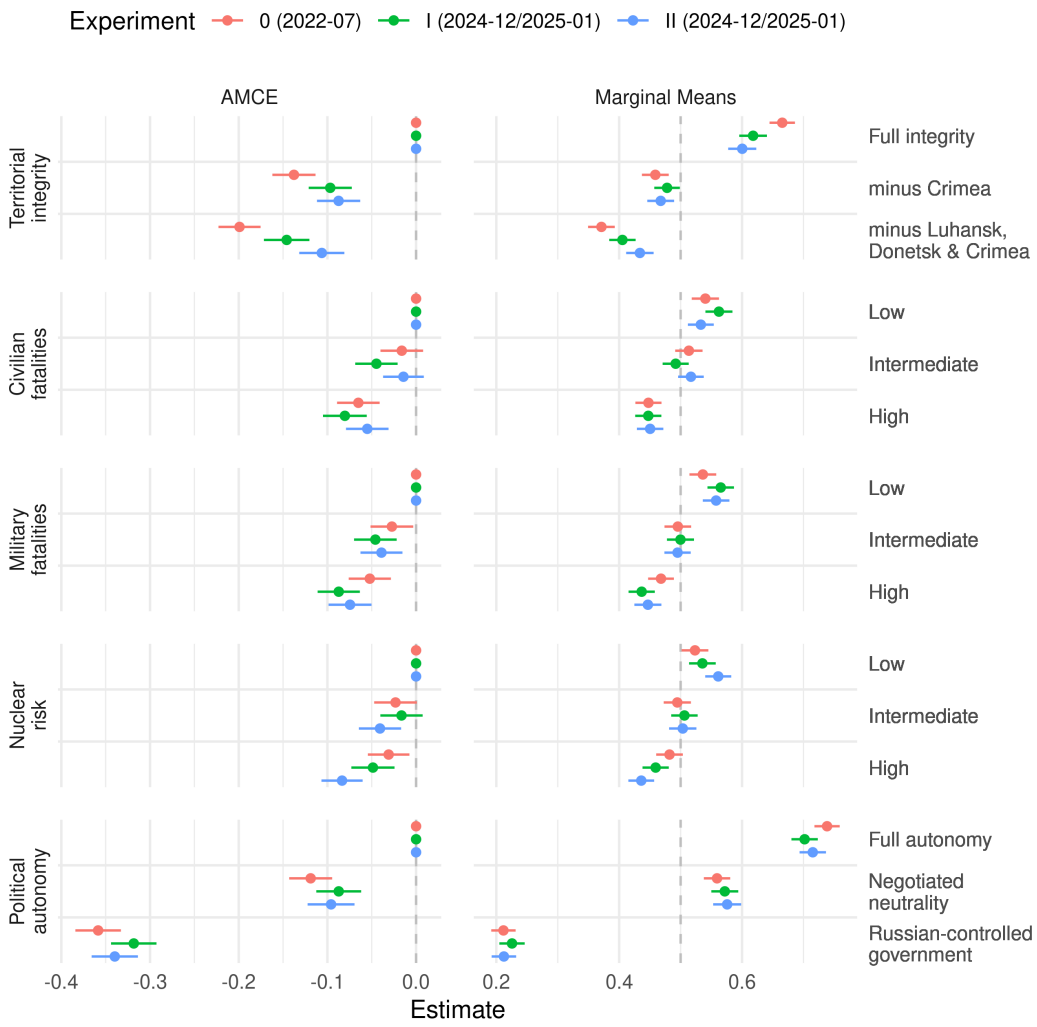


Figure A2: AMCEs and Marginal Means for Forced Choice outcome: Original results (July 2022) and Experiments I and II, Sample A

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

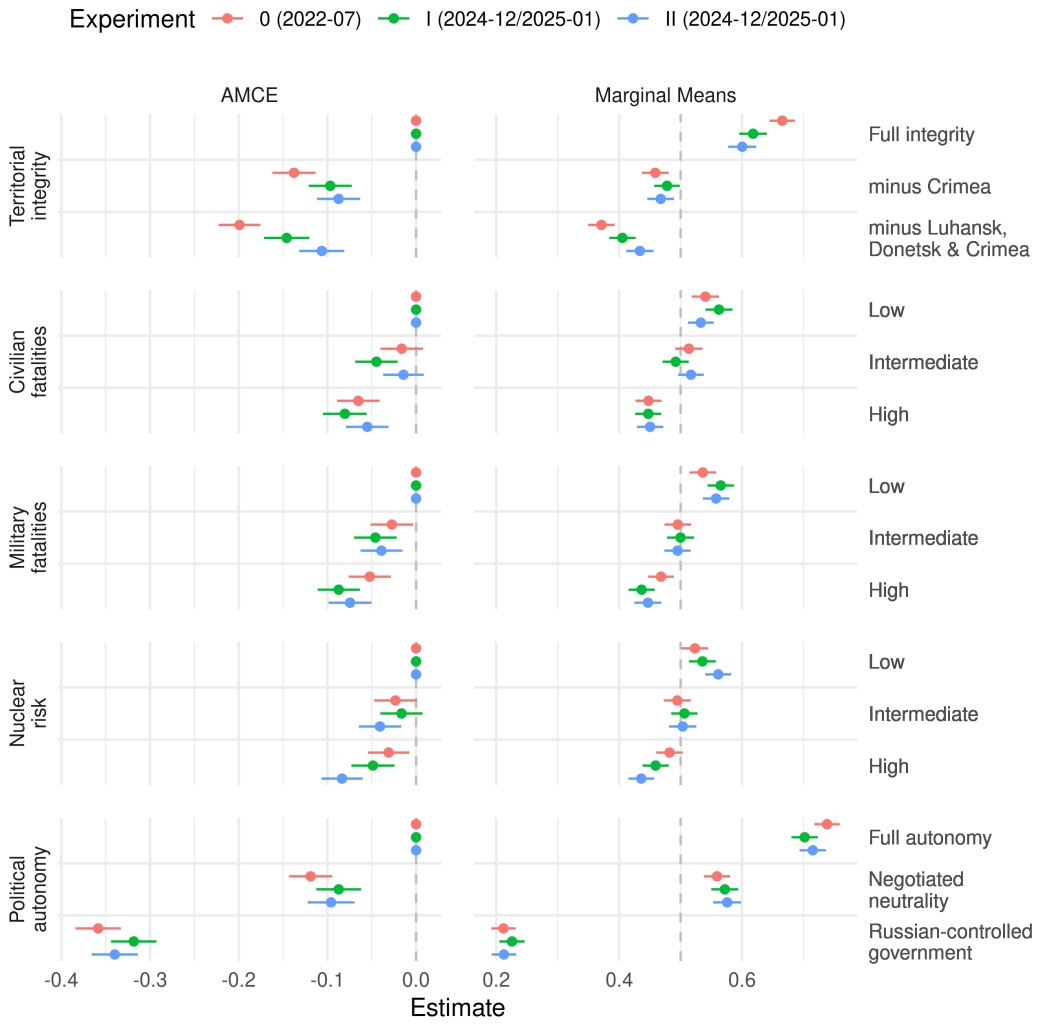


Figure A3: AMCEs and Marginal Means for Strategy Scores: Original results (July 2022) and Experiments I and II, Sample A

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

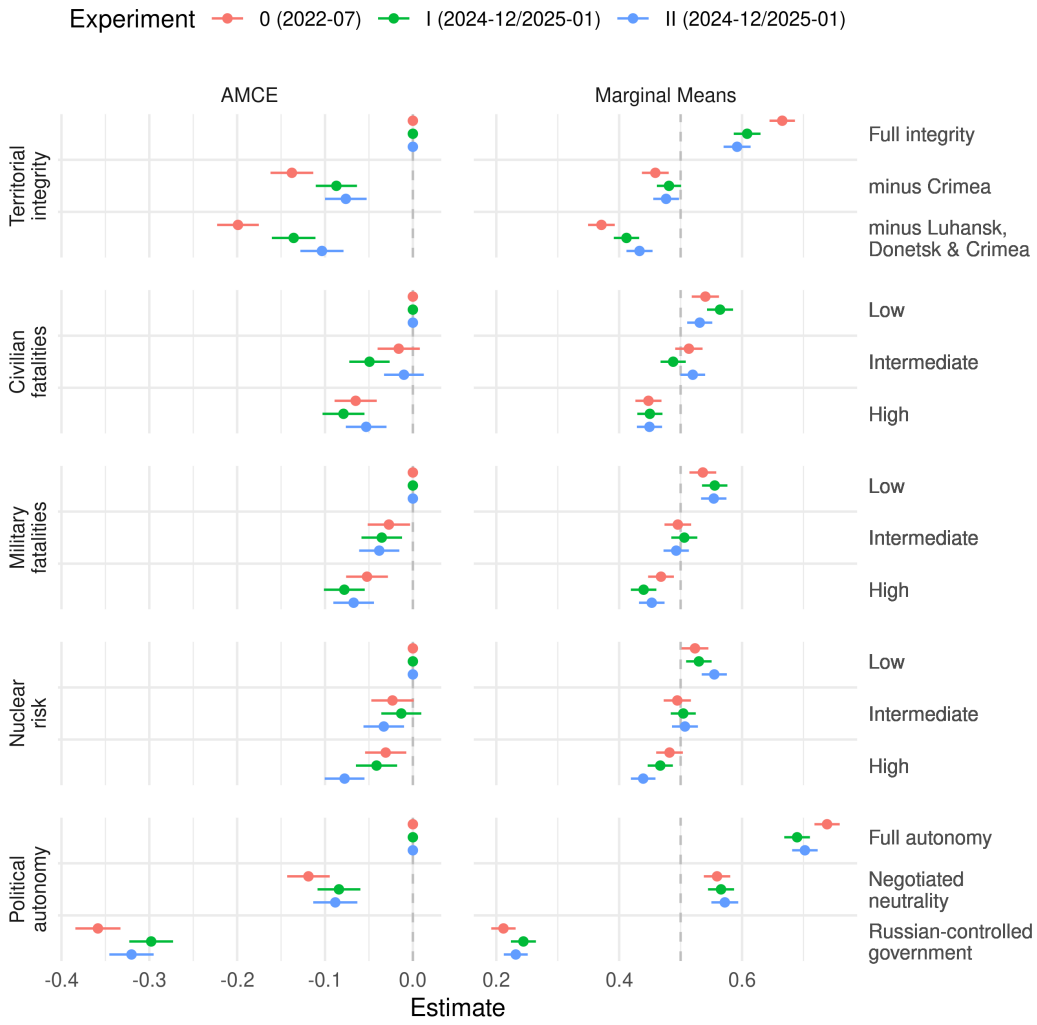


Figure A4: AMCEs and Marginal Means for Strategy Scores: Original results (July 2022) and Experiments I and II, Sample B

