

# Did Russia's Invasion of Ukraine Reduce Affective Polarization in the U.S.? Experimental Evidence

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## Abstract

In many Western countries, citizens have become increasingly biased in how they evaluate others based on political affiliation, and this affective polarization harms the functioning of governments. In an online experiment, we find that priming Americans with the threat of Russia's invasion of Ukraine reduces affective polarization as measured by feeling thermometers. The effect is not significantly different when subjects are also primed with cross-party disagreement about how well President Biden is handling the conflict. Using an incentivized coordination game, we then show that feeling thermometers are behaviorally relevant as they predict subjects' ability to coordinate and willingness to compromise. Our findings have great implications for society: While affective polarization undermines cooperation, citizens may come together when perceiving an external threat, regardless of perceived cross-party disagreement.

**Keywords:** Affective polarization, partisanship, social identity, common enemy effect, 2022 Russian invasion of Ukraine

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# 1 Introduction

Across many countries, political preferences have become increasingly important for people’s social identity (Mason, 2013, 2018a). This has led to a polarization that is not merely ideological but also affective as people increasingly dislike members of opposing parties (Iyengar et al., 2019).<sup>1</sup> Such affective polarization has detrimental consequences as it decreases societal cohesion, limits the scope for dialogue and collaboration, and hinders policy responses when challenges such as the COVID-19 outbreak arise (Layman et al., 2006; Valentino et al., 2008; MacKuen et al., 2010; Gervais, 2015; Hetherington, 2015; Flores et al., 2022). But in addition to increased polarization, recent years have also been characterized by (political) crises that pose a threat to society at large, including the COVID-19 pandemic, climate change, and Russia’s military aggression. A common dictum is that external threats to a group strengthen group cohesion (Sumner, 1906; De Jaegher, 2021), but this might not be the case if there is strong cross-party disagreement regarding the threat (John and Dvir-Gvirsman, 2015; Orian Harel et al., 2020).<sup>2</sup> The present study sheds light on the effect of external threats and the role of political disagreement as it investigates the following research questions: How did the Russian invasion of Ukraine influence affective polarization in the U.S.? How did this effect depend on perceived political agreement regarding the conflict? And to what extent does affective polarization matter for citizens’ ability to collaborate and willingness to compromise?

To answer these questions, we conduct an online experiment with 1,403 U.S. residents to examine how Russia’s invasion of Ukraine influences affective polarization. We prime subjects by exposing them to one of three news articles. In the *Invasion* treatment, subjects read about Russia’s invasion of Ukraine and how this poses a threat to the interests of the U.S. In *Disagreement*, subjects also read about Russia’s invasion, but the article focuses on the disagreement between some Republicans and Democrats about how well President Biden is

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<sup>1</sup>In the U.S., surveys provide evidence that from the mid-1980s, Democrats and Republicans have increasingly disliked members of the opposing party (Iyengar et al., 2012; Hetherington et al., 2016; Iyengar and Krupenkin, 2018). Recent experimental evidence even suggests that partisan favoritism is stronger than bias related to race and religion in the U.S. (Iyengar and Westwood, 2015; Westwood et al., 2018). Affective polarization is also present in other countries, including European countries with multiparty systems (Marchal and Watson, 2019; Tworzecki, 2019; Gidron et al., 2020; Reiljan, 2020; Knudsen, 2021; Harteveld, 2021; Wagner, 2021; Flores et al., 2022). Researchers have argued for many causes for affective polarization, including social sorting (Levendusky, 2009; Mason, 2015; Huber and Malhotra, 2017; Mason, 2018b; Mason and Wronski, 2018; Robison and Moskowitz, 2019; Harteveld, 2021), partisan media (Lau et al., 2017), campaign messages (Hansen and Kosiara-Pedersen, 2017), and the increased moralization of politics (Garrett and Bankert, 2020).

<sup>2</sup>We use the term ‘threat’ in the broad sense that encompasses both existential and symbolic threats as both types have been found to increase group cohesion (Riek et al., 2006). Moreover, this effect may occur regardless of whether the threat originates from opposing groups or from natural phenomena (Maki et al., 2019).

handling the crisis. Finally, subjects in *Control* read an apolitical and emotionally neutral news article about how raindrops move on car windshields. After the news prime, we elicit subjects' ratings of the Democratic and Republican Party on feeling thermometers, and we elicit their stereotypes about members of both parties on the following traits: Patriotism, selfishness, intelligence, open-mindedness, and honesty. Then, subjects play an incentivized asymmetric Battle of the Sexes game, where we elicit subjects' decisions in two conditions that vary the partisan identity of the other player.

Testing pre-registered hypotheses, we find that priming subjects with Russia's invasion of Ukraine reduces affective polarization as measured by the feeling thermometer. The difference between own- and opposite-party feeling thermometer rating (henceforth 'FT difference') is 2.7 degrees lower in the *Invasion* treatment than in *Control*. This effect is not significantly lower when also priming subjects with the political disagreement about how well President Biden is handling the conflict. But the 1.6 degrees reduction in FT difference between *Disagreement* and *Control* fails to reach statistical significance. We find no evidence of affective polarization in stereotype trait ratings in any of our treatments. We find that greater affective polarization as measured by feeling thermometers significantly predicts a greater tendency to discriminate based on party affiliation of the opposing player in the asymmetric Battle of the Sexes game. Finally, we find that priming subjects with Russia's invasion increases subjects' probability of cooperating by at least 2.7 percentage points regardless of the partisan affiliation of the other player, and this occurs both in *Invasion* and *Disagreement*.

The current study makes important contributions to the literature on affective polarization. First, it sheds light on how the external threat from Russia's invasion of Ukraine influences affective polarization and how this effect depends on perceived cross-party (dis)agreement related to the conflict. Recent studies from the U.S. show that affective polarization decreases when politics is less salient ([West and Iyengar, 2020](#)) or when national identity is more salient ([Levendusky, 2018](#)). Other studies relate group identities to external threats. Thus, [Carlin and Love \(2018\)](#) find that Americans became more trusting towards opposite-party members after the killing of Osama Bin Laden, and [Gehring \(2021\)](#) finds that the Russian invasion of Ukraine in 2014 made citizens in Eastern Europe identify more strongly with the EU and support common EU policies to a greater extent. In this study, we not only look at a new case of Russian military aggression, we also examine how the effect of the intergroup conflict depend on the salience of intragroup divisions.

The second contribution of this study is to document how affective polarization matters for incentivized behavior in the asymmetric Battle of the Sexes game, which measures people's ability to cooperate and their willingness to compromise ([Attanasi et al., 2016](#)). Previous

studies have shown that individuals behave more selfishly in the dictator game when they face a recipient from the opposite party (Fowler and Kam, 2007; Iyengar and Westwood, 2015; Whitt et al., 2021), and they are less trusting towards an opposite-party member in the trust game (Carlin and Love, 2013; Iyengar and Westwood, 2015; Carlin and Love, 2018; Whitt et al., 2021). The novel feature of the asymmetric Battle of the Sexes game is that it is a coordination game in which two players must agree on an action in order to earn money. It is therefore particularly suited for measuring ability to coordinate and (as players earn different amounts) willingness to compromise for achieving the most efficient outcome.

Finally, our study has implications for politicians in times of (political) crises. Affective polarization matters for many decisions that people make (Gift and Gift, 2015; McConnell et al., 2018; Ruch et al., 2022), and it greatly influences how well governments function (Binder, 2003; Hetherington, 2015; Flores et al., 2022). It is therefore a key finding that external threats reduce affective polarization as it can be vital for the immediate policy response – even if the effect is only transient (Chong and Druckman, 2007; Myrick, 2021). Importantly, this effect is not significantly different when people perceive greater political disagreement regarding the conflict. This suggests that as long as people agree that there is an external threat, politicians should not fear a backlash from open discussions about how best to handle the threat.

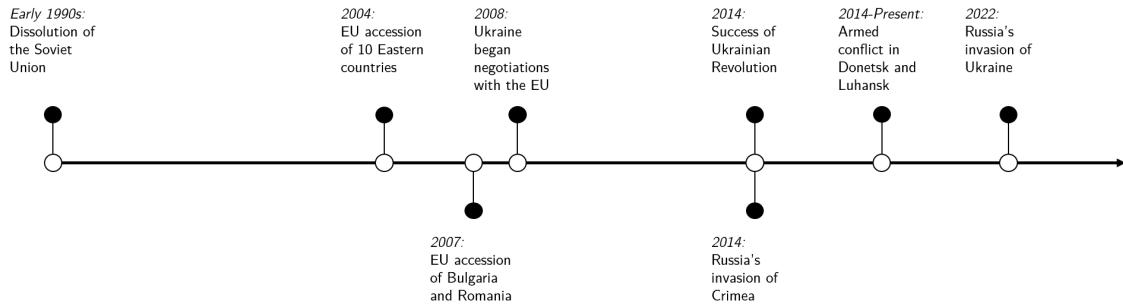
## 2 Background: Russia’s Invasion of Ukraine

In the following section, we give a brief account of important developments for Ukraine’s recent history, and we describe how Americans viewed the Russian invasion at the time of our experiment. Our aim is not to provide full details of Ukraine’s complex history but rather to provide background information necessary for understanding the scope of the current conflict.

After Ukraine left the Soviet Union in 1991 (Mackintosh, 2022), Ukraine’s main political goals have been to ensure independence and sovereignty while simultaneously balancing co-operation with the European Union and Russia (Shyrokykh, 2018). This balance has been increasingly difficult to maintain as the European Union and the North Atlantic Treaty Organization (NATO) have expanded eastward. Specifically, the European Union enrolled 12 new states between 2004 and 2007 and initiated negotiations about an Association Agreement with Ukraine in 2008 (Gehring, 2021). Further, NATO announced at the Bucharest summit in 2008 plans of some day enrolling Ukraine and Georgia in the organization (Bebler, 2015). This eastward expansion has been viewed critically by Russia and President Vladimir Putin, who on several occasions has expressed his views of Ukraine being a part of Russia (Mackintosh, 2022).

The tensions between Russia and Ukraine increased drastically after the 2014 Ukrainian Revolution. The revolution followed the Russian-friendly President Viktor Yanukovych's refusal to sign an Association Agreement with the European Union, and it ended with Yanukovych being forced to flee the country ([Gehring, 2021](#)). Afterwards, a separatist rebellion broke out in the east of Ukraine, and this gained support from Russia. In March 2014, Russia deployed military to Crimea and took over government buildings. Russian-backed authorities held a referendum shortly after this invasion, and Crimean voters overwhelmingly chose to join Russia. While Ukraine and Western countries called this referendum illegitimate, President Vladimir Putin finalized the absorption of the peninsula into Russia. The conflict then shifted to the Donetsk and Luhansk regions in eastern Ukraine. The pro-Russian separatists held a self-rule referendum claiming independence of the regions, but the Ukrainian government responded with a so-called “anti-terrorist operation” against the separatists. Throughout this operation, President Vladimir Putin denied Russian military involvement ([Roman et al., 2017](#)). The Ukrainian government and the separatists agreed on cease fire with the Minsk peace agreement in 2015, but there has not been stable peace in the regions since. By 2021, more than 13,000 people had been killed in this conflict and Western countries have responded with sanctions on Russia ([History Extra, 2022](#)).

Figure 1: Timeline of the Russian/Ukrainian conflict



A dramatic escalation of the conflict occurred on February 24, 2022, when Russia launched a full-scale invasion of the Ukrainian mainland. The immediate response from the U.S. and European countries was to impose economic sanctions targeting Russian banks and Russia's oil and gas industry. The U.S. did not employ any military in Ukraine, but they increased the number of troops in NATO countries near Ukraine. As of May 17 (around the time of our experiment), more than 3,380 civilians were confirmed to have been killed ([UN, 2022](#)), and 12 million refugees were believed to have fled Ukraine ([BBC, 2022](#)).

Among the American public, many viewed Russia's invasion as alarming: In a survey of U.S. adults conducted April 25 – May 1 by [Pew Research Center](#), 50 percent responded that

they were “extremely” or “very” concerned that the support for Ukraine might lead to a U.S. war with Russia. Democrats and Republicans both approved of placing strict economic sanctions on Russia (80 and 73 percent, respectively). Yet, the conflict involved cross-party disagreement as 55 percent of Republicans “somewhat” or “strongly” disapproved of the Biden administration’s response to Russia’s invasion of Ukraine. In contrast, 63 percent of Democrats “somewhat” or “strongly” approved of the Biden administration’s response.