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

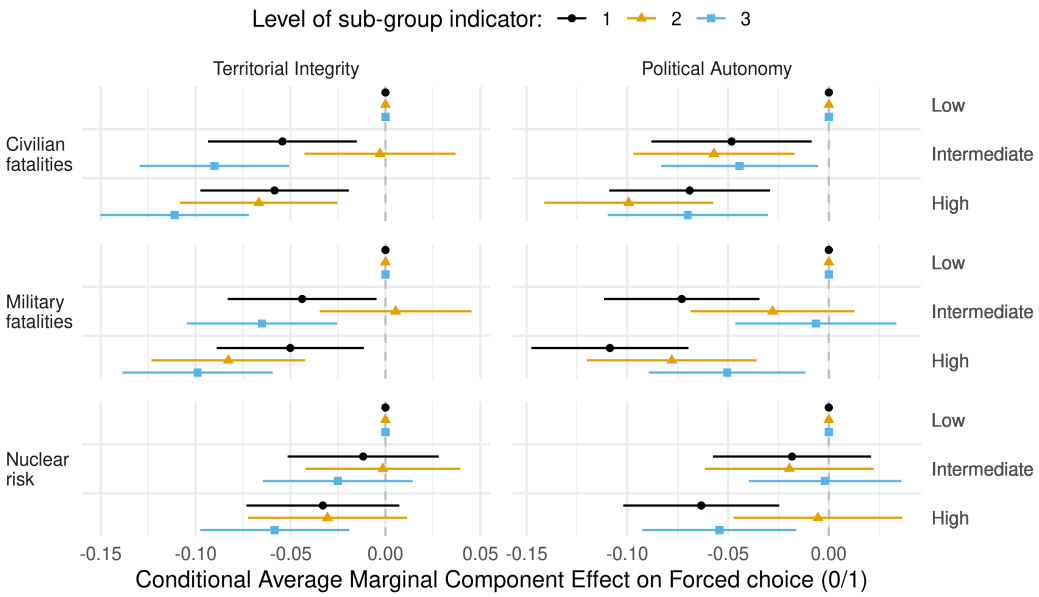


Figure A5: Experiment I, forced choice – No evidence for proportionality: Stable effects of cost attributes 2-4 across levels of territorial integrity and political autonomy.

Note: Using 2024 sample

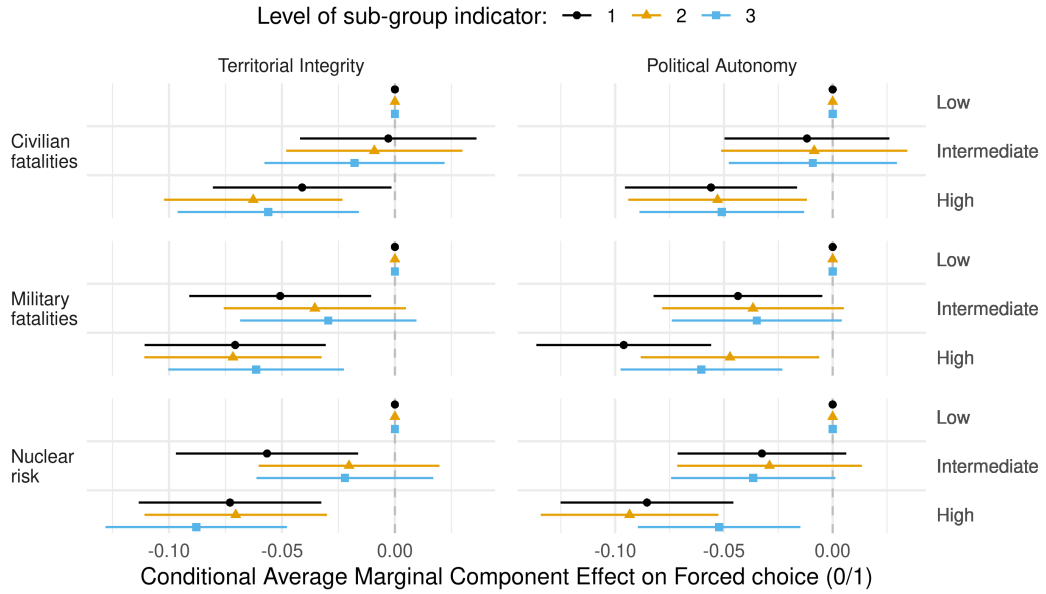


Figure A6: Experiment II, forced choice – No evidence for proportionality: Stable effects of cost attributes 2-4 across levels of territorial integrity and political autonomy.

Note: Using 2024 sample

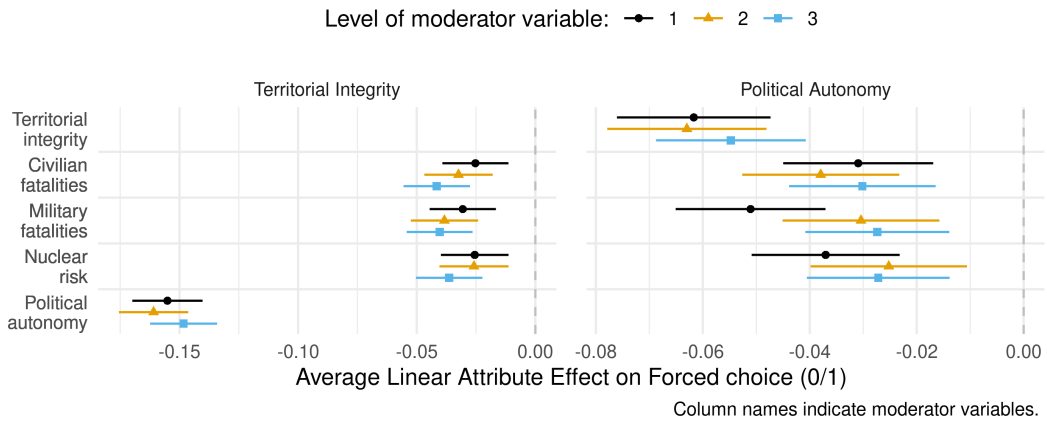


Figure A7: Conditional linear attribute effects on forced `choices`, by attributes 1 and 5 (see column title), pooling Experiments I and II.

D.2 Scoring outcomes

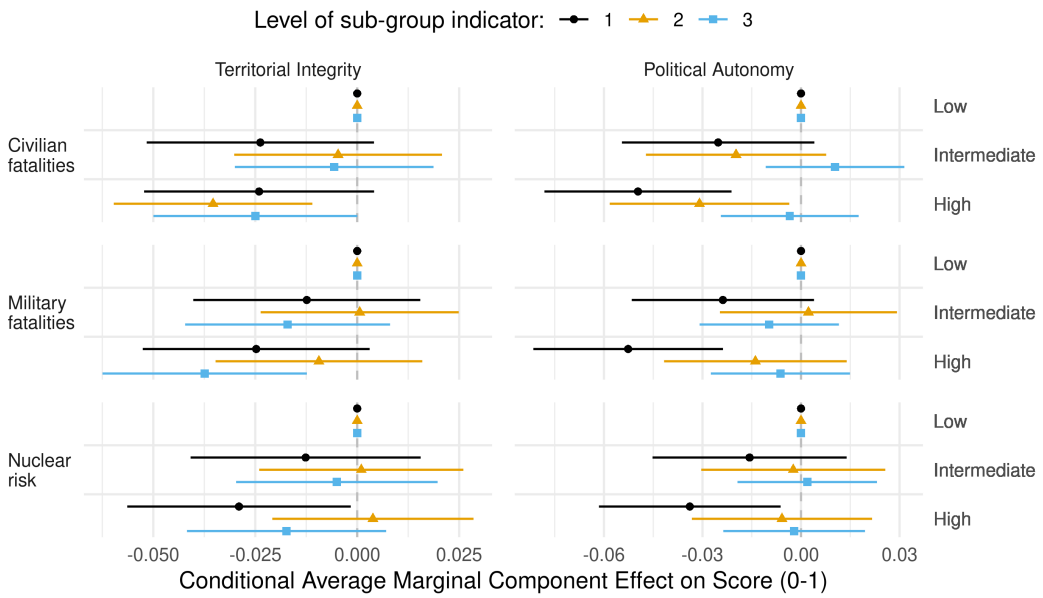


Figure A8: Experiment I, scores – No evidence for proportionality: Stable effects of cost attributes 2-4 across levels of territorial integrity and political autonomy.

Note: Using 2024 sample

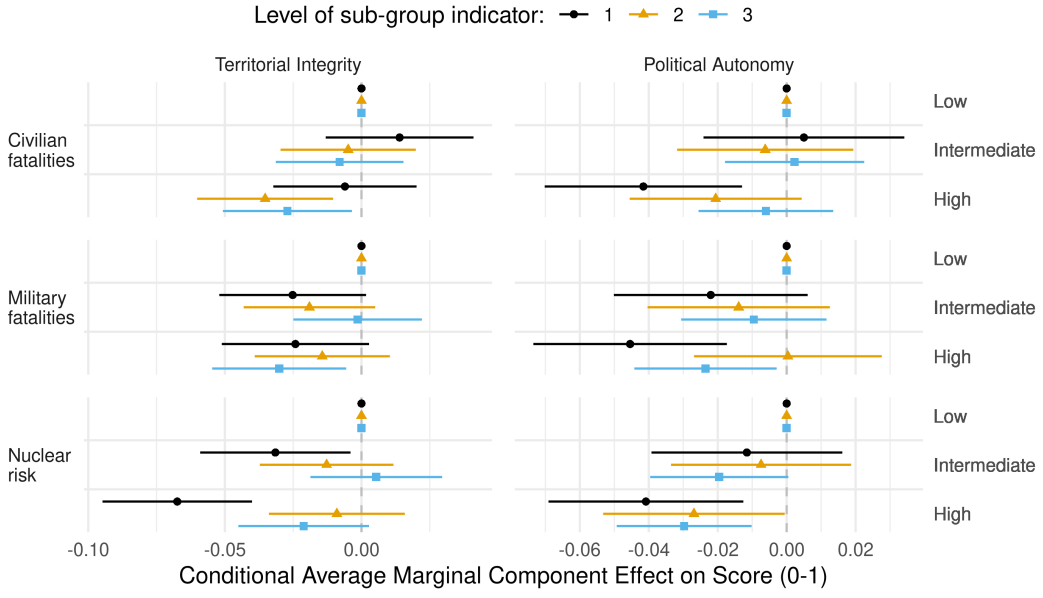


Figure A9: Experiment II, scores – No evidence for proportionality: Stable effects of cost attributes 2-4 across levels of territorial integrity and political autonomy.

Note: Using 2024 sample

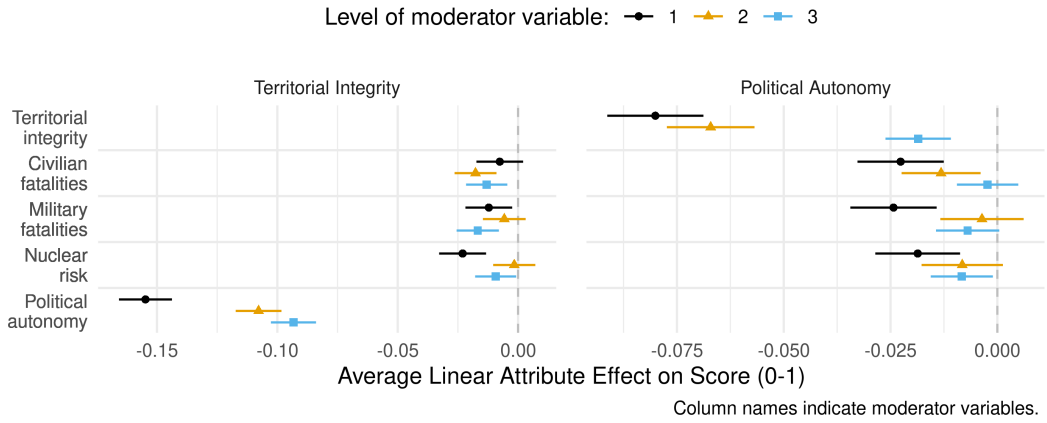


Figure A10: Conditional linear attribute effects on `scores`, by attributes 1 and 5 (see column title), pooling Experiments I and II.

E Categorical resistance: Additional results

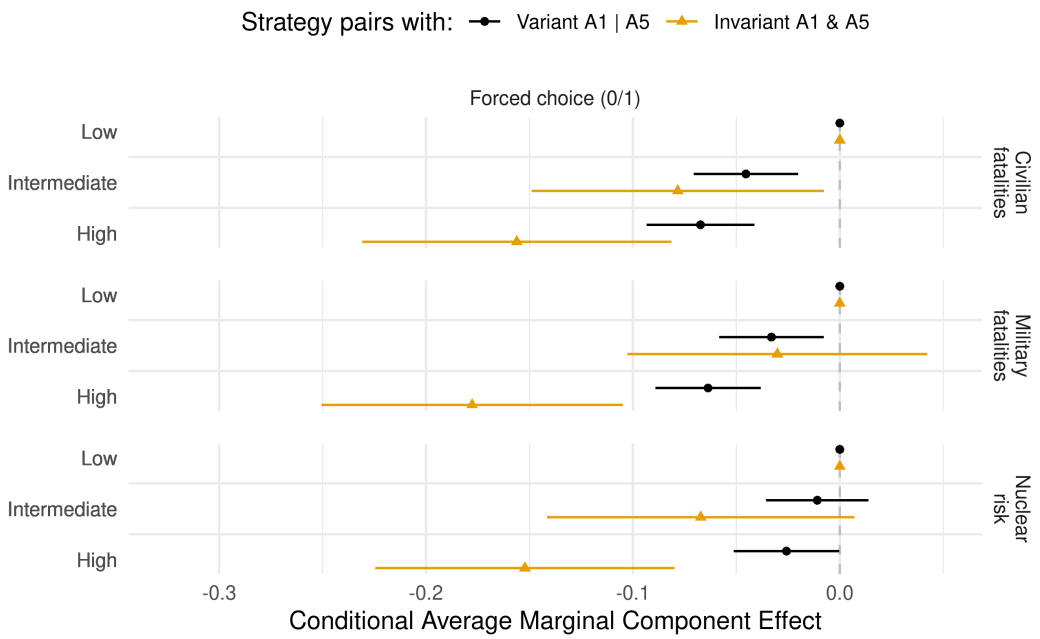


Figure A11: Experiments I: Effects of cost attributes 2-4 with and without pair-level variation in territorial integrity and political autonomy attributes.

Note: Using 2024 sample.

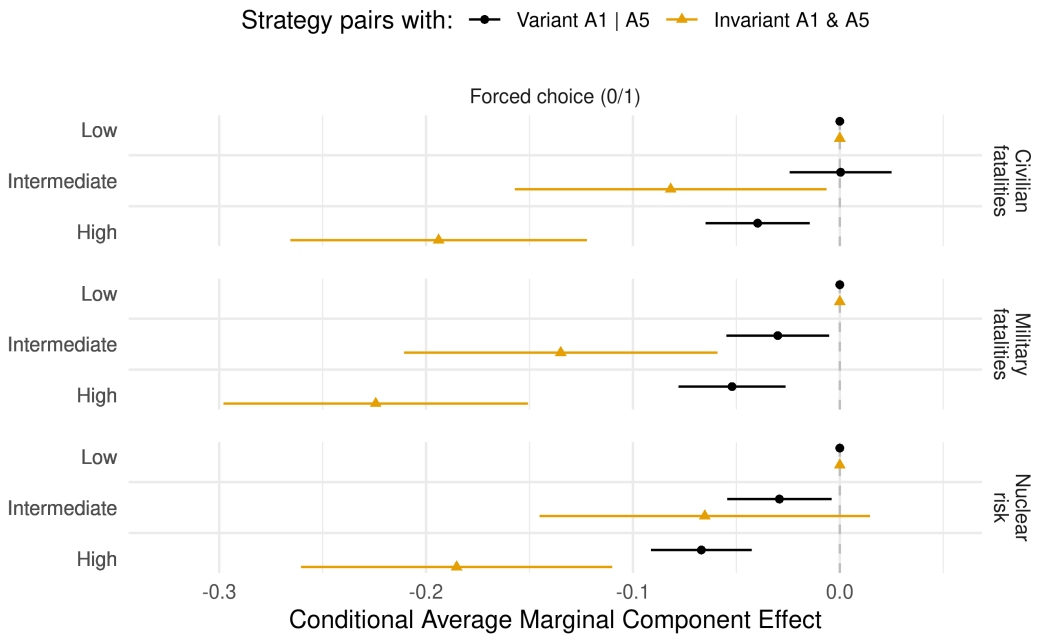


Figure A12: Experiment III: Effects of cost attributes 2-4 with and without pair-level variation in territorial integrity and political autonomy attributes.

Note: Using 2024 sample.

F Robustness checks of main analysis

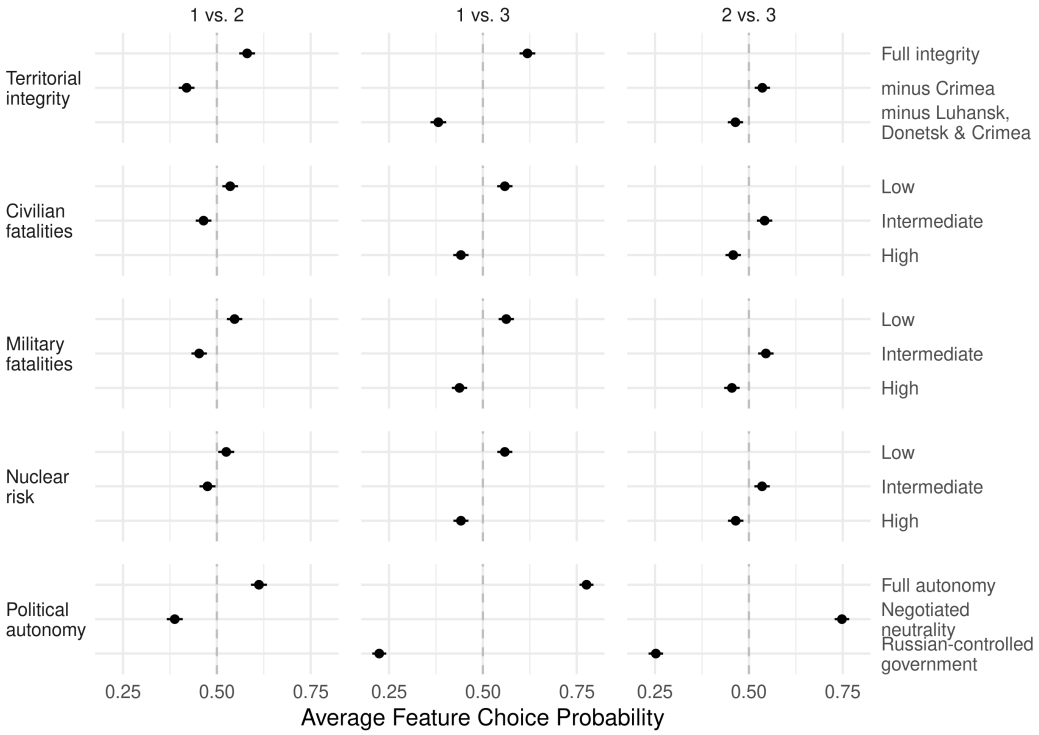


Figure A13: Average Feature Choice Probabilities (Abramson et al. 2020)

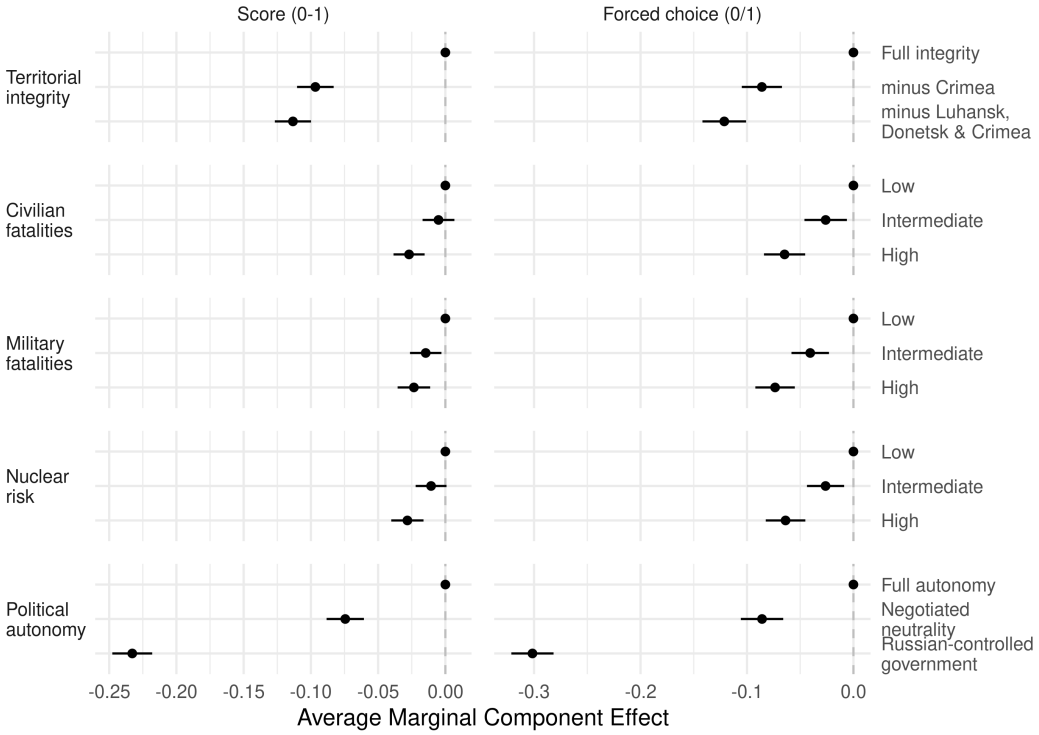


Figure A14: AMCEs using weights proportional to the size of households

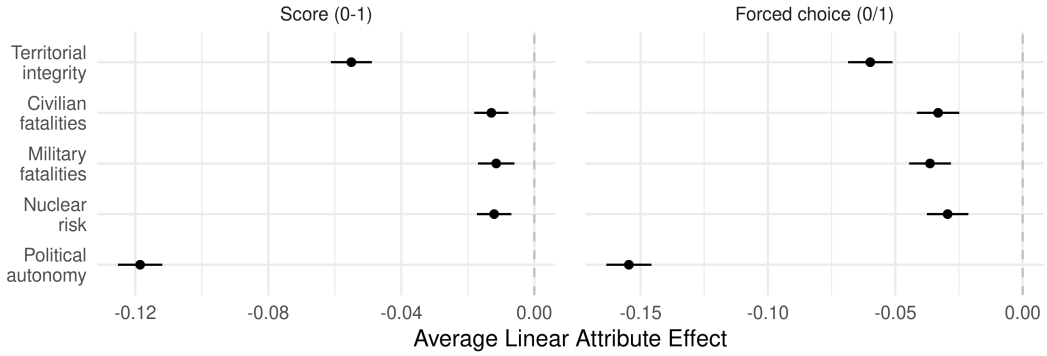


Figure A15: Average linear attribute effects, taking each attribute as a linear scale