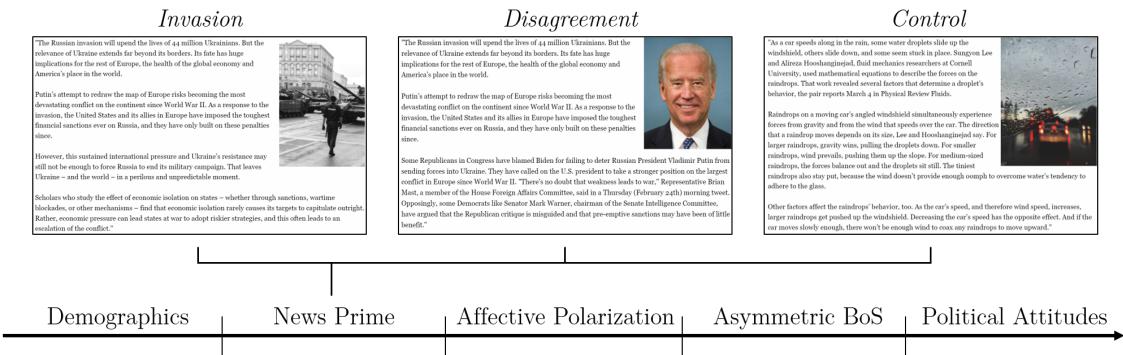
### 3 Experimental Design

The experiment consists of five parts, and these are completed in a single session online (see overview in Figure 2). First, subjects answer questions about their demographics, which we use for controls in the analysis. Second, subjects receive one of three news primes, focusing on either the threat of the Russian invasion, the political disagreement regarding Biden’s response to the invasion, or an apolitical topic. Third, subjects rate the Democratic and Republican parties on feeling thermometers and answer questions about their stereotypes. Fourth, subjects play an asymmetric Battle of the Sexes game; a coordination game in which one player can increase total payoff by foregoing some personal earnings. Finally, subjects answer questions about their political attitudes. The full set of instructions are available in Appendix A.

#### 3.1 Demographic Survey

Subjects first answer demographic questions about their age, gender, ethnicity, education, and employment. Such information provides us with details about the background of our sample, and we use these as controls in testing our hypotheses as individuals’ demographics to some extent predict affective polarization (Iyengar et al., 2019).

Figure 2: Timeline of the experiment



### 3.2 Treatments: News Primes

In the second part of the experiment, subjects read a brief news article, and they are asked to answer in 1-2 sentences a question about the content of the news article.<sup>3</sup> We vary the topic and framing of the news article in a between-subjects design, and we stratify subjects based on their stated party affiliation on Prolific such that there is an equal number of Republicans and Democrats in each treatment.

In the *Invasion* treatment, subjects read about Russia’s invasion of Ukraine and how this poses a threat to the interests of the U.S. Specifically, the article describes “Putin’s attempt to redraw the map of Europe” and how “economic pressure can lead states at war to adopt riskier strategies, and this often leads to an escalation of the conflict”. The article is accompanied by a picture of Russian tanks.

In *Disagreement*, subjects also read about the Russian invasion, but the article focuses on the disagreement between Republicans and Democrats about how well President Biden is handling the crisis. This includes a description of how “some Republicans in Congress have blamed Biden for failing to deter Russian President Vladimir Putin from sending forces into Ukraine” and that “some Democrats [...] have argued that the Republican critique is misguided”. This news article is accompanied by a picture of President Joe Biden.

In *Control*, subjects read an apolitical and emotionally neutral news article about how raindrops move on car windshields, illustrated with a picture. By making the content emotionally neutral, we avoid potential confounds with e.g. individuals in a good mood perceiving the world in a more inclusive and integrative way (e.g., [Bless and Fiedler, 2006](#)).

Upon reading the news article, subjects in the *Invasion* and *Disagreement* treatment answer three questions about Russia’s invasion of Ukraine: How much they have followed the development of Russia’s invasion of Ukraine, how big a threat they consider Russia’s invasion of Ukraine to be for the U.S. and its interest, and to what extent they consider Democrats and Republicans to disagree/agree on how to handle Russia’s invasion of Ukraine. These questions serve as a manipulation check as the *Invasion* treatment should increase perceived threat, and the *Disagreement* treatment should increase perceived disagreement compared to *Control*. We return to this in Section 4.2.

### 3.3 Affective Polarization

For the third part, subjects answer standard questions used to elicit affective polarization. Subjects start by rating the Democratic and Republican parties on feeling thermometers ([American](#)

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<sup>3</sup>The news articles draw heavily upon the formulations by [Times \(2022\)](#), [Morgan \(2022\)](#), and [Morales \(2022\)](#). The exact wording is included in Appendix A.

National Election Studies, 1968), and we randomize the order of the parties to preclude order effects. A feeling thermometer is a scale from 0 to 100, where ratings between 0 and 49 degrees mean that one feels cold and unfavorable towards the party (with 0 being the coldest), and ratings between 51 and 100 degrees mean that one feels warm and favorable (with 100 being the warmest). A rating of 50 means that one neither feels warmly nor coldly towards the party.<sup>4</sup>

We additionally elicit the subjects' stereotypes by asking them to rate the Democratic and Republican parties on five traits: Patriotism, selfishness, intelligence, open-mindedness, and honesty (Iyengar et al., 2012; Garrett et al., 2014; Levendusky, 2018; Druckman and Levendusky, 2019; Hobolt et al., 2021; Renström et al., 2021). To avoid order effects, we randomize both the order of the party and the order of the traits.

### 3.4 Asymmetric Battle of the Sexes Game

To obtain an incentivized, behavioral measure of subjects' ability and willingness to collaborate across party lines, the fourth part of the experiment consists of an asymmetric Battle of the Sexes game (Attanasi et al., 2016). Similar to the traditional Battle of the Sexes game, the asymmetric version is a one-shot coordination game in which two players (Player 1 and 2) must choose the same action of two (A and B) to earn money. For the asymmetric game, however, the total payoffs are different depending on what action the two players coordinate on (summarized in Table 1). Thus, if both players choose A, Player 1 earns 35 cents, and Player 2 earns 5 cents. If both players choose B, Player 1 earns 15 cents, and Player 2 earns 35 cents. If the players choose differently, both Player 1 and Player 2 earn zero cents.

Table 1: Payoff matrix for the asymmetric Battle of the Sexes game

$1 \setminus 2$	A	B
A	35,5	0,0
B	0,0	15,35

As evident from the payoff structure, there are two pure-strategy Nash equilibria to the asymmetric Battle of the Sexes game: Both play A and both play B.<sup>5</sup> Yet, in this game, both

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<sup>4</sup>Note the key difference between affective polarization and ideological polarization: Whereas ideological polarization suggests that people disagree on political topics, the emotional attachment to one's party leads to stereotypes about and a dislike for the members of the opposing party *on a personal level*. Mason (2015) and Marchal and Watson (2019) have even demonstrated that it is possible for ideological disagreement to play a negligible role to the extent that voters “disrespectfully agree”.

<sup>5</sup>There is also a Nash equilibrium in mixed strategies, where Player 1 plays A with 87.5 percent probability

players choosing B yields a greater total payoff. Importantly, this outcome does not Pareto dominate the other equilibrium; rather, Player 1 must forego some earnings to achieve the “greater good”, and she must agree to earn less than Player 2 to do so. Thus, analyzing Player 1 decisions informs about subjects’ willingness and ability to coordinate and compromise for the “greater good”.

Using the strategy method, subjects make four potentially payoff-relevant decisions in this game. They decide both as Player 1 and as Player 2, and they play the game together with a Republican and a Democrat in random order. Subjects are informed that we match ex post, and that one of their four decisions will be payoff relevant (randomly drawn and paid as a bonus via Prolific). Subjects answer three control questions before making their own decisions. Following Arechar et al. (2018), subjects are allowed to continue only when they answer all three control questions correctly. If subjects answer incorrectly, they are informed about this and are asked to try again.

### 3.5 Political Attitudes

Finally, the subjects answer general questions about their political preferences. Specifically, they indicate on a 5-point Likert scale how interested they are in politics, and they answer what party they support and how strongly they do so. For people indicating that they are Independent, we ask whether they consider themselves as closer to the Democratic Party or the Republican Party. Afterwards, subjects in *Control* answer the three questions about Russia’s invasion of Ukraine, which we use for our manipulation check in Section 4.2.<sup>6</sup>

### 3.6 Procedure

We recruited 1425 subjects on Prolific between May 7 and May 24, 2022, and the experiment was implemented in Qualtrics.<sup>7</sup> Online samples tend to be politically left-leaning and women are often over-represented (Paolacci et al., 2010; Paolacci and Chandler, 2014; Casey et al., 2017), and we therefore stratified the sample on Prolific to recruit an equal number of Democrats and Republicans as well as an equal number of men and women.<sup>8</sup>

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and Player 2 plays B with 70 percent probability.

<sup>6</sup>We placed these questions at the very end of the survey for the subjects in *Control* to avoid any priming effects of having the subjects consider the invasion.

<sup>7</sup>As online experiments attract the most respondents when they are published, we started collecting data on a Saturday to ensure that we did not bias our sample against employed individuals (Casey et al., 2017).

<sup>8</sup>As we are interested in affective polarization, our main sample comprises only people who affiliate themselves with the Republican or the Democratic Party. To maximize the relevant sample given our budget, we therefore use the pre-recorded questions on Prolific in recruiting the most relevant subjects. One might be concerned that

We limited the sample to Americans who had completed 10 previous studies on Prolific with an approval rating of at least 98 percent (Matherly, 2019). We applied several pre-registered screeners to ensure high-quality data (Thomas and Clifford, 2017; Zhang et al., 2022). As we describe in Appendix C, we screened out 13 responses (0.9 percent). Furthermore, as our study concerns polarization between Democrats and Republicans, we exclude nine subjects who identify as “true Independents”, leading to a main sample of 1403.<sup>9</sup> In this sample, the mean age was 40 years, 49.9 percent were men, 82.3 percent were white or Caucasian, 62.2 percent were employed (part or full time), 10.2 percent were self-employed, 39.8 percent had obtained a Bachelor’s degree, and 13.6 percent had obtained a Master’s degree. The full set of sample characteristics are provided in Appendix D.

For completing the study, respondents earned on average USD 1.2 (min: 1.07, max: 1.41), and the median completion time was approximately 8 minutes (which is an upper bound as it relies on Qualtrics timing data that also counts time spent off task with the survey running in the background).

### 3.7 Theory and Hypotheses

Because affective polarization is rooted in people’s social identities (Iyengar et al., 2019), we use theories from the social identity approach to inform our (pre-registered) hypotheses (Tajfel et al., 1971; Tajfel and Turner, 1979; Tajfel, 1986).<sup>10</sup> This approach describes how group biases arise as individuals distinguish between those who belong to the same group as themselves (ingroup) and those who do not (outgroup), cf. self-categorization theory (Turner et al., 1987; Turner and Reynolds, 2012). In our context, the social categorizations follow from individuals’ affiliation to either the Democratic or the Republican Party. This group identification is emotionally significant, and it leads to social comparisons (Turner, 1975).

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we by doing so bias our sample towards the most politically interested sample. But a vast majority of subjects on Prolific provide information about their political affiliation as doing so maximizes their chance of getting invited for future studies. Thus, as of May 3, 2022, there were 37,916 active American subjects on Prolific, of which 27,293 (72 percent) had reported their political affiliation. Of these, 17,821 (65 percent) supported either the Democratic or the Republican Party (Prolific, 2022).

<sup>9</sup>Our results are robust to including all subjects in the analysis. Furthermore, our results are robust to using RelevantID as a screener (Imperium, 2022). RelevantID is an online fraud and duplicates detection service offered by Imperium, and it is embedded in Qualtrics (Qualtrics, 2022). Note that we only use this for robustness as Zhang et al. (2022) demonstrate that combining individual screeners provides a similar fraud detection performance while making it more transparent why responses are flagged.

<sup>10</sup>Following Tajfel (1978, p. 63), we define social identity as “that part of an individual’s self-concept which derives from his knowledge of his membership in a social group (or groups) together with the value or emotional significance attached to that membership”.

Here, an individual is motivated to think highly of her own party (“ingroup love”) and to focus on the negative characteristics of the other party (“outgroup hate”, Weisel and Böhm, 2015).<sup>11</sup> This gives rise to affective polarization, in which voters are more likely to distrust and dislike those affiliated to the other party. In the following, we describe how we expect the treatments to influence this affective polarization.

**Invasion Treatment.** We expect that priming subjects with Russia’s invasion of Ukraine reduces affective polarization in two ways. First, this prime may influence what individuals perceive to be their ingroup and outgroup. Most Democrats and Republicans also think of themselves as American (cf. the common ingroup identity model Gaertner et al., 1989, 1993; Gaertner and Dovidio, 2000), and we expect that the focus on an international conflict will make the national identity more salient. Levendusky (2018) demonstrates that an increased focus on national identity reduces affective polarization, following from the fact that motivation to think highly of one’s ingroup then also encompasses those who were previously in the outgroup.