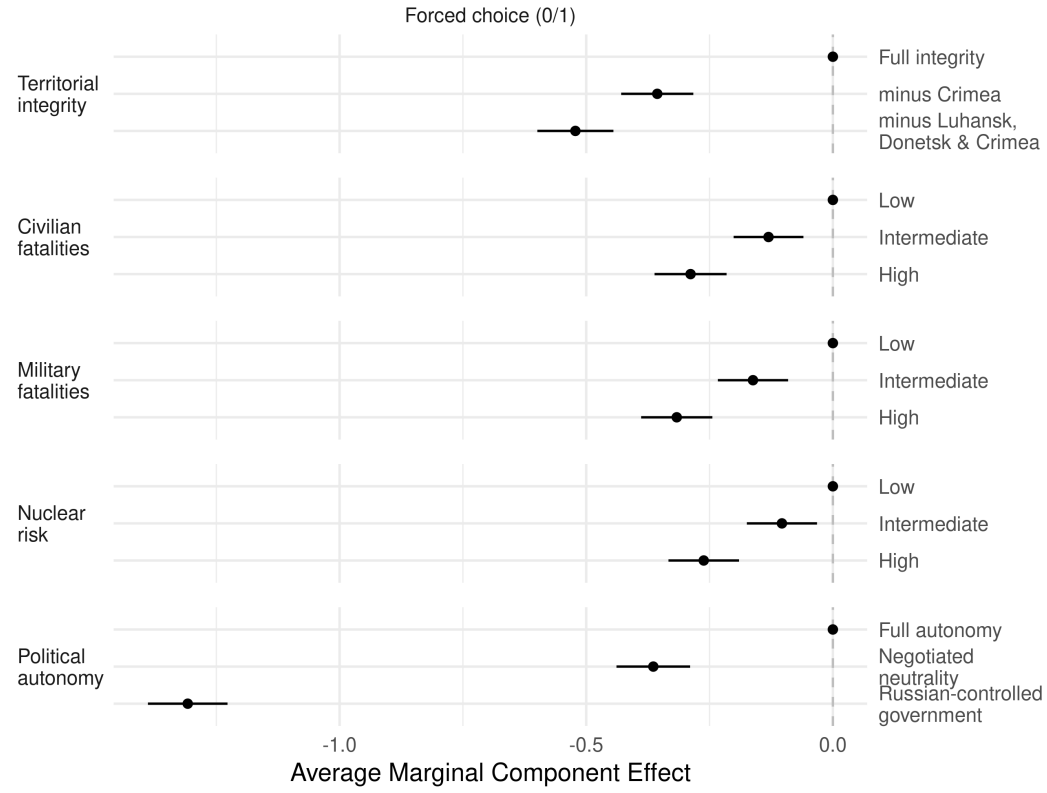
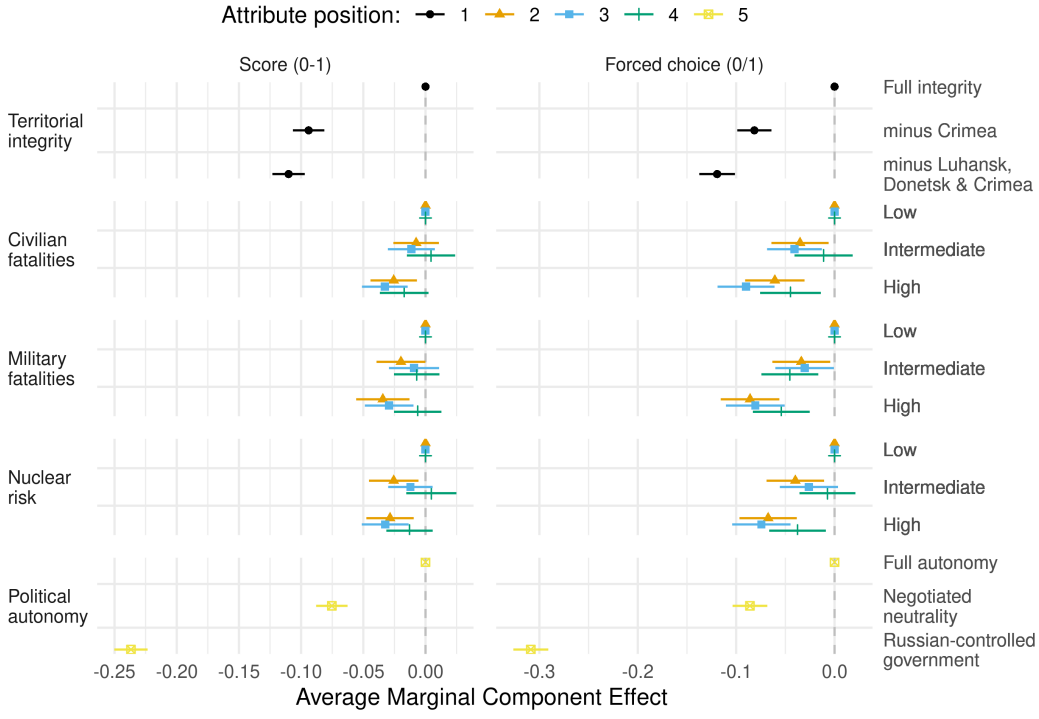


Figure A16: AMCEs on `choice` outcome using logistic regression models

Column names indicates outcome variable.

Figure A17: Clustering standard errors not at all, on the level of pairs, respondents, and PSUs.



Position of attributes 2-4 varied randomly between respondents.

Figure A18: Order Effects

G Heterogeneous Effects

G.1 Summary

Table A4: 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 A5: 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 A6: 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 A7: 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

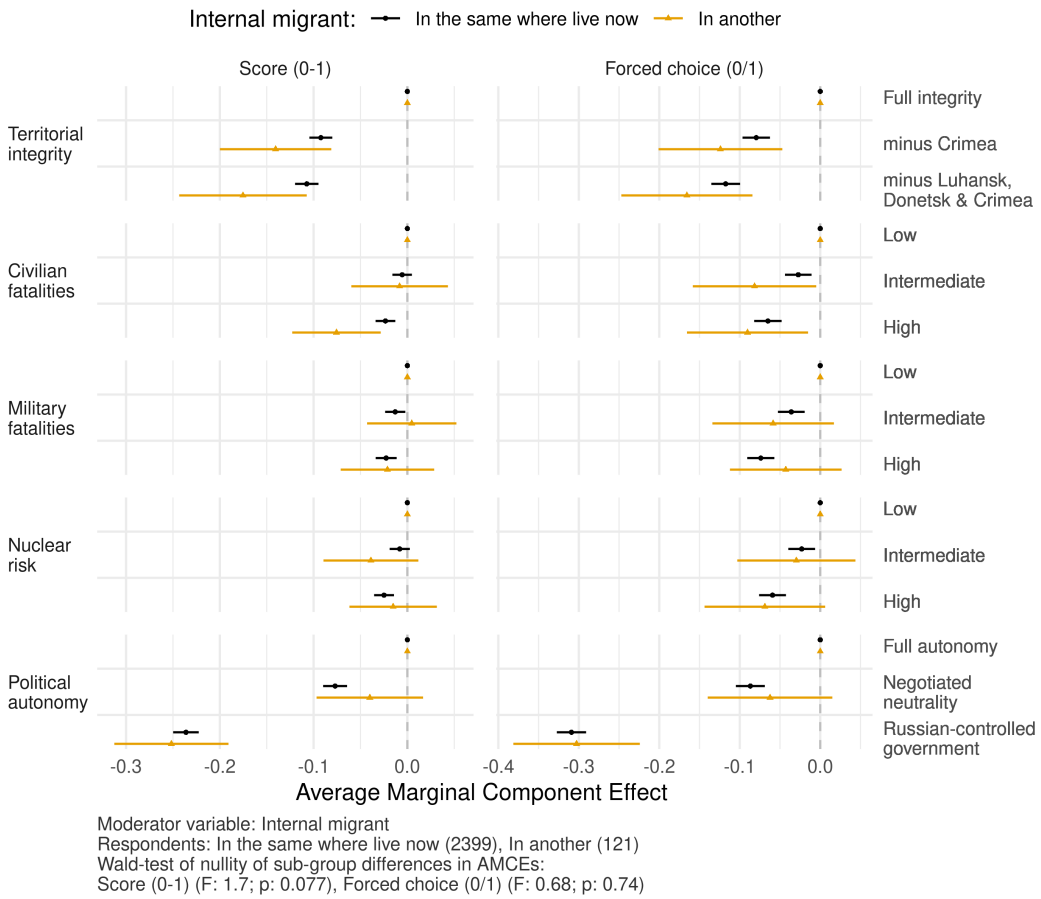


Figure A19: Pooled Experiments I and II – Moved since February 2022

G.3 By language and ethnicity

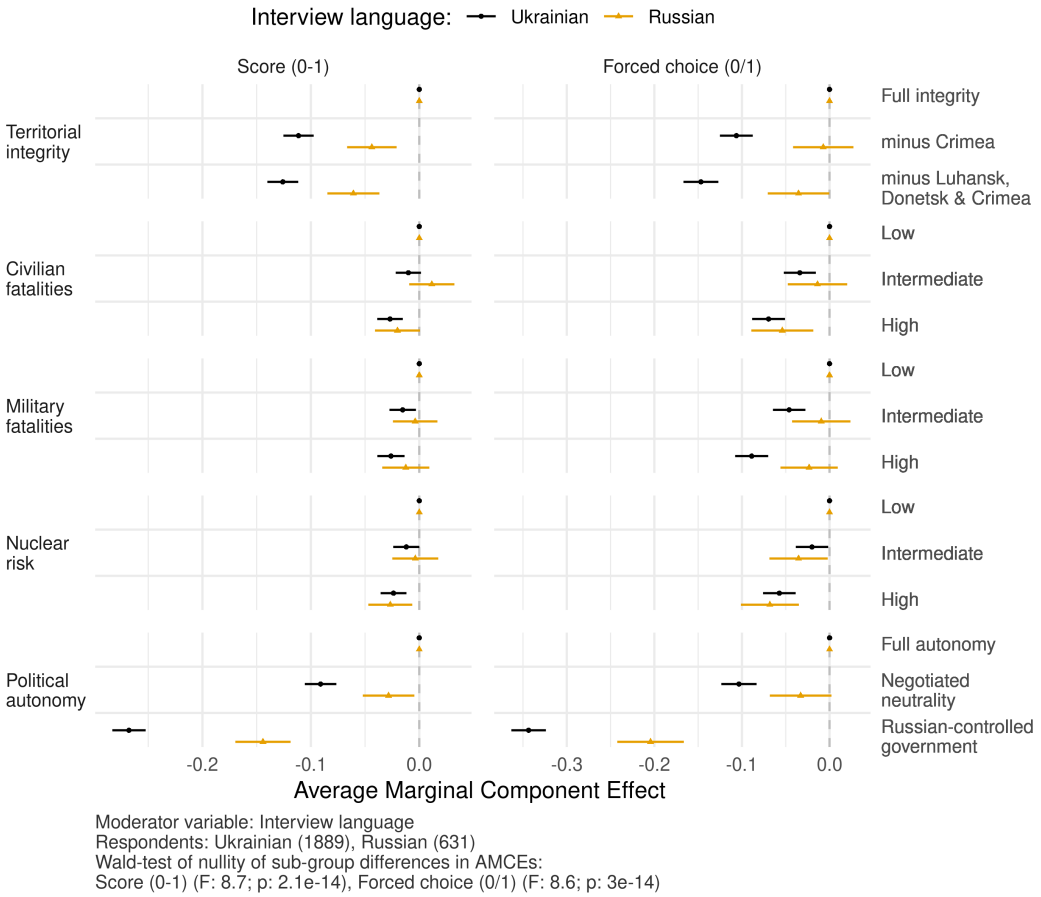


Figure A20: Pooled Experiments I and II: Interview Language

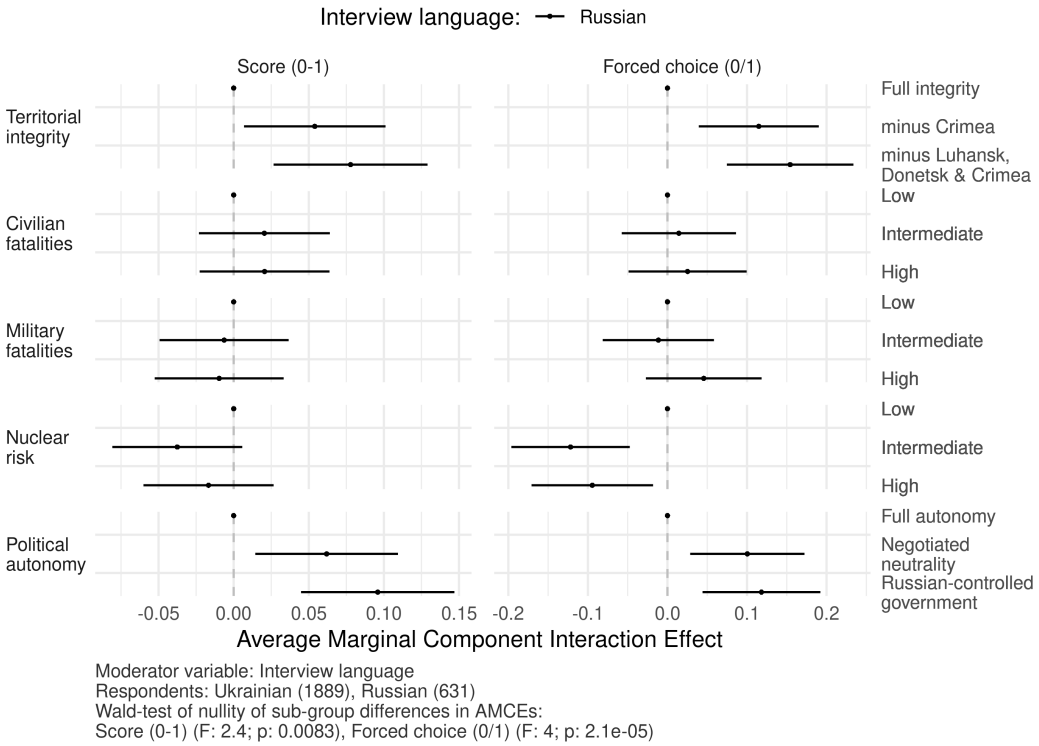


Figure A21: Pooled Experiments I and II: AMCIEs of conducting the interview in Russian (compared to Ukrainian) among respondents in the same PSU

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

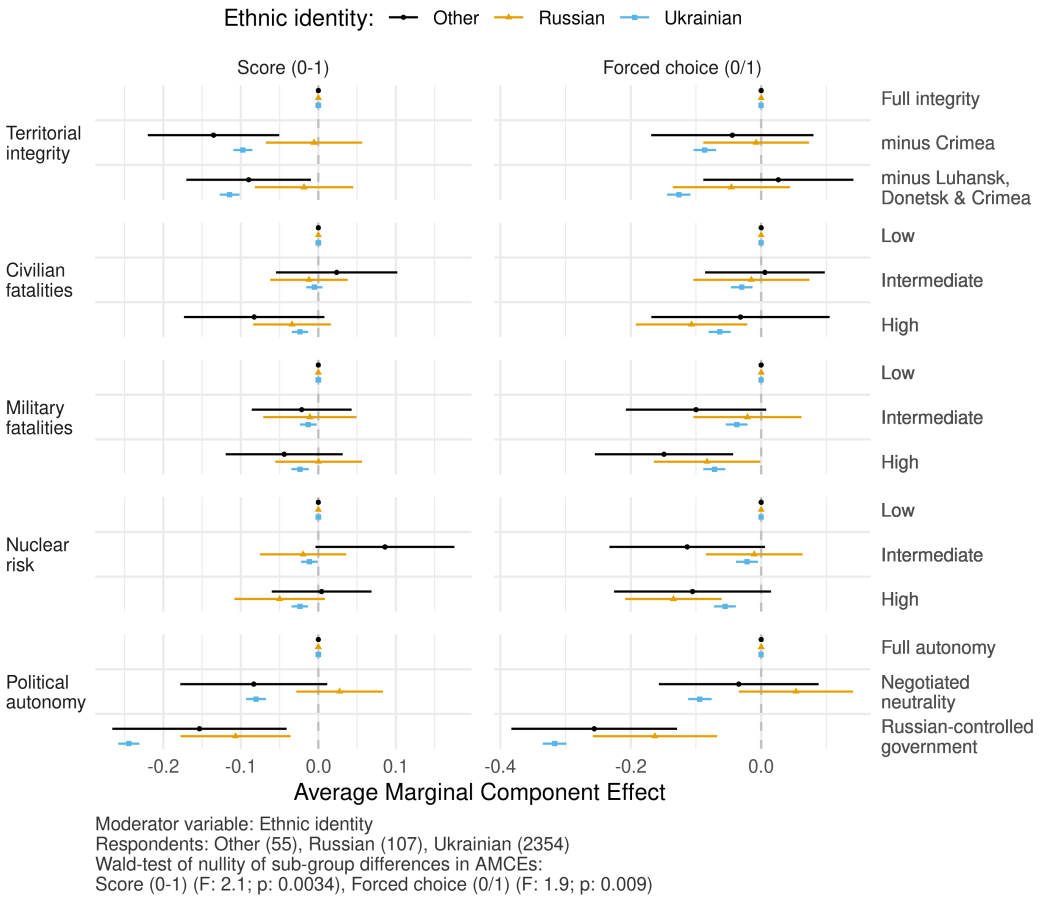


Figure A22: Pooled Experiments I and II: Respondent ethnicity

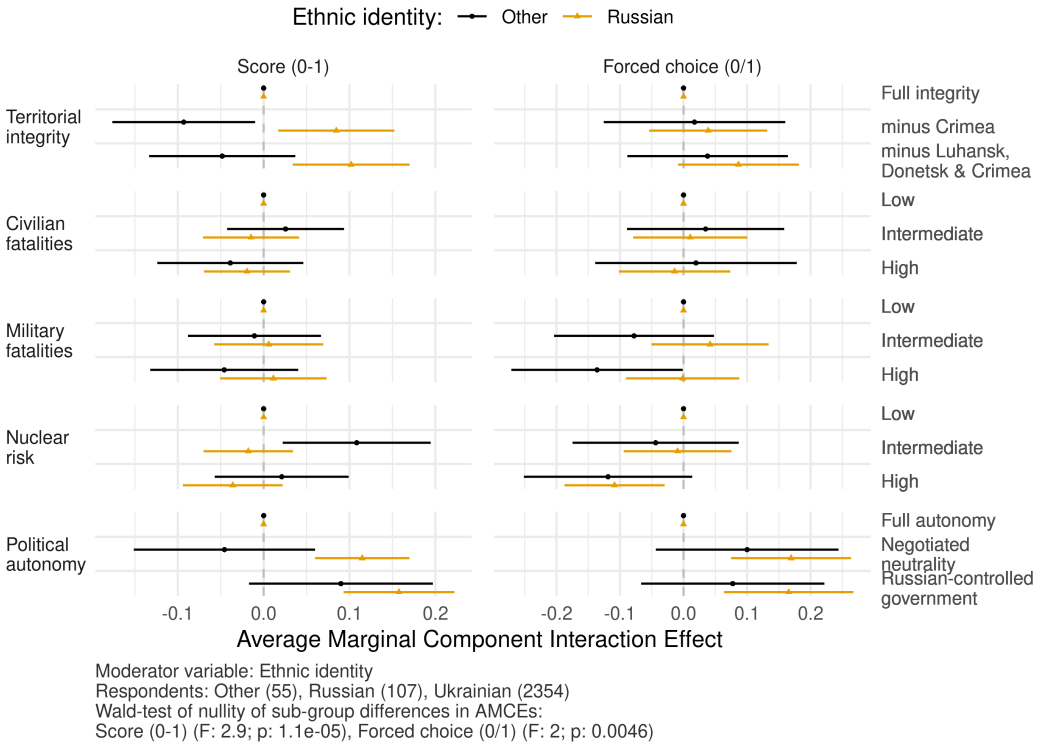
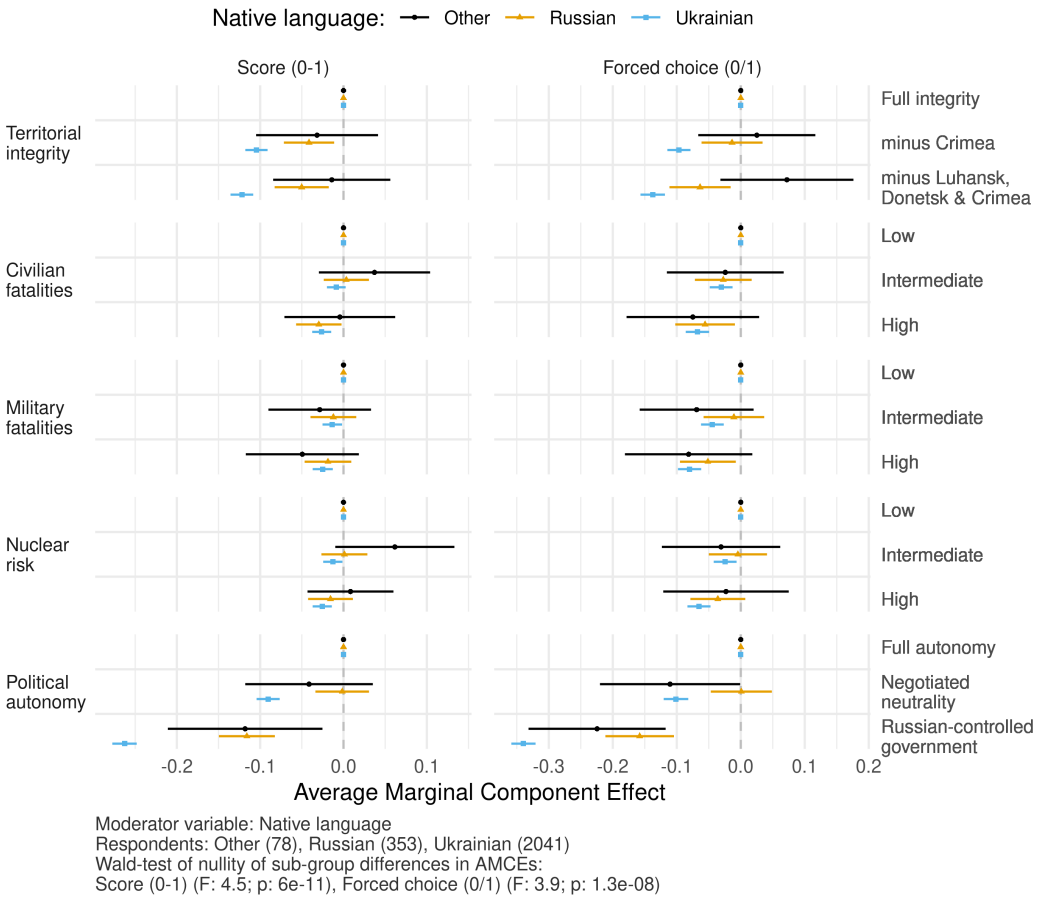