Second, we expect the invasion prime to increase the perceived threat from Russia, leading to a common enemy effect (Tajfel and Turner, 1979; Giles and Evans, 1985; De Jaegher, 2021). Specifically, perceived threats can enhance the distinction between Americans and Russians (cf. intergroup conflict theory, Stephan and Stephan, 1996, 2000; Stephan et al., 2009, 2015), and it can lead to cross-political support for the incumbent leader (cf. rally around the flag, Mueller, 1970; Baker and Oneal, 2001). Thus, previous literature has demonstrated that gaps between groups in a society may decrease with perceived threats (Dovidio et al., 2004; Moskalenko et al., 2006; Stollberg et al., 2017; Dehdari and Gehring, 2022), and this occurs through both attitudes (Bonanno and Jost, 2006; Echebarria-Echabe and Fernández-Gude, 2006), emotions (Porat et al., 2019), and a general sense of group cohesiveness (Wilder, 1984; Rothgerber, 1997; Mackie et al., 2000; Karasawa et al., 2004).<sup>12</sup>

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<sup>11</sup>This tendency is further strengthened by people’s tendency to like those who share their attitudes (cf. the similarity-liking effect, Byrne, 1961; Bruchmann et al., 2018; Zorn et al., 2022).

<sup>12</sup>While this literature goes back to Sumner (1906), more recent research emphasizes that it is the perceived threat rather than the actual threat that matters for people’s threat response (Merolla et al., 2007; Merolla and Zechmeister, 2009; Vail et al., 2012). How people respond to a specific perceived threat depends on a wide range of factors, including the nature of the intergroup relation, situational factors, and the cultural dimensions on which the groups differ (see Stephan et al., 2009, for a review). Most important for the present experiment, a group is more prone to perceive a threat from another group if the two have a history of conflict (Stephan et al., 2002; Shamir and Sagiv-Schifter, 2006) and if their cultural values differ (cf. the concordance model of acculturation, Piontkowski et al., 2002; Zárate et al., 2004; Rohmann et al., 2006, 2008). Regarding the individuals within the group, the theory predicts that the response to a perceived threat is especially strong for

Both the increased focus on American identity and the increased threat perception work to reduce affective polarization, and we thereby reach our first hypothesis:

**Hypothesis 1** *Affective polarization is greater in Control than in Invasion.*

**Disagreement Treatment.** We expect that an emphasis on party disagreements about President Biden will counteract the two effects mentioned above. First, it increases the salience of political rather than national identities, and this leads to an increase in affective polarization (West and Iyengar, 2020). Second, if individuals perceive an intense cross-party polarization related to the conflict, it is possible that they view their political opposition as a hindrance for dealing with the treat rather than as a part of the ingroup. In such situations, perceived external threats may in fact increase polarization (John and Dvir-Gvirsman, 2015; Orian Harel et al., 2020). Thus, we reach our second hypothesis:

**Hypothesis 2** *Affective polarization is greater in Disagreement than in Control.*

## 4 Analysis

In the following, we first present descriptive statistics that document the existence of affective polarization in our sample. Afterwards, we show that the *Invasion* and *Disagreement* treatments succeed in manipulating subjects' threat and disagreement perceptions, respectively. We then test the pre-registered hypotheses and conduct exploratory analyses.

As pre-registered, our primary outcome measure is FT difference (own-party rating less opposite-party rating). We planned to use stereotypes as secondary measures to provide more details on affective polarization. But in contrast to previous literature (e.g., Garrett et al., 2014), we do not find affective polarization in stereotypes and refer instead the results of our pre-registered analyses to Appendix G. When conducting tests on FT difference, we rely on OLS regressions with different levels of control variables, and we use non-parametric tests of treatment differences for robustness. To examine behavioral effects, we examine behavior in the asymmetric Battle of the Sexes game with a specific focus on subjects' decisions in the role of Player 1. Subjects make two decisions in the role of Player 1 as they face a Player 2 who is affiliated with either their own or the opposing party. We use McNemar's test to investigate within-subject changes in the proportions of subjects who choose selfish/cooperative strategies. To investigate between-subject treatment effects on behavior in the game, we use logit and multinomial logit as well as Fisher's exact tests for robustness. Throughout, we rely on one-sided tests if the estimated treatment effect is in accordance with our hypotheses and two-sided

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people who more closely identifies with the ingroup (Riek et al., 2006).

tests for other tests. Stated  $p$ -values in the following sections refer to two-sided tests unless otherwise stated. All this in line with our pre-registration.

## 4.1 Descriptive Statistics

**Feeling Thermometers.** We find affective polarization in the feeling thermometer questions. Across all subjects, the average FT difference is 49.6 degrees. Subjects on average rate their own party at 70.4 degrees and the opposite party at 20.8 degrees.<sup>13</sup> Figure 3 illustrates the distribution of answers to the feeling thermometer questions for Democrats and Republicans separately. As seen from the figure, we find a larger FT difference among Democrats than Republicans (in line with [West and Iyengar, 2020](#), and [Renström et al., 2021](#)): Both Democrats and Republicans rate their own party at around 70 degrees, but Democrats rate the Republican Party at 15.9 degrees while Republicans rate the Democratic Party at 25.8 degrees on average.

**Asymmetric Battle of the Sexes.** Our main interest in the Asymmetric Battle of the Sexes game is subjects' behavior in the role of Player 1. Subjects display affective polarization in the sense that they choose differently depending on the partisan affiliation of the other subject. We do not observe any order effects on Player 1 behavior, and we therefore pool the data. We find that subjects are more likely to choose the cooperative action B if Player 2 is an own-party member (47.1 percent) rather than an opposite-party member (39.3 percent). This difference is statistically significant ( $p < .001$ , McNemar's test).<sup>14</sup>

We proceed to generate four "Player 1 types" to characterize how subjects choose when facing an own- and opposite party member, respectively. We find 49.2 (35.5) percent choose A (B) irrespective of the partisan identity of Player 2 (henceforth *AA* and *BB*). Further, 11.6 percent of subjects display affective polarization by playing the cooperative strategy B when Player 2 is from their own party, but the selfish strategy A when Player 2 is from the opposite party (*BA*). Only 3.7 percent display the opposite pattern of playing A when Player 2 is from their own party and B otherwise (*AB*).<sup>15</sup>

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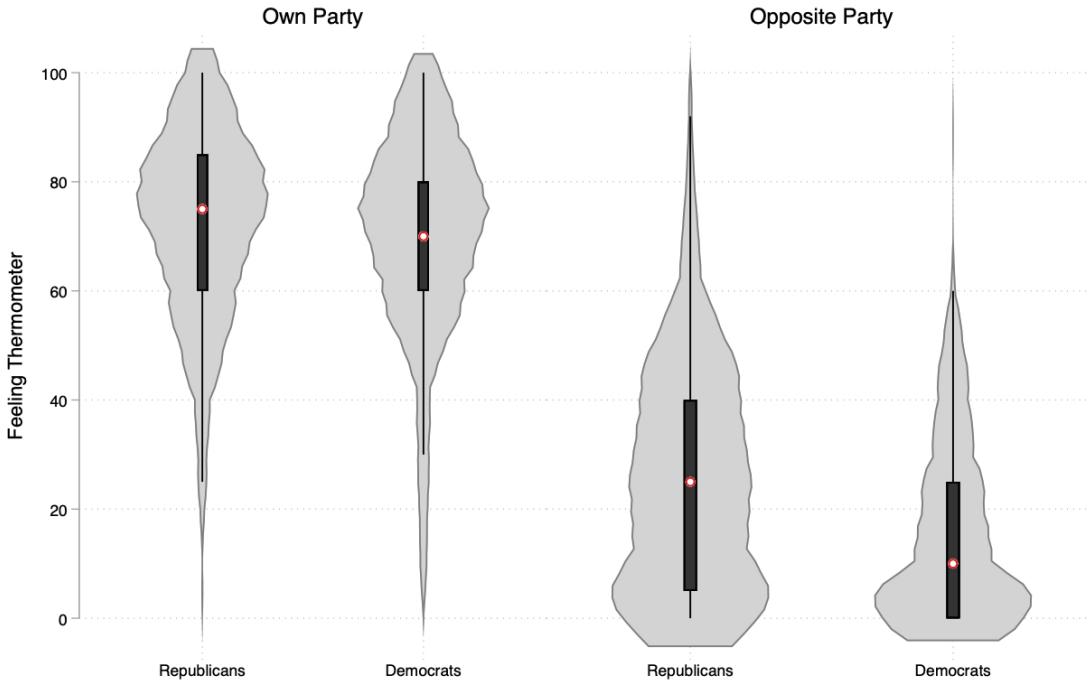
<sup>13</sup>Compared to the existing literature, we find a similar own-party feeling thermometer rating and around 5 degrees lower opposite-party rating. (e.g., [Iyengar et al., 2012](#); [Iyengar and Krupenkin, 2018](#); [Levendusky, 2018](#)).

<sup>14</sup>In the decisions in the role of Player 2, there is not much indication of behavioral difference in own/opposite-party condition. Only around 8 percent of subjects change their decision from own- to opposite-party condition in the role of Player 2 and a change in either direction is equally likely (McNemar's  $\chi^2 = .08, p = .850$ ).

<sup>15</sup>Player 1 cooperation with own-party members is similar in our experiment to the level that [Attanasi et al. \(2016\)](#) find in their *University* treatment (47.1 vs. 49 percent), in which subjects also share a generalized sense of belonging to an extended ingroup (students at the same university). Compared to [Attanasi et al. \(2016\)](#), we

Democrats and Republicans choose differently in the game (Pearson  $\chi^2 = 27.4, p < .001$ ). As summarized in Table 2, Democrats are more likely than Republicans to play *BB*, and less likely to play *AA*. Yet, Democrats are also more likely to display affective polarization (Type *BA*) than Republicans (13.5 vs. 9.6 percent,  $p = .024$ , Fisher's exact test).

Figure 3: Affective polarization in Feeling Thermometer ratings



*Note:* This figure shows violin plots for how subjects rate each party on the feeling thermometer. Violin plots show kernel density estimates and embed standard box plots. x-axis labels refer to partisan affiliation of the subjects. Thus, the left-most plot is the distribution of Republican subjects rating their own party and similar for the other plots.

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generally find a higher willingness to choose B in the role of Player 2.

Table 2: Player 1 types in the Battle of the Sexes game by party affiliation

Player 1 Type	Republicans	Democrats	Total
(AA)	55.2%	43.3%	49.2%
(AB)	4.6%	2.8%	3.7%
(BA)	9.6%	13.5%	11.6%
(BB)	30.6%	40.4%	35.6%

*Note:* First letter refers to subjects' Player 1 decision when Player 2 is affiliated with own party, second letter refers to their Player 1 decision when Player 2 is affiliated with the opposite party.

## 4.2 Manipulation Check

Before turning to our main hypotheses, we first show that the experimental manipulations work by testing whether subjects in the *Invasion* treatment perceive Russia to be a greater threat to the U.S. and its interest relative to subjects in *Control* and whether subjects in the *Disagreement* treatment perceive more political disagreement about how to handle Russia's invasion of Ukraine relative to subjects in *Control*. Figure E1 shows the average threat perception and disagreement perception in the three treatments.

**Invasion.** Subjects in the *Invasion* treatment perceive Russia's invasion of Ukraine as a greater threat to the U.S. and its interest relative to subjects in *Control* (3.52 vs. 3.33,  $p = .006$ , *t*-test). Another way to see this is that subjects in *Invasion* are more likely to rate the threat of Russia's invasion of Ukraine as "somewhat severe" or "severe" relative to subjects in *Control* (53 vs. 44 percent,  $p = .009$ , Fisher's exact test). We find no difference in the perception of disagreement between *Invasion* and *Control* (2.91 vs. 2.89,  $p = .703$ , *t*-test).

**Disagreement.** Subjects in the *Disagreement* treatment perceive more political disagreement on how to handle Russia's invasion of Ukraine relative to subjects in *Control* (3.29 vs. 2.89,  $p < .001$ , *t*-test). Similarly, subjects in *Disagreement* are more likely to answer that Democrats and Republicans "strongly disagree" or "somewhat disagree" on how to handle Russia's invasion of Ukraine relative to subjects in *Control* (52.6 vs. 33.4 percent,  $p < .001$ , Fisher's exact test). We do not find a difference in threat perception between *Disagreement* and *Control* (3.42 vs. 3.33,  $p = .240$ , *t*-test).

## 4.3 Main Results

As our news primes succeeded in generating (i) a greater average threat perception in *Invasion* and (ii) a greater average disagreement perception in *Disagreement*, we continue to examine how the treatments influence affective polarization.