Figure A23: Pooled Experiments I and II: AMCIEs of non-Ukrainian ethnic self-identifications (compared to Ukrainian) among respondents in the same PSU

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 A24: Pooled Experiments I and II: Respondent ethnicity

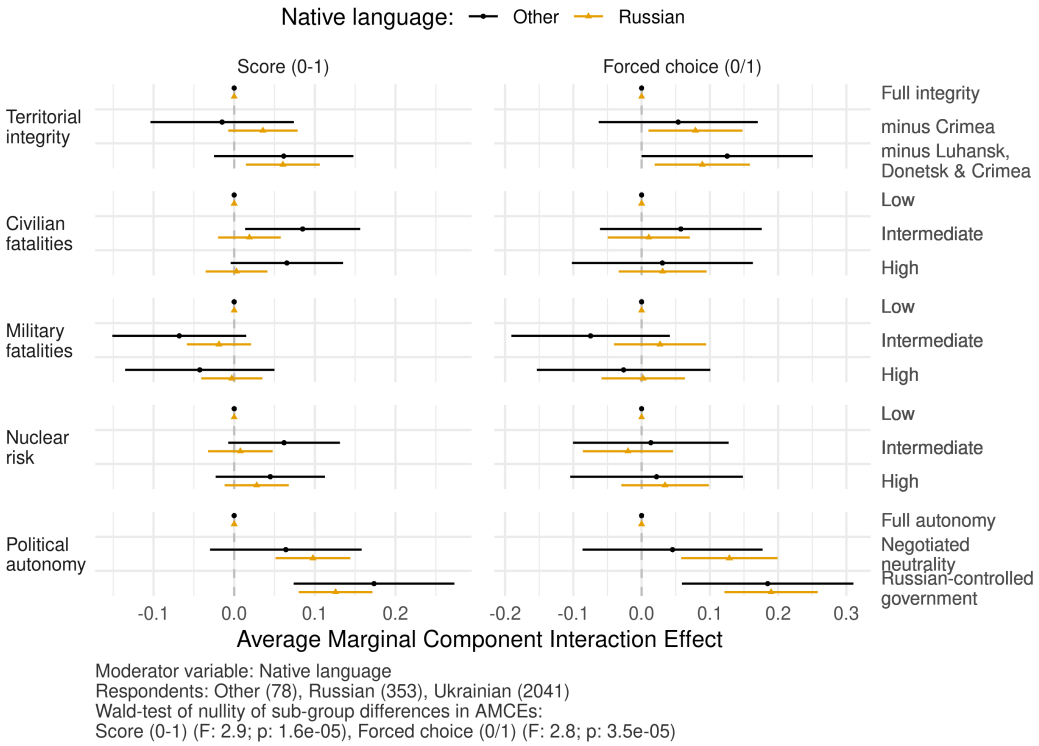


Figure A25: Pooled Experiments I and II: AMCIEs of non-Ukrainian mother-tongues (compared to Ukrainian) among respondents in the same PSU

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

G.4 By respondents' affectedness

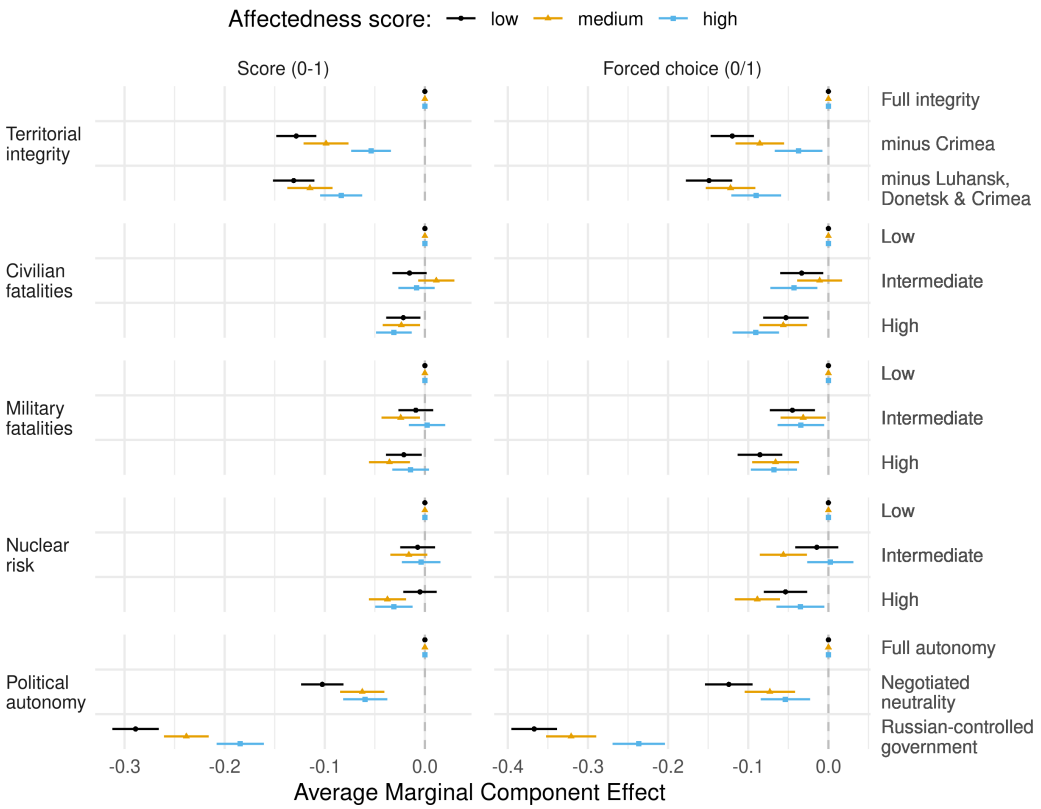


Figure A26: Pooled Experiments I and II: Affectedness score

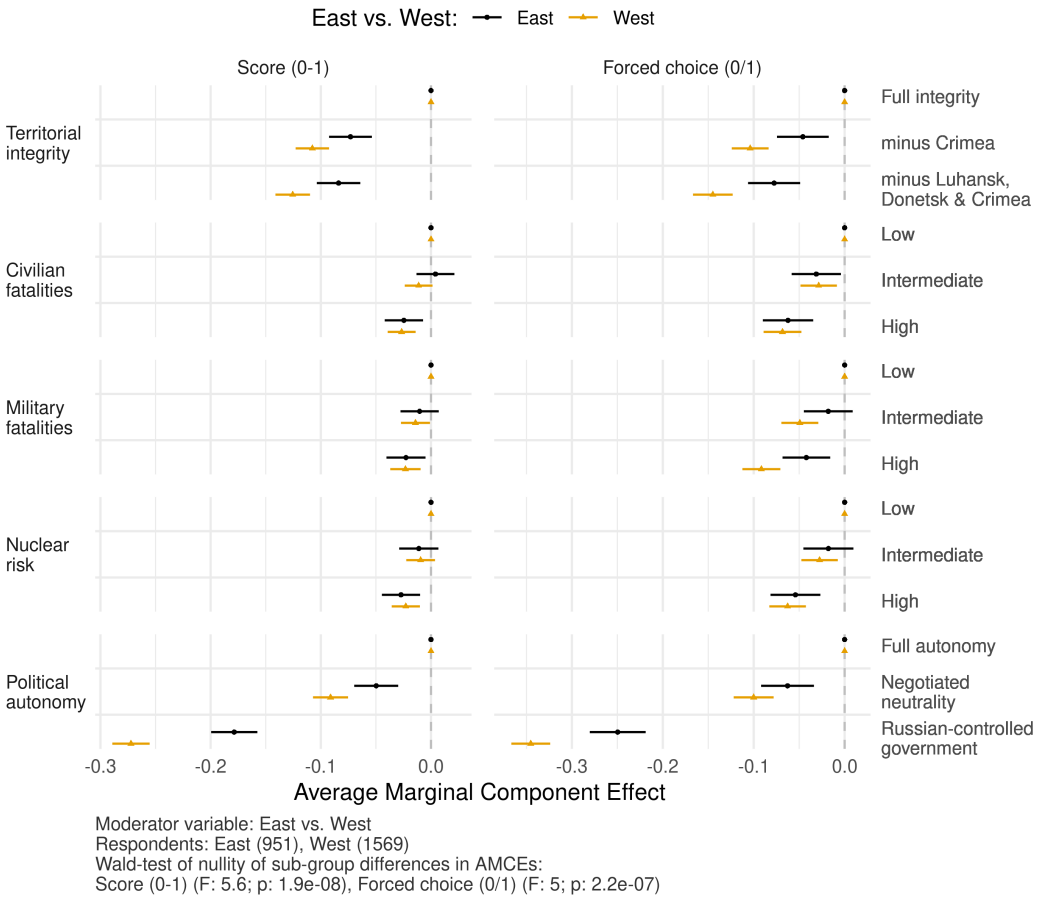


Figure A27: Pooled Experiments I and II: East vs West

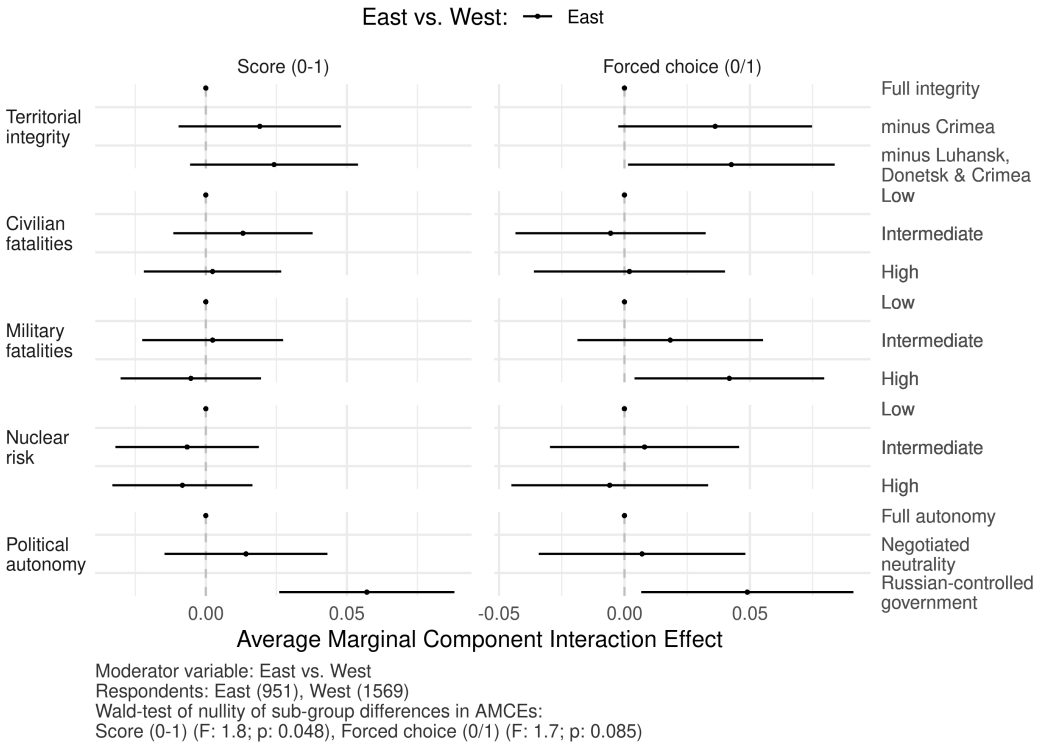


Figure A28: Pooled Experiments I and II: AMCIEs of the East (compared to the West) among respondents with the same mother-tongue

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

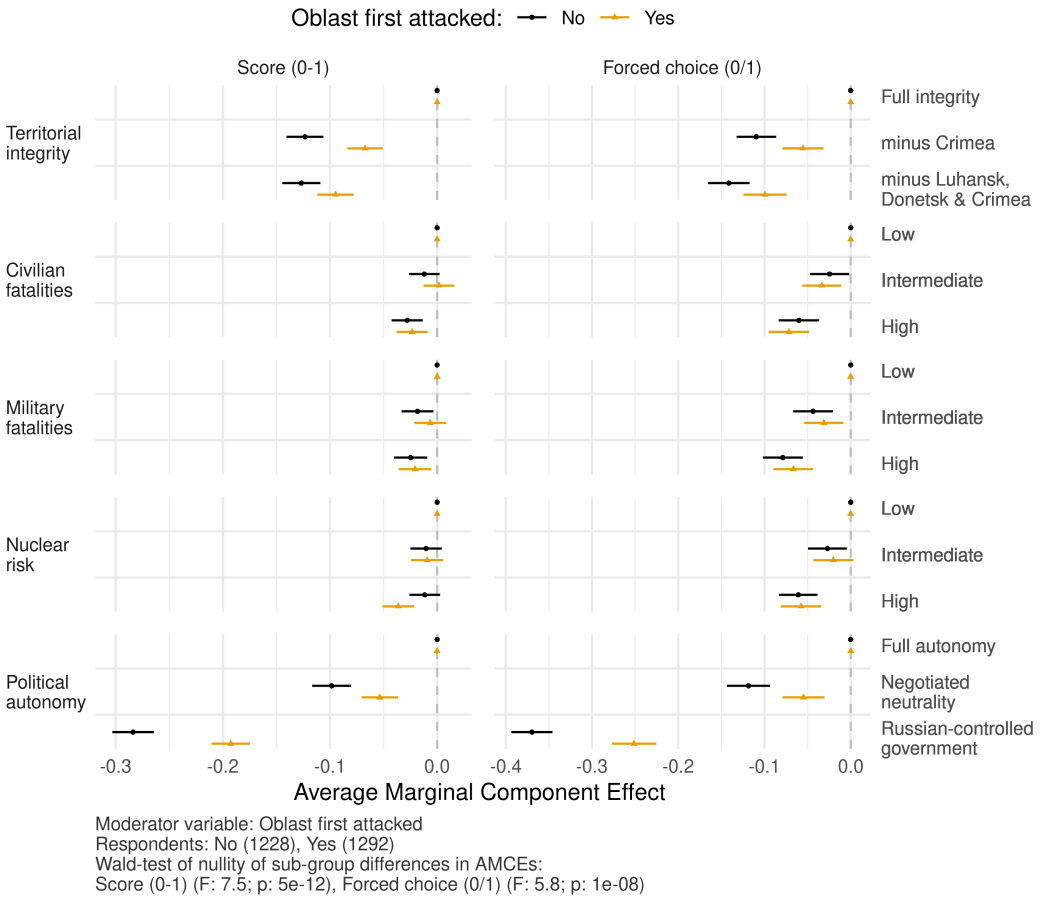


Figure A29: Pooled Experiments I and II: Oblast directly invaded by Russian forces

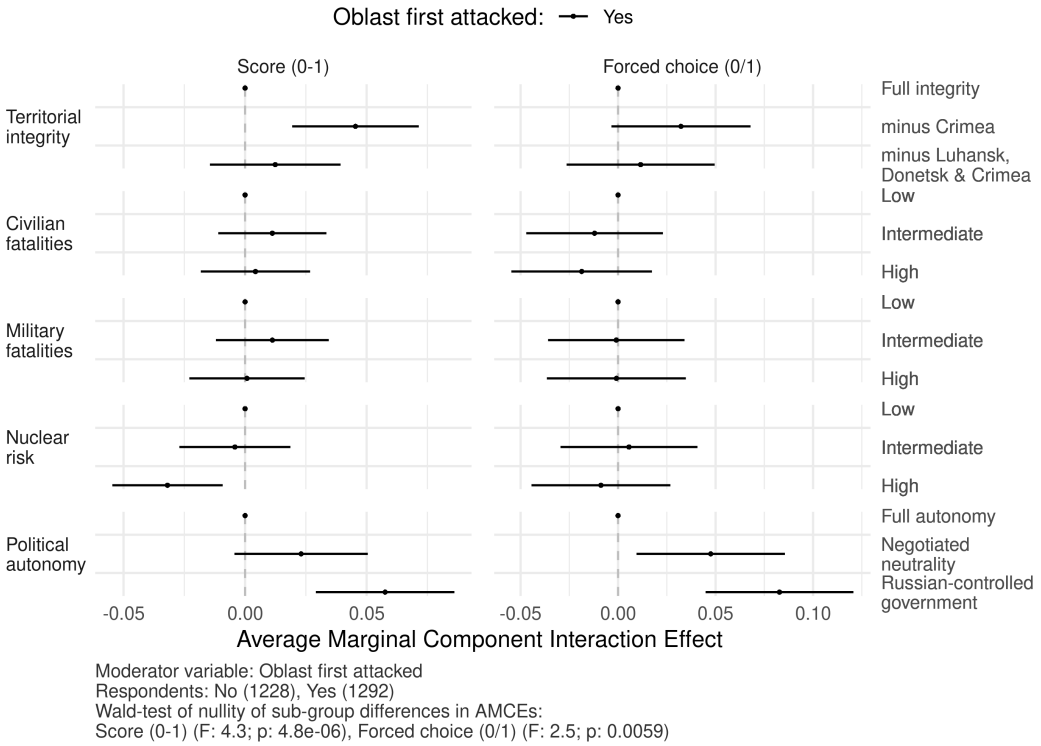
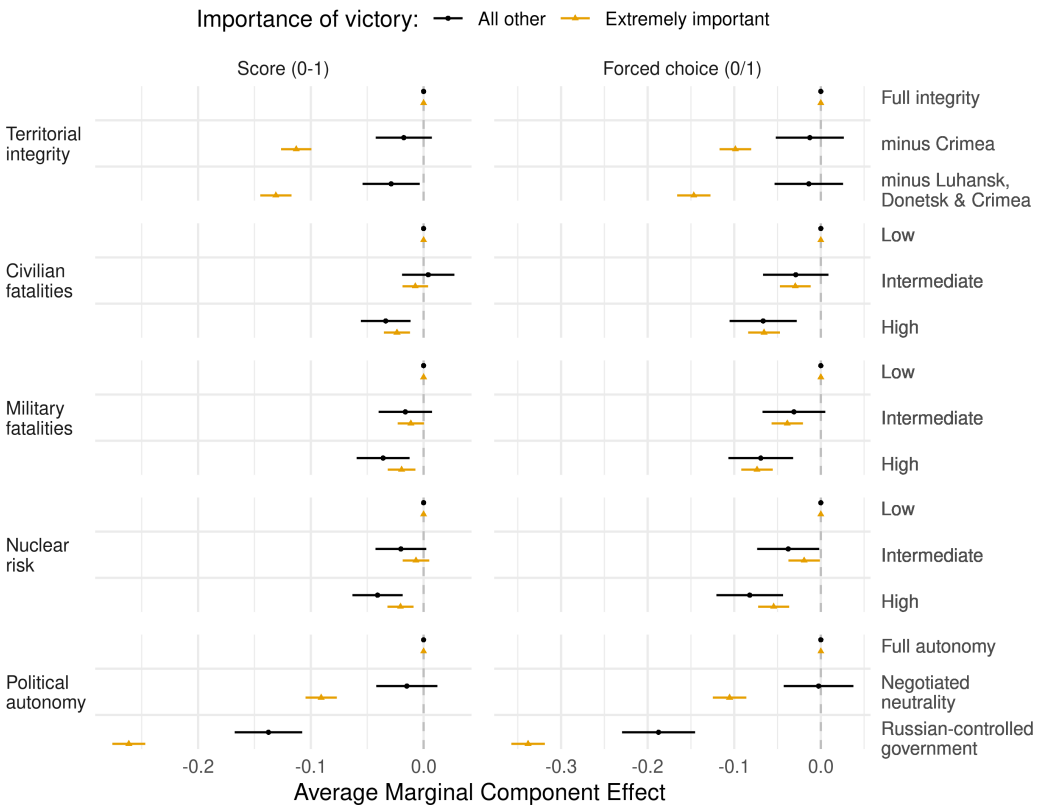


Figure A30: Pooled Experiments I and II: AMCIEs of living in an Oblast directly invaded by Russian forces among respondents with the same mother-tongue

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 A31: Pooled Experiments I and II: By importance of victory