### 4.3.1 H1: Affective Polarization in *Invasion* and *Control*

We first report the results related to our first hypothesis, which states that affective polarization should be greater in *Control* than in *Invasion*.

**Feeling Thermometers.** We find that affective polarization is greater in *Control* than *Invasion* as measured by FT difference, and the difference becomes statistically significant when we include all control variables ( $t = -1.76, p = .040$ , one-sided test, cf. Table 3).<sup>16</sup>

The size of the coefficient suggests that subjects in *Invasion* on average rate a 2.7 degrees smaller FT difference relative to subjects in *Control*. Arguably, this is a modest effect compared to the average FT difference of 51.4 in *Control*. It is somewhat smaller than the 5.6 degrees reduction that [Levendusky \(2018\)](#) finds from priming Americans with their national identity, but it is similar to the effect of 2.5 degrees that [Boxell et al. \(2020\)](#) find from priming individuals with the COVID-19 pandemic.<sup>17</sup>

**Asymmetric Battle of the Sexes.** Cf. our pre-registration, we expected that a reduction in affective polarization would manifest in subjects' willingness to compromise in the decision of Player 1. Accordingly, we find that subjects in *Invasion* are more likely to choose B in the role of Player 1 compared to subjects in *Control* (see Figure 4). Logistic regressions show that subjects in *Invasion* are more likely to choose B both when facing a Player 2 who is affiliated with their own party (6.1 percentage-points,  $p = .036$ , one-sided test) and the opposite party (6.2 percentage-points,  $p = .029$ , one-sided test) compared to subjects in *Control* (see Table F2).<sup>18</sup>

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<sup>16</sup>The treatment effect remains marginally significant when controlling for both the family-wise error rate and the false discovery rate (both  $p$ 's < .096), cf. Appendix I). Yet, the nonparametric Mann-Whitney U-test just fails to reach marginal significance due to the increased noise from not including control variables ( $p = .104$ , one-sided test).

<sup>17</sup>We chose the sample size such that we had a power of .8 (see Appendix B) to detect a standardized effect size of Hedge's  $g_p = .150$ . We find a treatment effect of Hedge's  $g_p = .088$  in the *Invasion* vs. *Control* comparison.

<sup>18</sup>Fisher's exact tests yield the same conclusion: Subjects in *Invasion* are more likely to choose B when Player 2 is affiliated with their own party (49.6 vs. 44.3 percent,  $p = .060$ , Fisher's exact one-sided test) and with the opposite party (42.1 vs. 36.2 percent,  $p = .037$ , Fisher's exact one-sided test) compared to subjects in *Control*.

In addition, we expected that a reduction in affective polarization would cause subjects to be less likely to discriminate based on the party affiliation of the Player 2 (i.e., choose B in the own-party condition and A in the opposite-party condition rather than B in both conditions). To test this, we perform multinomial logistic regression with “Player 1 type” as the dependent variable (see Table 1). Contrary to our expectations, we find that subjects in *Invasion* are 1 percentage point more likely to be of type *BA* compared to subjects in *Control*, and this is not statistically significant. Yet, subjects in *Invasion* are 7.4 percentage points less likely to be of type *AA* ( $p = .029$ ) and 6 percentage points more likely to be of type *BB* ( $p = .068$ ) relative to subjects in *Control* (see Table F3).

In sum, our analysis of H1 leads us to conclude the following:

**Result 1** *Priming subjects with Russia’s invasion of Ukraine leads to a modest reduction in affective polarization as measured by differences in feeling thermometer ratings. Moreover, the invasion prime makes subjects more willing to compromise and choose B in the asymmetric Battle of the Sexes game irrespective of the partisan identity of the other player.*

#### 4.3.2 H2: Affective Polarization in *Disagreement* and *Control*

We now report the results related to our second hypothesis, which states that affective polarization should be greater in *Disagreement* than *Control*.

**Feeling Thermometers.** Contrary to our expectations, subjects report a 1.6 degrees greater FT difference in *Control* than in *Disagreement*. This indicates that affective polarization is reduced in *Disagreement*, but the difference is only marginally statistically significant in the specification with demographic controls ( $p = .093$ , cf. Table 3). The nonparametric Mann-Whitney U-test fails to reach statistical significance ( $p = .152$ ).

**Asymmetric Battle of the Sexes.** Just as we find no statistical difference in affective polarization between *Disagreement* and *Control* as measured by FT differences, we find no difference in subjects’ willingness to compromise and choose B in the role of Player 1 (see Figure 4). The increased probability of choosing B for subjects in *Disagreement* compared to subjects in *Control* is statistically insignificant both when Player 2 is affiliated with their own party (2.7 percentage-points,  $p = .432$ , cf. Table F2) and the opposite party (3 percentage-points,  $p = .364$ , cf. Table F2).<sup>19</sup> Looking at “Player 1 types”, we also find no statistically

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<sup>19</sup>Fisher’s exact tests yield the same conclusion: The difference is statistically insignificant both when Player 2 is affiliated with the subjects’ own party (47.6 vs. 44.3 percent,  $p = .328$ , Fisher’s exact test) and the opposite party (39.6 vs. 36.2 percent,  $p = .284$ , Fisher’s exact test).

significant differences (all  $p$ 's > .200, cf. Table F3).

**Result 2** *Priming subjects with political disagreement about how President Biden is handling Russia's invasion of Ukraine does not lead to an increase in affective polarization as measured by differences in feeling thermometer ratings; instead, it leads to a modest and statistically insignificant reduction in affective polarization. The prime does not affect behavior in the asymmetric Battle of the Sexes game.*

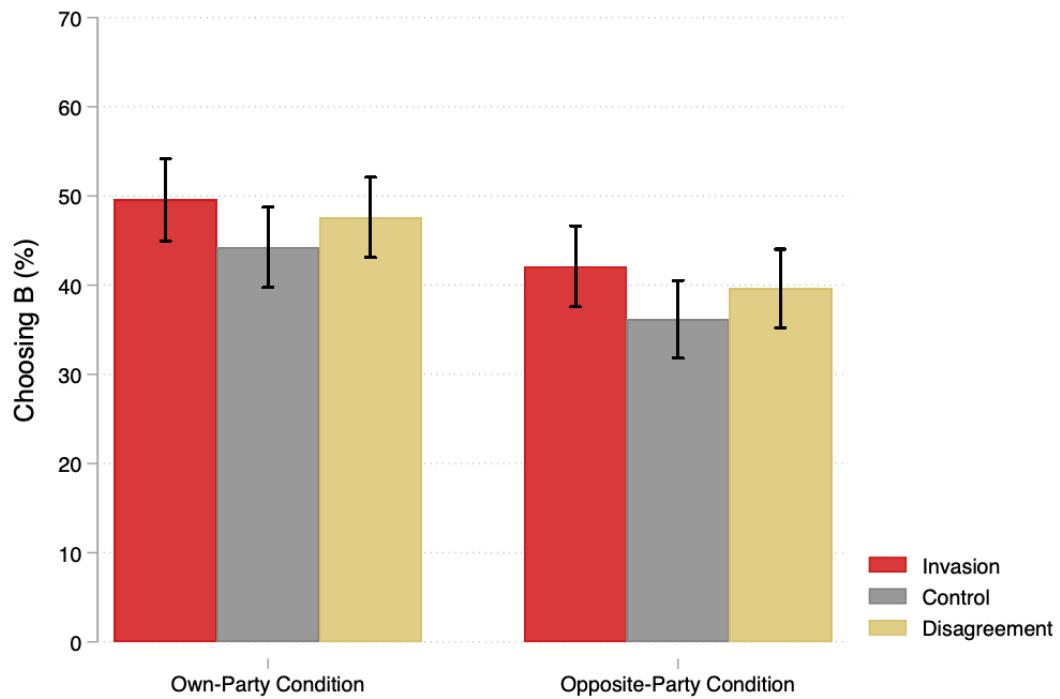
Table 3: Treatment effects on affective polarization

	Invasion vs. Control			Disagreement vs. Control		
Invasion	-2.504 (1.860)	-2.476 (1.855)	-2.744* (1.563)			
Disagreement				-2.960 (1.828)	-3.048* (1.811)	-1.594 (1.522)
Constant	51.434*** (1.300)	46.806*** (3.828)	22.966*** (4.048)	51.434*** (1.300)	40.400*** (3.936)	19.021*** (4.138)
N	926	926	926	947	947	947
Adj. R2	0.00	0.02	0.31	0.00	0.04	0.32
Demographics	No	Yes	Yes	No	Yes	Yes
Attitudes	No	No	Yes	No	No	Yes

*Note:* OLS regressions with FT difference as the dependent variable. Demographics include age, gender, dummies for ethnicity and dummies for level of schooling. Attitudes include political interest (5-point Likert scale), partisan affiliation (dummy with value 1 if subject identifies as a Democrat, strength of partisan affiliation (dummy with value 1 if subject is a strong supporter), and how much the subject has been following the invasion (5-point Likert scale). Robust standard errors in parentheses.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

Figure 4: Decision of Player 1 across treatments



*Note:* This figure shows for each treatment the share of subjects who choose B as Player 1 in the asymmetric Battle of the Sexes game when facing either a player affiliated with one's own party or the opposite party. Whiskers denote 95 percent confidence intervals.

#### 4.3.3 Behavioral Effects of Affective Polarization

The above analysis sheds light on how Russia’s invasion of Ukraine influenced affective polarization, and in Section 5.2 we return to the moderating role of political disagreement. But a second major contribution of the present study is to provide evidence on how informative survey-based measures of affective polarization are in explaining behavior in a situation where decisions have real (economic) consequences.

First, note that subjects are more likely to choose the cooperative decision in the role of Player 1 when Player 2 is affiliated with their own party than with the other party (47.1 vs. 39.3 percent,  $p < .001$ , McNemar’s test). This is consistent with previous studies that show how partisans tend to behave more prosocially towards people from their own party in the Dictator Game and the Trust Game (Fowler and Kam, 2007; Carlin and Love, 2013; Iyengar and Westwood, 2015; Carlin and Love, 2018; Whitt et al., 2021).

Second, if the feeling thermometer is informative for actual behavior, one would expect that subjects who display a greater FT difference are more likely to discriminate based on party affiliation in the asymmetric Battle of the Sexes game. This is exactly what we find: A greater FT difference is associated with higher probability of being type *BA* and thus displaying affective polarization in the game (see Figure 5). Multinomial logistic regressions confirm this tendency as greater FT difference predicts a greater probability of being type *BA* ( $p < .001$ , cf. Table F4). The marginal effect implies that a 10 degrees greater FT difference predicts a 2 percentage points greater probability of being of type *BA* in the asymmetric Battle of the Sexes game. This is a considerable effect considering that the baseline frequency of type *BA* is only 11.5 percent. In addition, a greater FT difference correlates significantly with a lower probability of being of type *BB* and a greater probability of being of type *AA*.

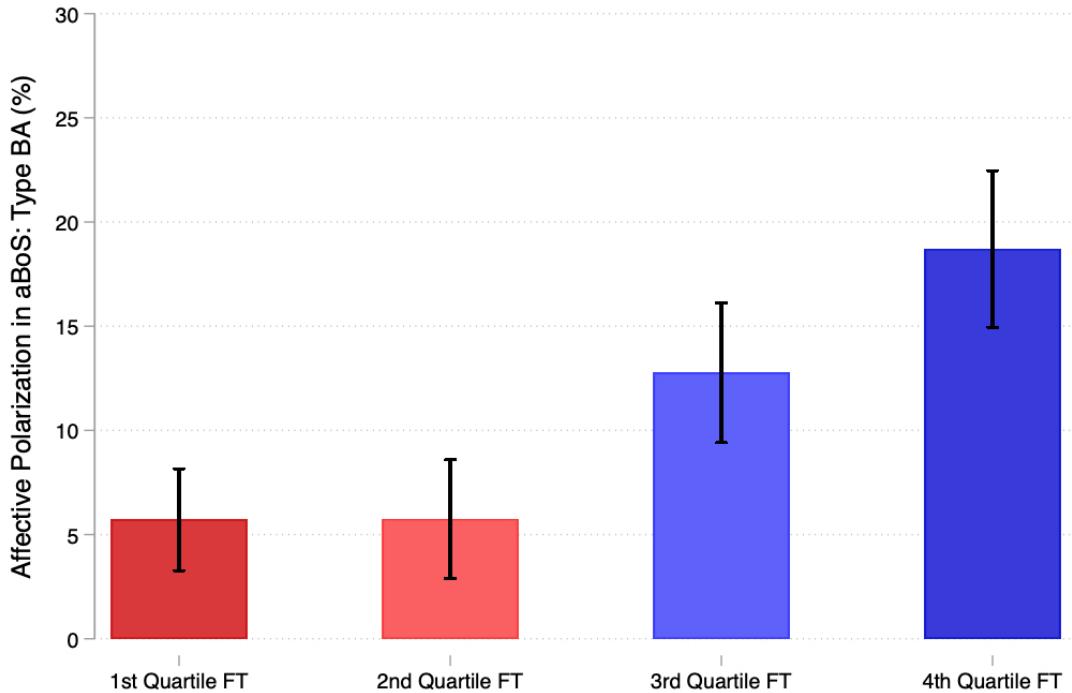
**Result 3** *Affective polarization as measured by feeling thermometers is behaviorally relevant: A greater difference in thermometer ratings predicts a greater tendency to discriminate based on party affiliation in an incentivized asymmetric Battle of the Sexes game, indicating that affective polarization correlates with individuals being less willing and able to coordinate and compromise for the “greater good” when they encounter someone affiliated with the opposing party.*

The effects of discrimination are large in our setting: If subjects were as cooperative in the opposite-party condition as in the own-party condition, the total surplus would increase by 16.4 percent.<sup>20</sup>

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<sup>20</sup>To obtain this result, we use the frequencies from Player 2 behavior when facing a Player 1 affiliated with the opposite party. We then compute the expected total surplus given the average Player 1 behavior in the

Figure 5: Share of types BA split by FT difference



*Note:* This figure divides subjects into quartiles based on the size of FT difference such that subjects in the first quartile exhibit the smallest FT difference and subjects in the fourth quartile exhibit the greatest FT difference. For each quartile, the bars indicate the share of subjects who as Player 1 choose B when facing a person affiliated with own party and choose A when facing a person affiliated with the opposing party. Whiskers denote 95 percent confidence intervals.

Note that the relation between affective polarization measured by feeling thermometers and behavior in the asymmetric Battle of the Sexes game holds across all treatments and is not a finding unique to the conflict under investigation. Rather, it is a general result that documents how affective polarization influences behavior when decisions have real consequences.

## 5 Discussion

In the preceding analysis, we demonstrated that priming Americans with an external threat in the form of Russia’s military aggression against Ukraine reduces affective polarization as measured by the standard feeling thermometer. In addition, we showed that this measure of affective polarization is behaviorally relevant as it predicts individuals’ tendency to bias their decisions in an incentivized coordination game.

In the following section, we extend this analysis to examine how treatment effects differ between Democrats and Republicans. We then discuss the influence of political disagreement and discuss the behavioral effects of our treatment primes. Finally, we broaden the discussion to what can be learned from the priming technique. In Appendix K, we demonstrate that the mechanism of how the *Invasion* treatment reduces affective polarization is by making subjects feel more warmly towards individuals affiliated with the opposing party (as predicted by the common ingroup identity model). Appendix K also provides evidence that neither strength of partisan support, extent of political interest, nor the subjects’ gender or age moderate our treatment effects.

### 5.1 Heterogeneous Treatment Effects by Partisan Affiliation

An exploratory analysis reveals substantial differences in how Democrats and Republicans respond to the invasion prime: As we detail below, both the *Invasion* and *Disagreement* treatments reduce affective polarization among Republicans, but Democrats display the same level of affective polarization across all three treatments. Notably, this occurs even though both groups pass the manipulation checks. Thus, we find that perceived threat is significantly greater in *Invasion* than *Control* for Democrats (3.73 vs. 3.53,  $p = .024$ ) and marginally so for Republicans (3.31 vs. 3.14,  $p = .099$ ). Moreover, perceived disagreement is significantly greater in *Disagreement* than *Control* for both Democrats (3.37 vs. 2.81,  $p < .001$ ) and Republicans (3.21 vs. 2.97,  $p = .025$ ). In the following, we test for treatment effects for the two parties separately, and we then discuss possible reasons for the discrepancies.

Looking first at feeling thermometers, we find a 5.5 degrees reduction in FT difference in own-party and other-party conditions.

*Invasion* among Republicans, and this is statistically significant (OLS:  $p = .020$ , cf. Table 4). In contrast, we find no treatment effect among Democrats ( $p = .989$ ). The *Disagreement* treatment yields a similar pattern: Republicans exhibit a 4.2 degrees reduction in FT difference (OLS:  $p = .054$ , cf. Table 4), but there is no effect among Democrats ( $p = .383$ ). Further, a Wald test shows that the difference between the treatment effects for Republicans and Democrats is statistically significant for both *Invasion* ( $p = .073$ ) and *Disagreement* ( $p = .043$ ).

For the asymmetric Battle of the Sexes game, only Republicans are influenced by the *Invasion* treatment (see Figure 6). Compared to Republicans in *Control*, Republicans in *Invasion* are more likely to choose B both when Player 2 is affiliated with the subject's own party (logit: 10.9 percentage-points,  $p = .031$ , cf. Table F5) and the opposite party (9.4 percentage-points,  $p = .051$ ). In contrast, Democrats are not influenced by the *Invasion* treatment (all  $p'$ s  $> .309$ ). The difference between Republicans in *Disagreement* and *Control* is statistically insignificant, but suggests that the *Disagreement* treatment leads Republicans to be 6.7 percentage-points more likely to choose B in the own-party condition ( $p = .158$ ) and 6.4 percentage-points more likely in the opposite-party condition ( $p = .174$ ). Also for this treatment, there is no effect on Democrats (all  $p'$ s  $> .638$ ).<sup>21</sup>

As for Player 1 types, the *Invasion* treatment makes Republicans 13.9 percentage points less likely to be of the selfish type *AA* (multinomial logistic regression:  $p = .004$ , cf. Table F6) and 7.7 percentage points more likely to be of the cooperative type *BB* ( $p = .068$ ). The effects in *Disagreement* suggest that Republicans become 6.7 percentage points less likely to be of type *AA* ( $p = .130$ ) and 7.6 percentage points more likely to be of type *BB* ( $p = .075$ ). Among Democrats, neither treatment has any effects on Player 1 types (all  $p'$ s  $> .295$ ).

In sum, both treatments effectively reduce affective polarization among Republicans, and they increase Republican's willingness to compromise in the coordination game. Opposingly, none of the treatments have any effect on Democrats. First, one might speculate that this result is due to the characteristics of our sample. Thus, in our sample Republican subjects are on average older, less educated, and more likely to be white/Caucasian compared to Democratic subjects. However, our sample differences reflect differences between Republicans and Democrats in the population ([Pew Research Center, 2018](#)), and we control for these characteristics throughout the analysis.

Second, one might speculate that our sampling procedure led to differences between Republicans and Democrats. Specifically, because there are more Democrats than Republicans

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<sup>21</sup>Fisher's exact tests yield a similar conclusion, though the difference between Republicans in *Invasion* and *Control* is marginally insignificant in the own-party condition ( $p = .102$ ) and marginally significant in the opposite-party condition ( $p = .093$ ).

on Prolific,<sup>22</sup> more Democrats were recruited early in the data collection. Specifically, almost all Democratic subjects were recruited on the first day of data collection, but it took longer to recruit the Republican subjects (96 vs. 34.6 percent of responses collected on the first day). Thus, if something happened after we started the data collection on May 7, 2022, this would have disproportionately large effects on the Republican sample. Ex ante, we accounted for this making sure that equal shares were randomized into each treatment on every day, implying that any developments in the conflict would influence subjects across all treatments. Ex post, we find no evidence that there should be any change in the estimated treatment effect among Republicans over the course of the data collection.

Third, it is possible that citizens respond differently to the conflict depending on what party the President represents. Studies of previous conflicts have found that the rally-around-the-flag effect, in which the President's popularity increases as a response to a threat, is more pronounced among the opposition. For instance, [Fox \(2009\)](#) find that the popularity of President Bush increased more for Democrats than Republicans in response to both the 9/11 attacks and the Iraq War. Similarly, [Callaghan and Virtanen \(1993\)](#) show that in response to the Iranian hostage crisis in 1979, support for President Carter increased more among Republicans than Democrats (see also [Lebo and Cassino, 2007](#)). In this way, it is possible that those who are not in power and thus dislike the (party of the) President the most at the outset respond more strongly to a threat. This would make Republicans more responsive to our treatments.

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<sup>22</sup>As of August 16, 2022, 80 percent of the subject pool on Prolific who had stated their support for one of the two parties supported the Democratic Party.

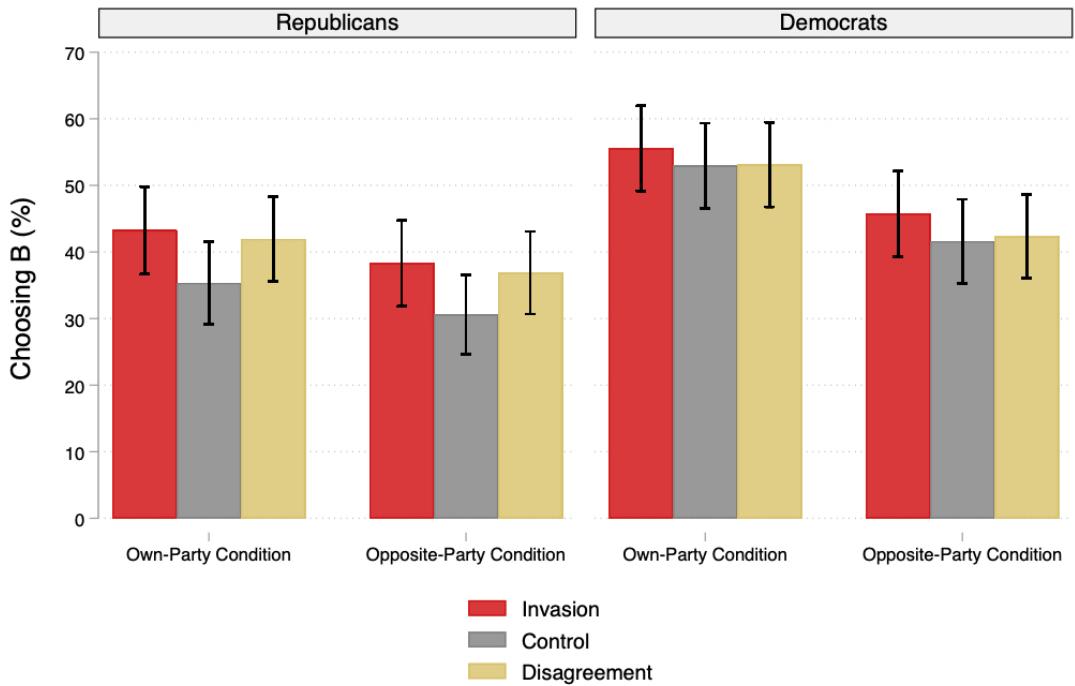
Table 4: Treatment effects by party affiliation

Invasion vs. Control						
	Democrats			Republicans		
Invasion	-0.387 (2.395)	0.303 (2.387)	0.029 (2.102)	-4.798* (2.833)	-5.505* (2.853)	-5.547** (2.371)
Constant	53.618*** (1.783)	46.079*** (4.819)	20.857*** (5.141)	49.194*** (1.888)	45.177*** (5.787)	26.043*** (5.987)
N	472	472	472	454	454	454
Adj. R2	-0.00	0.03	0.27	0.00	0.03	0.35
Demographics	No	Yes	Yes	No	Yes	Yes
Attitudes	No	No	Yes	No	No	Yes
Disagreement vs. Control						
	Democrats			Republicans		
Disagreement	0.685 (2.430)	0.827 (2.384)	1.874 (2.145)	-6.673** (2.681)	-6.611** (2.713)	-4.172* (2.159)
Constant	53.618*** (1.783)	41.132*** (5.198)	17.750*** (5.616)	49.194*** (1.888)	38.757*** (6.031)	23.442*** (5.896)
N	479	479	479	468	468	468
Adj. R2	-0.00	0.07	0.25	0.01	0.04	0.39
Demographics	No	Yes	Yes	No	Yes	Yes
Attitudes	No	No	Yes	No	No	Yes

*Note:* OLS regressions with FT difference as the dependent variable. Demographics include age, gender, dummies for ethnicity and dummies for level of schooling. Attitudes include political interest (5-point Likert scale), strength of partisan affiliation (dummy with value 1 if subject is a strong supporter), and how much the subject has been following the invasion (5-point Likert scale). Robust standard errors in parentheses.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

Figure 6: Player 1 decisions in aBoS



*Note:* This figure shows for each treatment the share of subjects who choose B as Player 1 in the asymmetric Battle of the Sexes game when facing either a player affiliated with one's own party or the opposite party. The left diagram shows the behavior of Republicans, the right diagram shows the behavior of Democrats. Whiskers denote 95 percent confidence intervals.