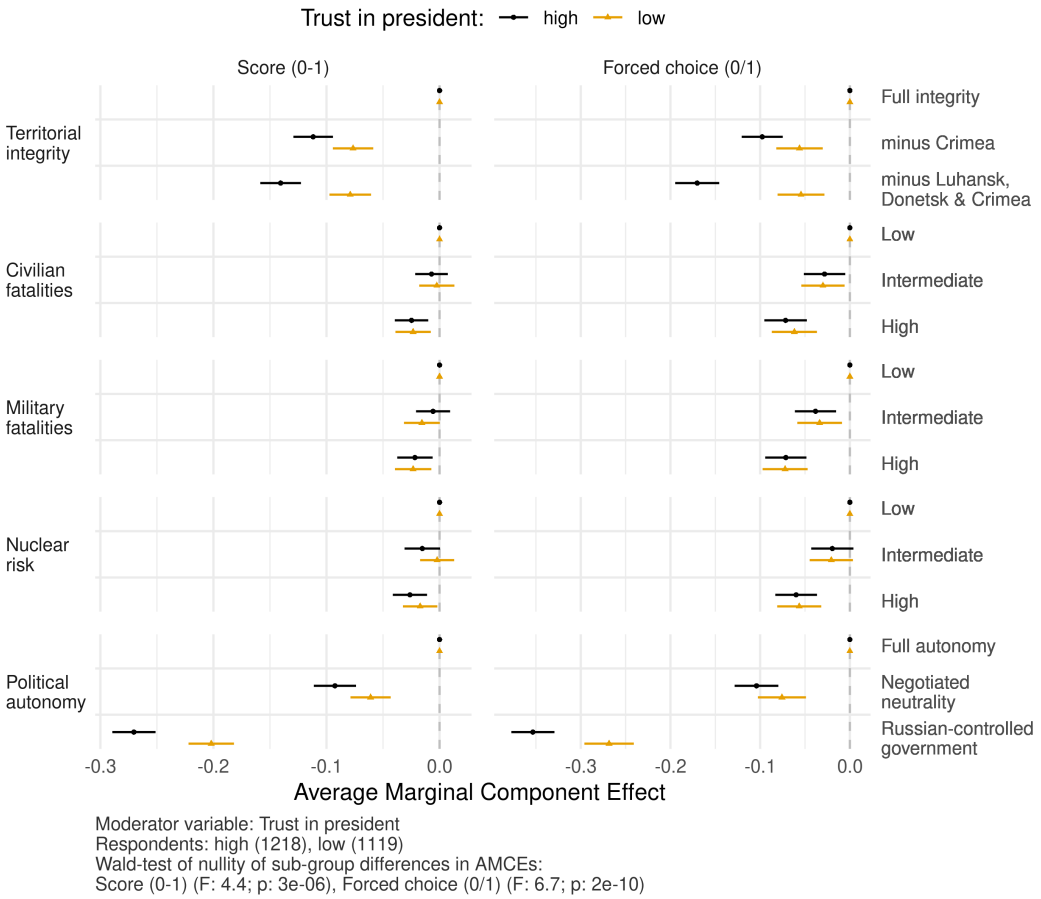


Figure A32: Pooled Experiments I and II: By trust in president

H Within-Location Change in AMCEs

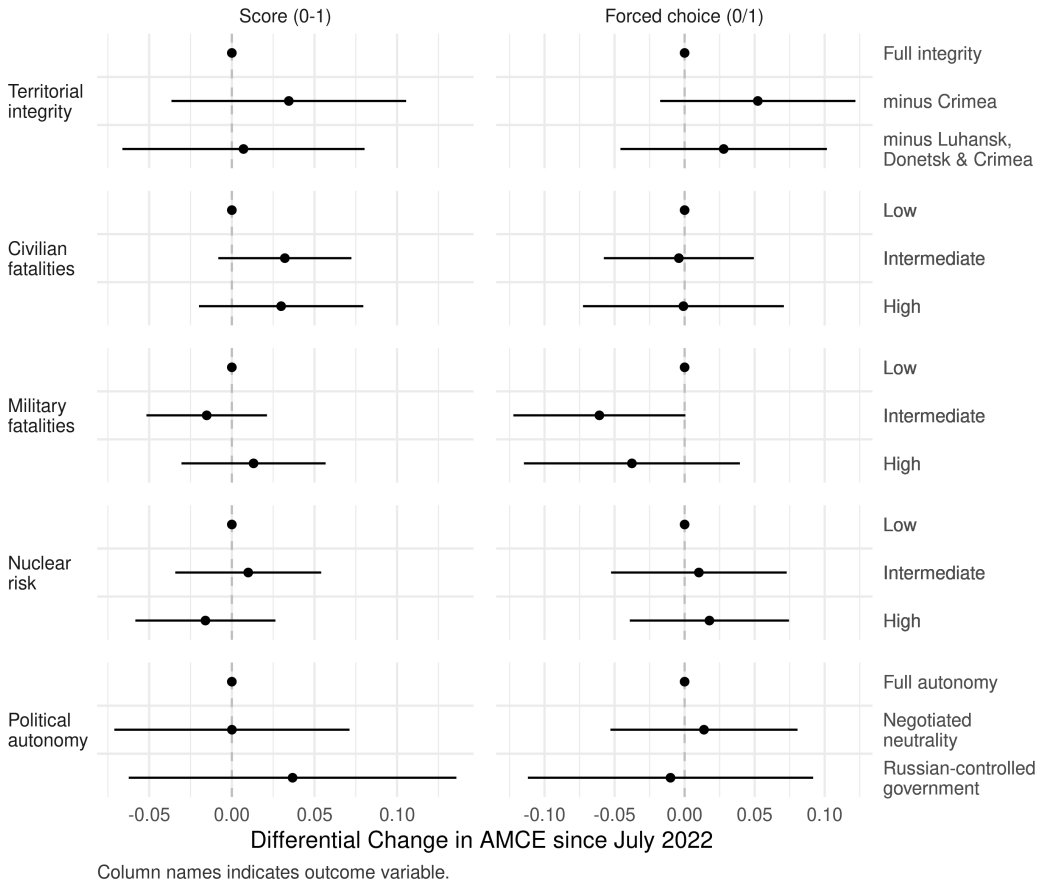


Figure A33: Association of close-by shelling events (0/1) over the past 24 months before December 2024 and within location changes in AMCEs

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

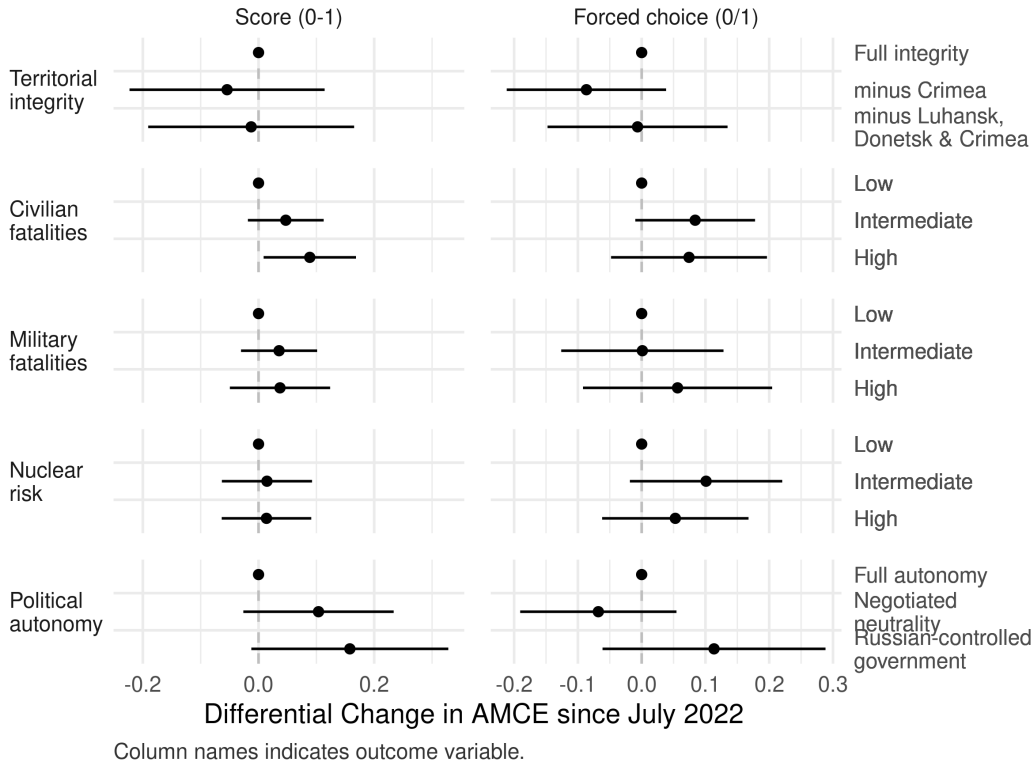


Figure A34: Association of changes in respondents' average affectedness and within location changes in AMCEs

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

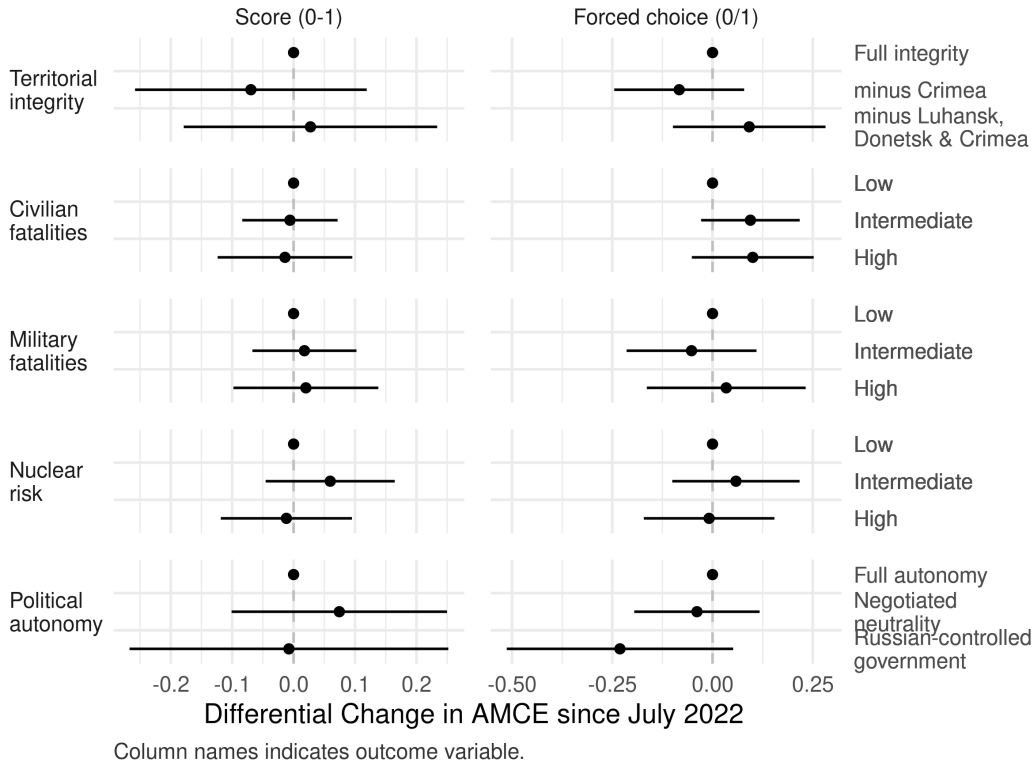


Figure A35: Association of changes in the average affectedness of respondents' family members and within location changes in AMCEs

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

J References (Appendix)

Abramson, Scott F, Korhan Kocak, Asya Magazinnik and Anton Strezhnev. 2020. "Improving preference elicitation in conjoint designs using machine learning for heterogeneous effects." *Unpublished Working Paper* .

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.