## 5.2 The Effects of Political Disagreement

The fact that our two hypotheses were not both confirmed leads us to test whether affective polarization is greater in *Disagreement* than in *Invasion*.<sup>23</sup> Looking first at FT difference, we find no difference between *Invasion* and *Disagreement* (OLS:  $p = .796$ , cf. Table H10; MWU:  $p = .843$ ). The lack of differences is confirmed when examining the asymmetric Battle of the Sexes game. Logistic regressions reveal no statistically significant difference in Player 1 behavior regardless of whether Player 2 is affiliated with the same party ( $p = .579$ , cf. Table H11) or the opposite party ( $p = .432$ , cf. Table H11). We also find no statistically significant effects on Player 1 types (cf. Table H12).

In sum, we find no statistical difference between the reduction in affective polarization in *Invasion* and *Disagreement*. That is, when subjects are primed with the threat of Russia's military aggression (which occurs in both treatments), we fail to detect any effect of also priming subjects with political disagreement (which only occurs in *Disagreement*). Moreover, as the above discussion revealed, both treatments result in a reduction in affective polarization for Republicans and a Wald test cannot reject that the treatment effect is the same in *Invasion* and *Disagreement* ( $p = .469$ ).

These results seem to be at odds with previous literature that shows how making politics salient tends to increase affective polarization (e.g., [West and Iyengar, 2020](#); [Huddy and Yair, 2021](#); [Skytte, 2021](#)). In addition, they go against what one would expect from the importance of party cues for voter attitudes and behavior ([Baum and Groeling, 2009](#); [Bullock, 2019](#); [Telhami and Rouse, 2022](#)): When voters were reminded that their own party had criticized the opposing party, the cue received from one's party is to feel animosity towards the opposing party.

One explanation for the fact that there are no difference between the effect in *Invasion* and *Disagreement* could be that the effect of Russia's military aggression dominates the effect of disagreement about how well President Biden is handling the crisis. As such, our study provides evidence that points in a different direction than the recent studies that explain how conflicts can make disagreements become even more pronounced and increase national divisions ([John and Dvir-Gvirsman, 2015](#); [Orian Harel et al., 2020](#)). We view it as an interesting point for future research to explore what conditions determine if conflicts work to unite or divide a nation.

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<sup>23</sup>We pre-registered to test this if H1 and H2 were not both confirmed.

### 5.3 The Effect of Threats on Cooperation

In Section 4, we showed that the *Invasion* treatment makes subjects more likely to cooperate (see also Figure 4). Strikingly, this effect occurs regardless of the partisan identity of Player 2. Thus, it is not simply an artefact of reducing affective polarization. One can, however, understand this effect in accordance with the the Perceived Target of Threat principle ([Weisel and Zultan, 2016, 2021b,a](#)). This states that individuals tend to help the group if they perceive the group to be under threat, but they help themselves if they perceive themselves to be under threat. At the time of the present study, Americans arguably perceived the target of threat to be “the U.S.” rather than themselves as “individuals”. Hence, the *Invasion* treatment makes subjects more cooperative in general, increasing their willingness to cooperate as Player 1 regardless of the party affiliation of Player 2.

### 5.4 External Validity of Priming in Experiments

As the priming method has become increasingly popular ([Cohn and Maréchal, 2016](#)), researchers have become more aware of potential caveats with the method. One critique of priming is that effects tend to not last for long. Indeed, the fact that we find an effect of priming subjects with Russia’s invasion of Ukraine during the armed conflict suggest that the effect of the conflict is only present for individuals for whom the conflict is highly salient. And it has long been known that while incumbent leaders become more popular following conflicts, this effect decays over time ([Mueller, 1973; Kernell, 1978; Norpoth, 1984](#)). Although we find causal evidence of the effect of the conflict, our study provides no information about the long-run effects of the conflict or how this effect may change as the nature of the conflict changes.<sup>24</sup>

A related concern is whether our primes work as “subtle situational cues” as intended or whether the primes include new information that may change subjects’ attitudes ([Cohn and Maréchal, 2016](#)). We address this in Appendix K.6 by investigating whether the observed treatment effects are moderated by the extent to which subjects have been following the development of Russia’s invasion of Ukraine. We find no statistically significant differences in treatment effects based on how much subjects follow the war; if anything, subjects who have been following Russia’s invasion of Ukraine actually reduce FT difference *more* in both the *Invasion* and *Disagreement* treatments. This suggests that the treatment effects in our study

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<sup>24</sup> As for short-run effects, we can exploit the fact that all subjects completed our experiment in one sitting but that some subjects took longer than others to complete the experiment. As we describe in Appendix K.5, we find that the treatment effects do not depend on the time between the news prime and answering the feeling thermometer questions (controlling for subjects’ speed).

indeed follow from priming and not from new information.

## 6 Conclusion

Affective polarization can be harmful for society as it hinders political collaboration and makes governments less able to handle crises (Binder, 2003; Hetherington, 2015; Flores et al., 2022). In the present study, we contribute to the understanding of the causes and consequences of affective polarization in two ways: First, we show that priming Americans with the threat associated with Russia’s invasion of Ukraine reduces affective polarization as measured by feeling thermometers, and it increases subjects’ willingness to compromise in an incentivized coordination game. This effect is not significantly different if subjects are also primed with cross-party disagreement about how well President Biden handles the conflict. Second, we show that affective polarization measured in feeling thermometers is behaviorally relevant as more affectively polarized subjects are more likely to bias their decisions in a coordination game based on the partisan identity of the other player.

Yet, some factors challenge the external validity of our results. First, our sample differs from the American voting population on a number of observable characteristics. Specifically, our sample is younger, more educated, more likely to be unemployed, and whites/Caucasians are over-represented. However, we control for all these background characteristics throughout the analyses.

Second, we measure the causal effect of one incident of military aggression for one specific war at one point in time. Our study provides no evidence for the generalizability of our effects across any of these dimensions. An obvious avenue for future research is thus to investigate whether the effect persists for different types of crises and whether the effect of Russia’s invasion changes as the conflict develops over time.

Another interesting avenue for future research is to elaborate on our surprising finding that priming subjects with cross-party disagreement about how well President Biden is handling Russia’s invasion does not change the effect of the invasion prime. Future studies should explore what characteristics of conflicts and political disagreements determine how the two interact.

## References

- AL-FANNAH, N. M. (2017): “Making Defeating CAPTCHAs Harder for Bots,” in *2017 Computing Conference*, London: IEEE, 775–782.
- AMERICAN NATIONAL ELECTION STUDIES (1968): “ANES 1968 Time Series Study,” <https://electionstudies.org/data-center/1968-time-series-study/>.
- ARECHAR, A. A., S. GÄCHTER, AND L. MOLLEMAN (2018): “Conducting Interactive Experiments Online,” *Experimental Economics*, 21, 99–131.
- ÅS, B. (1982): “A Materialistic View of Men’s and Women’s Attitudes towards War,” *Women’s Studies International Forum*, 5, 355–364.
- ATTANASI, G., A. HOPFENSITZ, E. LORINI, AND F. MOISAN (2016): “Social Connectedness Improves Co-Ordination on Individually Costly, Efficient Outcomes,” *European Economic Review*, 90, 86–106.
- BAKER, W. D. AND J. R. ONEAL (2001): “Patriotism or Opinion Leadership?: The Nature and Origins of the ‘Rally ’Round the Flag’ Effect,” *Journal of Conflict Resolution*, 45, 661–687.
- BAUM, M. A. AND T. GROELING (2009): “Shot by the Messenger: Partisan Cues and Public Opinion Regarding National Security and War,” *Political Behavior*, 31, 157–186.
- BBC (2022): “How Many Ukrainian Refugees Are There and Where Have They Gone?” *BBC*.
- BEBLER, A. (2015): “Crimea and the Russian-Ukrainian Conflict,” *Romanian Journal of European Affairs*, 15, 35–54.
- BENDER, R. AND S. LANGE (2001): “Adjusting for Multiple Testing—When and How?” *Journal of Clinical Epidemiology*, 54, 343–349.
- BENJAMINI, Y. AND Y. HOCHBERG (1995): “Controlling the False Discovery Rate: A Practical and Powerful Approach to Multiple Testing,” *Journal of the Royal Statistical Society: Series B (Methodological)*, 57, 289–300.
- BINDER, S. A. (2003): *Stalemate: Causes and Consequences of Legislative Gridlock*, Washington, DC: Brookings Institution Press.
- BLESS, H. AND K. FIEDLER (2006): “Mood and the Regulation of Information Processing and Behavior,” in *Affect in Social Thinking and Behavior*, New York, NY, US: Psychology Press, 65–84.
- BONANNO, G. A. AND J. T. JOST (2006): “Conservative Shift Among High-Exposure Survivors of the September 11th Terrorist Attacks,” *Basic and Applied Social Psychology*, 28, 311–323.
- BOXELL, L., J. CONWAY, J. N. DRUCKMAN, AND M. GENTZKOW (2020): “Affective Polarization Did Not Increase During the Coronavirus Pandemic,” Working Paper 28036, National Bureau of Economic Research.
- BRUCHMANN, K., B. KOOPMANN-HOLM, AND A. SCHERER (2018): “Seeing beyond Political Affiliations: The Mediating Role of Perceived Moral Foundations on the Partisan Similarity-Liking Effect,” *PLOS ONE*, 13, e0202101.

- BULLOCK, J. G. (2019): "Party Cues," in *The Oxford Handbook of Electoral Persuasion*, Oxford Handbooks, online edition.
- BURSZTEIN, E., S. BETHARD, C. FABRY, J. C. MITCHELL, AND D. JURAFSKY (2010): "How Good Are Humans at Solving CAPTCHAs? A Large Scale Evaluation," in *2010 IEEE Symposium on Security and Privacy*, Oakland, CA, USA: IEEE, 399–413.
- BYRNE, D. (1961): "Interpersonal Attraction as a Function of Affiliation Need and Attitude Similarity," *Human Relations*, 14, 283–289.
- CALLAGHAN, K. J. AND S. VIRTANEN (1993): "Revised Models of the "Rally Phenomenon": The Case of the Carter Presidency," *The Journal of Politics*, 55, 756–764.
- CAO, J. AND S. ZHANG (2014): "Multiple Comparison Procedures," *JAMA Guide to Statistics and Methods*, 312, 543–544.
- CARLIN, R. E. AND G. J. LOVE (2013): "The Politics of Interpersonal Trust and Reciprocity: An Experimental Approach," *Political Behavior*, 35, 43–63.
- (2018): "Political Competition, Partisanship and Interpersonal Trust in Electoral Democracies," *British Journal of Political Science*, 48, 115–139.
- CASEY, L. S., J. CHANDLER, A. S. LEVINE, A. PROCTOR, AND D. Z. STROLOVITCH (2017): "Intertemporal Differences among MTurk Workers: Time-based Sample Variations and Implications for Online Data Collection," *SAGE Open*, 7, 2158244017712774.
- CHMIELEWSKI, M. AND S. C. KUCKER (2020): "An MTurk Crisis? Shifts in Data Quality and the Impact on Study Results," *Social Psychological and Personality Science*, 11, 464–473.
- CHONG, D. AND J. N. DRUCKMAN (2007): "Framing Theory," *Annual Review of Political Science*, 10, 103–126.
- CLARKE, D., J. P. ROMANO, AND M. WOLF (2020): "The Romano–Wolf Multiple-Hypothesis Correction in Stata," *The Stata Journal*, 20, 812–843.
- COHN, A. AND M. A. MARÉCHAL (2016): "Priming in Economics," *Current Opinion in Psychology*, 12, 17–21.
- COVELL, K. (1996): "National and Gender Differences in Adolescents' War Attitudes," *International Journal of Behavioral Development*, 19, 871–883.
- CRAMER, A. O. J., D. VAN RAVENZWAIJ, D. MATZKE, H. STEINGROEVER, R. WETZELS, R. P. P. P. GRASMAN, L. J. WALDORP, AND E.-J. WAGENMAKERS (2016): "Hidden Multiplicity in Exploratory Multiway ANOVA: Prevalence and Remedies," *Psychonomic Bulletin & Review*, 23, 640–647.
- DE JAEGHER, K. (2021): "Common-Enemy Effects: Multidisciplinary Antecedents and Economic Perspectives," *Journal of Economic Surveys*, 35, 3–33.
- DEHDARI, S. H. AND K. GEHRING (2022): "The Origins of Common Identity: Evidence from Alsace-Lorraine," *American Economic Journal: Applied Economics*, 14, 261–292.

- DENNIS, S. A., B. M. GOODSON, AND C. A. PEARSON (2020): “Online Worker Fraud and Evolving Threats to the Integrity of MTurk Data: A Discussion of Virtual Private Servers and the Limitations of IP-Based Screening Procedures,” *Behavioral Research in Accounting*, 32, 119–134.
- DOVIDIO, J. F., M. TEN VERGERT, T. L. STEWART, S. L. GAERTNER, J. D. JOHNSON, V. M. ESSES, B. M. RIEK, AND A. R. PEARSON (2004): “Perspective and Prejudice: Antecedents and Mediating Mechanisms,” *Personality & Social Psychology Bulletin*, 30, 1537–1549.
- DRUCKMAN, J. N. AND M. S. LEVENDUSKY (2019): “What Do We Measure When We Measure Affective Polarization?” *Public Opinion Quarterly*, 83, 114–122.
- DUPUIS, E. C. AND E. S. COHN (2011): “A New Scale to Measure War Attitudes: Construction and Predictors,” *Journal of Psychological Arts and Sciences*, 14.
- ECHEBARRIA-ECHABE, A. AND E. FERNÁNDEZ-GUDE (2006): “Effects of Terrorism on Attitudes and Ideological Orientation,” *European Journal of Social Psychology*, 36, 259–265.
- ECONOMIST, T. (2022): “Americans’ Views on the War Reveal a Striking Generational Divide,” *The Economist*.
- FARCOMENI, A. (2008): “A Review of Modern Multiple Hypothesis Testing, with Particular Attention to the False Discovery Proportion,” *Statistical Methods in Medical Research*, 17, 347–388.
- FLORES, A., J. C. COLE, S. DICKERT, K. EOM, G. M. JIGA-BOY, T. KOGUT, R. LORIA, M. MAYORGA, E. J. PEDERSEN, B. PEREIRA, E. RUBALTELLI, D. K. SHERMAN, P. SLOVIC, D. VÄSTFJÄLL, AND L. VAN BOVEN (2022): “Politicians Polarize and Experts Depolarize Public Support for COVID-19 Management Policies across Countries,” *Proceedings of the National Academy of Sciences*, 119, e2117543119.
- FOWLER, J. H. AND C. D. KAM (2007): “Beyond the Self: Social Identity, Altruism, and Political Participation,” *The Journal of Politics*, 69, 813–827.
- FOX, G. T. (2009): “Partisan Divide on War and the Economy: Presidential Approval of G. W. Bush,” *Journal of Conflict Resolution*, 53, 905–933.
- GAERTNER, S. AND J. DOVIDIO (2000): *Reducing Intergroup Bias: The Common Ingroup Identity Model*, Philadelphia: Psychology Press.
- GAERTNER, S. L., J. F. DOVIDIO, P. A. ANASTASIO, B. A. BACHMAN, AND M. C. RUST (1993): “The Common Ingroup Identity Model: Recategorization and the Reduction of Intergroup Bias,” *European Review of Social Psychology*, 4, 1–26.
- GAERTNER, S. L., J. MANN, A. MURRELL, AND J. F. DOVIDIO (1989): “Reducing Intergroup Bias: The Benefits of Recategorization,” *Journal of Personality and Social Psychology*, 57, 239–249.
- GARRETT, K. N. AND A. BANKERT (2020): “The Moral Roots of Partisan Division: How Moral Conviction Heightens Affective Polarization,” *British Journal of Political Science*, 50, 621–640.
- GARRETT, R. K., S. D. GVRISMAN, B. K. JOHNSON, Y. TSFATI, R. NEO, AND A. DAL (2014): “Implications of Pro- and Counterattitudinal Information Exposure for Affective Polarization: Partisan Media Exposure and Affective Polarization,” *Human Communication Research*, 40, 309–332.

- GEHRING, K. (2021): “Can External Threats Foster a European Union Identity? Evidence from Russia’s Invasion of Ukraine,” *The Economic Journal*, ueab088.
- GERVAIS, B. T. (2015): “Incivility Online: Affective and Behavioral Reactions to Uncivil Political Posts in a Web-based Experiment,” *Journal of Information Technology & Politics*, 12, 167–185.
- GIDRON, N., J. ADAMS, AND W. HORNE (2020): “American Affective Polarization in Comparative Perspective,” *Elements in American Politics*.
- GIFT, K. AND T. GIFT (2015): “Does Politics Influence Hiring? Evidence from a Randomized Experiment,” *Political Behavior*, 37, 653–675.
- GILES, M. W. AND A. S. EVANS (1985): “External Threat, Perceived Threat and Group Identity,” *Social Science Quarterly*, 66, 50–67.
- GOULET-PELLETIER, J.-C. AND D. COUSINEAU (2018): “A Review of Effect Sizes and Their Confidence Intervals, Part I: The Cohen’s d Family,” *The Quantitative Methods for Psychology*, 14, 242–265.
- HANSEN, K. M. AND K. KOSIARA-PEDERSEN (2017): “How Campaigns Polarize the Electorate: Political Polarization as an Effect of the Minimal Effect Theory within a Multi-Party System,” *Party Politics*, 23, 181–192.
- HARTEVELD, E. (2021): “Fragmented Foes: Affective Polarization in the Multiparty Context of the Netherlands,” *Electoral Studies*, 71, 102332.
- HAUSER, D. J., P. C. ELLSWORTH, AND R. GONZALEZ (2018): “Are Manipulation Checks Necessary?” *Frontiers in Psychology*, 9.
- HAUSER, D. J. AND N. SCHWARZ (2015): “It’s a Trap! Instructional Manipulation Checks Prompt Systematic Thinking on “Tricky” Tasks,” *SAGE Open*, 5, 2158244015584617.
- (2016): “Attentive Turkers: MTurk Participants Perform Better on Online Attention Checks than Do Subject Pool Participants,” *Behavior Research Methods*, 48, 400–407.
- HETHERINGTON, M. (2015): ““Why Polarized Trust Matters”,” *The Forum*, 13, 445–458.
- HETHERINGTON, M. J., M. T. LONG, AND T. J. RUDOLPH (2016): “Revisiting the Myth: New Evidence of a Polarized Electorate,” *Public Opinion Quarterly*, 80, 321–350.
- HISTORY EXTRA, B. (2022): “Russia-Ukraine Crisis: 9 Milestone Moments in History That Explain Today’s Invasion,” *BBC*.
- HOBOLT, S. B., T. J. LEEPER, AND J. TILLEY (2021): “Divided by the Vote: Affective Polarization in the Wake of the Brexit Referendum,” *British Journal of Political Science*, 51, 1476–1493.
- HUBER, G. A. AND N. MALHOTRA (2017): “Political Homophily in Social Relationships: Evidence from Online Dating Behavior,” *The Journal of Politics*, 79, 269–283.
- HUDDY, L. AND O. YAIR (2021): “Reducing Affective Polarization: Warm Group Relations or Policy Compromise?” *Political Psychology*, 42, 291–309.

- IMPERIUM (2022): “RelevantID® – Imperium,” <https://www.imperium.com/relevantid/>.
- IYENGAR, S. AND M. KRUPENKIN (2018): “The Strengthening of Partisan Affect: Strengthening of Partisan Affect,” *Political Psychology*, 39, 201–218.
- IYENGAR, S., Y. LELKES, M. LEVENDUSKY, N. MALHOTRA, AND S. J. WESTWOOD (2019): “The Origins and Consequences of Affective Polarization in the United States,” *Annual Review of Political Science*, 22, 129–146.
- IYENGAR, S., G. SOOD, AND L. YPHTACH (2012): “AFFECT, NOT IDEOLOGY: A SOCIAL IDENTITY PERSPECTIVE ON POLARIZATION,” *The Public Opinion Quarterly*, 76, 405–431.
- IYENGAR, S. AND S. J. WESTWOOD (2015): “Fear and Loathing across Party Lines: New Evidence on Group Polarization,” *American Journal of Political Science*, 59, 690–707.
- JOHN, N. A. AND S. DVIR-GVIRSMAN (2015): ““I Don’t like You Any More”: Facebook Unfriending by Israelis during the Israel–Gaza Conflict of 2014,” *Journal of Communication*, 65, 953–974.
- KAISER, J. (2022): “Growth and Inequality: Experimental Evidence on How Misperceptions Affect Redistribution,” *Unpublished manuscript*.
- KARASAWA, M., K. KARASAWA, AND Y. HIROSE (2004): “Homogeneity Perception as a Reaction to Identity Threat: Effects of Status Difference in a Simulated Society Game,” *European Journal of Social Psychology*, 34, 613–625.
- KENNEDY, R., S. CLIFFORD, T. BURLEIGH, P. D. WAGGONER, R. JEWELL, AND N. J. G. WINTER (2020): “The Shape of and Solutions to the MTurk Quality Crisis,” *Political Science Research and Methods*, 8, 614–629.
- KERNELL, S. (1978): “Explaining Presidential Popularity: How Ad Hoc Theorizing, Misplaced Emphasis, and Insufficient Care in Measuring One’s Variables Refuted Common Sense and Led Conventional Wisdom Down the Path of Anomalies,” *American Political Science Review*, 72, 506–522.
- KNUDSEN, E. (2021): “Affective Polarization in Multiparty Systems? Comparing Affective Polarization Towards Voters and Parties in Norway and the United States,” *Scandinavian Political Studies*, 44, 34–44.
- LAU, R. R., D. J. ANDERSEN, T. M. DITONTO, M. S. KLEINBERG, AND D. P. REDLAWSK (2017): “Effect of Media Environment Diversity and Advertising Tone on Information Search, Selective Exposure, and Affective Polarization,” *Political Behavior*, 39, 231–255.
- LAYMAN, G. C., T. M. CARSEY, AND J. M. HOROWITZ (2006): “PARTY POLARIZATION IN AMERICAN POLITICS: Characteristics, Causes, and Consequences,” *Annual Review of Political Science*, 9, 83–110.
- LEBO, M. J. AND D. CASSINO (2007): “The Aggregated Consequences of Motivated Reasoning and the Dynamics of Partisan Presidential Approval,” *Political Psychology*, 28, 719–746.
- LESTER, D. (1994): “Factors Affecting Student Attitudes toward War,” *The Journal of Social Psychology*, 134, 541–543.

- LEVENDUSKY, M. (2009): *The Partisan Sort: How Liberals Became Democrats and Conservatives Became Republicans*, Chicago, IL: University of Chicago Press.
- LEVENDUSKY, M. S. (2018): “Americans, Not Partisans: Can Priming American National Identity Reduce Affective Polarization?” *The Journal of Politics*, 80, 59–70.
- LIST, J. A., A. M. SHAIKH, AND Y. XU (2019): “Multiple Hypothesis Testing in Experimental Economics,” *Experimental Economics*, 22, 773–793.
- MACKIE, D. M., T. DEVOS, AND E. R. SMITH (2000): “Intergroup Emotions: Explaining Offensive Action Tendencies in an Intergroup Context,” *Journal of Personality and Social Psychology*, 79, 602–616.
- MACKINTOSH, E. (2022): “What Does Putin Want in Ukraine? The Conflict Explained,” *CNN*.
- MACKUEN, M., J. WOLAK, L. KEELE, AND G. E. MARCUS (2010): “Civic Engagements: Resolute Partisanship or Reflective Deliberation,” *American Journal of Political Science*, 54, 440–458.
- MAKI, A., P. C. DWYER, S. BLAZEK, M. SNYDER, R. GONZÁLEZ, AND S. LAY (2019): “Responding to Natural Disasters: Examining Identity and Prosociality in the Context of a Major Earthquake,” *British Journal of Social Psychology*, 58, 66–87.
- MARCHAL, N. AND D. WATSON (2019): “The Rise of Partisan Affective Polarization in the British Public,” *SSRN Electronic Journal*.
- MASON, L. (2013): “The Rise of Uncivil Agreement: Issue Versus Behavioral Polarization in the American Electorate,” *American Behavioral Scientist*, 57, 140–159.
- (2015): “‘I Disrespectfully Agree’: The Differential Effects of Partisan Sorting on Social and Issue Polarization,” *American Journal of Political Science*, 59, 128–145.
- (2018a): “Ideologues without Issues: The Polarizing Consequences of Ideological Identities,” *Public Opinion Quarterly*, 82, 866–887.
- (2018b): “Losing Common Ground: Social Sorting and Polarization,” *The Forum*, 16, 47–66.
- MASON, L. AND J. WRONSKI (2018): “One Tribe to Bind Them All: How Our Social Group Attachments Strengthen Partisanship,” *Political Psychology*, 39, 257–277.
- MATHERLY, T. (2019): “A Panel for Lemons? Positivity Bias, Reputation Systems and Data Quality on MTurk,” *European Journal of Marketing*, 53, 195–223.
- McCONNELL, C., Y. MARGALIT, N. MALHOTRA, AND M. LEVENDUSKY (2018): “The Economic Consequences of Partisanship in a Polarized Era,” *American Journal of Political Science*, 62, 5–18.
- MEROLLA, J. L., J. M. RAMOS, AND E. J. ZECHMEISTER (2007): “Crisis, Charisma, and Consequences: Evidence from the 2004 U.S. Presidential Election,” *The Journal of Politics*, 69, 30–42.
- MEROLLA, J. L. AND E. J. ZECHMEISTER (2009): *Democracy at Risk: How Terrorist Threats Affect the Public*, Chicago, IL: University of Chicago Press.

- MORALES, M. (2022): “Movement of Raindrops on Car Windshield Has Scientific Explanation As Gravity Forces Cause Them to Move,” *The Science Times*.
- MORGAN, D. (2022): “Republicans Target Biden for Blame over Putin’s Ukraine Invasion,” *Reuters*.
- MOSKALENKO, S., C. McCUALEY, AND P. ROZIN (2006): “Group Identification under Conditions of Threat: College Students’ Attachment to Country, Family, Ethnicity, Religion, and University before and after September 11, 2001,” *Political Psychology*, 27, 77–97.
- MOSS, A. AND L. LITMAN (2018a): “After the Bot Scare: Understanding What’s Been Happening with Data Collection on MTurk and How to Stop It,” .
- (2018b): “Concerns about Bots on Mechanical Turk: Problems and Solutions,” .
- MUELLER, J. (1973): *War, Presidents and Public Opinion*, New York: John Wiley.
- MUELLER, J. E. (1970): “Presidential Popularity from Truman to Johnson,” *The American Political Science Review*, 64, 18–34.
- MYRICK, R. (2021): “Do External Threats Unite or Divide? Security Crises, Rivalries, and Polarization in American Foreign Policy,” *International Organization*, 75, 921–958.
- NORPOTH, H. (1984): “Economics, Politics, and the Cycle of Presidential Popularity,” *Political Behavior*, 6, 253–273.
- OPPENHEIMER, D. M., T. MEYVIS, AND N. DAVIDENKO (2009): “Instructional Manipulation Checks: Detecting Satisficing to Increase Statistical Power,” *Journal of Experimental Social Psychology*, 45, 867–872.
- ORIAN HAREL, T., I. MAOZ, AND E. HALPERIN (2020): “A Conflict within a Conflict: Intragroup Ideological Polarization and Intergroup Intractable Conflict,” *Current Opinion in Behavioral Sciences*, 34, 52–57.
- PAOLACCI, G. AND J. CHANDLER (2014): “Inside the Turk: Understanding Mechanical Turk as a Participant Pool,” *Current Directions in Psychological Science*, 23, 184–188.
- PAOLACCI, G., J. CHANDLER, AND P. G. IPEIROTIS (2010): “Running Experiments on Amazon Mechanical Turk,” *Judgment and Decision Making*, 5, 411–419.
- PEW RESEARCH CENTER (2018): “Trends in Party Affiliation among Demographic Groups,” *Pew Research Center*.
- (2022): “Americans’ Concerns About War in Ukraine: Wider Conflict, Possible U.S.-Russia Clash,” *Pew Research Center*.
- PIONTKOWSKI, U., A. ROHMANN, AND A. FLORACK (2002): “Concordance of Acculturation Attitudes and Perceived Threat,” *Group Processes & Intergroup Relations*, 5, 221–232.
- PORAT, R., M. TAMIR, M. J. A. WOHL, T. GUR, AND E. HALPERIN (2019): “Motivated Emotion and the Rally around the Flag Effect: Liberals Are Motivated to Feel Collective Angst (like Conservatives) When Faced with Existential Threat,” *Cognition and Emotion*, 33, 480–491.

- PROLIFIC (2021): “Why Participants Get Banned,” <https://blog.prolific.co/why-participants-get-banned/>.
- (2022): “Prolific . . . Quickly Find Research Participants You Can Trust.” <https://www.prolific.co/#audience>.
- PUTNEY, S. AND R. MIDDLETON (1962): “Some Factors Associated with Student Acceptance or Rejection of War,” *American Sociological Review*, 27, 655–667.
- QUALTRICS (2022): “Fraud Detection,” <https://www.qualtrics.com/support/survey-platform/survey-module/survey-checker/fraud-detection/>.
- REILJAN, A. (2020): “‘Fear and Loathing across Party Lines’ (Also) in Europe: Affective Polarisation in European Party Systems,” *European Journal of Political Research*, 59, 376–396.
- RENSTRÖM, E. A., H. BÄCK, AND R. CARROLL (2021): “Intergroup Threat and Affective Polarization in a Multi-Party System,” *The Journal of Social and Political Psychology*, 9, 553–576.
- RIEK, B. M., E. W. MANIA, AND S. L. GAERTNER (2006): “Intergroup Threat and Outgroup Attitudes: A Meta-Analytic Review,” *Personality and Social Psychology Review*, 10, 336–353.
- ROBISON, J. AND R. L. MOSKOWITZ (2019): “The Group Basis of Partisan Affective Polarization,” *The Journal of Politics*, 81, 1075–1079.
- ROHMANN, A., A. FLORACK, AND U. PIONTKOWSKI (2006): “The Role of Discordant Acculturation Attitudes in Perceived Threat: An Analysis of Host and Immigrant Attitudes in Germany,” *International Journal of Intercultural Relations*, 30, 683–702.
- ROHMANN, A., U. PIONTKOWSKI, AND A. VAN RANDENBORGH (2008): “When Attitudes Do Not Fit: Discordance of Acculturation Attitudes as an Antecedent of Intergroup Threat,” *Personality and Social Psychology Bulletin*, 34, 337–352.
- ROMAN, N., W. WANTA, AND I. BUNIAK (2017): “Information Wars: Eastern Ukraine Military Conflict Coverage in the Russian, Ukrainian and U.S. Newscasts,” *International Communication Gazette*, 79, 357–378.
- ROMANO, J. P. AND M. WOLF (2005a): “Exact and Approximate Stepdown Methods for Multiple Hypothesis Testing,” *Journal of the American Statistical Association*, 100, 94–108.
- (2005b): “Stepwise Multiple Testing as Formalized Data Snooping,” *Econometrica : journal of the Econometric Society*, 73, 1237–1282.
- (2016): “Efficient Computation of Adjusted P-Values for Resampling-Based Stepdown Multiple Testing,” *Statistics & Probability Letters*, 113, 38–40.
- ROTHGERBER, H. (1997): “External Intergroup Threat as an Antecedent to Perceptions in In-Group and out-Group Homogeneity,” *Journal of Personality and Social Psychology*, 73, 1206–1212.
- RUCH, A., A. DECTER-FRAIN, AND R. BATRA (2022): “Millions of Co-purchases and Reviews Reveal the Spread of Polarization and Lifestyle Politics across Online Markets,” *arXiv:2201.06556 [physics]*.

- SCHROEDER, D. F., E. L. GAIER, AND J. A. HOLDNACK (1993): "Middle Adolescents' Views of War and American Military Involvement in the Persian Gulf," *Adolescence*, 28, 951–963.
- SHAMIR, M. AND T. SAGIV-SCHIFTER (2006): "Conflict, Identity, and Tolerance: Israel in the Al-Aqsa Intifada," *Political Psychology*, 27, 569–595.
- SHYROKYKH, K. (2018): "The Evolution of the Foreign Policy of Ukraine: External Actors and Domestic Factors," *Europe-Asia Studies*, 70, 832–850.
- SIVAKORN, S., I. POLAKIS, AND A. D. KEROMYTIS (2016): "I Am Robot: (Deep) Learning to Break Semantic Image CAPTCHAs," in *2016 IEEE European Symposium on Security and Privacy (EuroS&P)*, Saarbrucken: IEEE, 388–403.
- SKYTHE, R. (2021): "Dimensions of Elite Partisan Polarization: Disentangling the Effects of Incivility and Issue Polarization," *British Journal of Political Science*, 51, 1457–1475.
- STAGNER, R. (1938): "Some Factors Related to Attitude toward War," *The Journal of Social Psychology*, 16, 131–142.
- STEPHAN, W. G., K. A. BONIECKI, O. YBARRA, A. BETTENCOURT, K. S. ERVIN, L. A. JACKSON, P. S. MCNATT, AND C. L. RENFRO (2002): "The Role of Threats in the Racial Attitudes of Blacks and Whites," *Personality and Social Psychology Bulletin*, 28, 1242–1254.
- STEPHAN, W. G. AND C. W. STEPHAN (1996): "Predicting Prejudice," *International Journal of Intercultural Relations*, 20, 409–426.
- (2000): "An Integrated Threat Theory of Prejudice," in *Reducing Prejudice and Discrimination*, Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers, "The Claremont Symposium on Applied Social Psychology", 23–45.
- STEPHAN, W. G., O. YBARRA, AND K. R. MORRISON (2009): "Intergroup Threat Theory," in *Handbook of Prejudice*, Mahwah, NJ: Lawrence Erlbaum.
- STEPHAN, W. G., O. YBARRA, AND K. RIOS (2015): "Intergroup Threat Theory," in *Handbook of Prejudice, Stereotyping, and Discrimination*, Mahwah, NJ: Lawrence Erlbaum Associates.
- STOLLBERG, J., I. FRITSCHE, AND E. JONAS (2017): "The Groupy Shift: Conformity to Liberal in-Group Norms as a Group-Based Response to Threatened Personal Control," *Social Cognition*, 35, 374–394.
- SUMNER, W. G. (1906): *Folkways: A Study of the Sociological Importance of Usages, Manners, Customs, Mores, and Morals*, Boston, MA: Ginn.
- TAJFEL, H. (1978): "Social Categorization, Social Identity and Social Comparisons," in *Differentiation between Social Groups*, London, UK: Academic Press, 61–76.
- (1986): "An Integrative Theory of Intergroup Conflict," in *The Social Psychology of Intergroup Relations*, Monterey, CA, USA: Brooks/Cole, 33–37.
- TAJFEL, H., M. G. BILLIG, R. P. BUNDY, AND C. FLAMENT (1971): "Social Categorization and Intergroup Behaviour," *European Journal of Social Psychology*, 1, 149–178.

- TAJFEL, H. AND J. C. TURNER (1979): “An Integrative Theory of Intergroup Conflict,” in *The Social Psychology of Intergroup Relations*, Monterey, CA: Brooks/Cole.
- TELHAMI, S. AND S. M. ROUSE (2022): “Measuring the Impact of Partisanship on Attitudes toward the US Response to the Russia-Ukraine War,” *Brookings*.
- THOMAS, K. A. AND S. CLIFFORD (2017): “Validity and Mechanical Turk: An Assessment of Exclusion Methods and Interactive Experiments,” *Computers in Human Behavior*, 77, 184–197.
- TIMES, N. Y. (2022): “The Roots of the Ukraine War: How the Crisis Developed,” *New York Times*.
- TURNER, J. C. (1975): “Social Comparison and Social Identity: Some Prospects for Intergroup Behaviour,” *European Journal of Social Psychology*, 5, 1–34.
- TURNER, J. C., M. A. HOGG, P. J. OAKES, S. D. REICHER, AND M. S. WETHERELL (1987): *Rediscovering the Social Group: A Self-Categorization Theory*, Rediscovering the Social Group: A Self-Categorization Theory, Cambridge, MA, US: Basil Blackwell.
- TURNER, J. C. AND K. J. REYNOLDS (2012): “Self-Categorization Theory,” in *Handbook of Theories of Social Psychology*, Vol. 2, Thousand Oaks, CA: Sage Publications Ltd, 399–417.
- TWORZECKI, H. (2019): “Poland: A Case of Top-Down Polarization,” *The ANNALS of the American Academy of Political and Social Science*, 681, 97–119.
- UN (2022): “Ukraine: UN Rights Office Probe Spotlights Harrowing Plight of Civilians,” *UN*.
- VAIL, K. E., J. ARNDT, M. MOTYL, AND T. PYSCZYNSKI (2012): “The Aftermath of Destruction: Images of Destroyed Buildings Increase Support for War, Dogmatism, and Death Thought Accessibility,” *Journal of Experimental Social Psychology*, 48, 1069–1081.
- VALENTINO, N. A., V. L. HUTCHINGS, A. J. BANKS, AND A. K. DAVIS (2008): “Is a Worried Citizen a Good Citizen? Emotions, Political Information Seeking, and Learning via the Internet,” *Political Psychology*, 29, 247–273.
- VANNETTE, D. (2017): “Using Attention Checks in Your Surveys May Harm Data Quality,” .
- WAGNER, M. (2021): “Affective Polarization in Multiparty Systems,” *Electoral Studies*, 69, 102199.
- WEISEL, O. AND R. BÖHM (2015): ““Ingroup Love” and “Outgroup Hate” in Intergroup Conflict between Natural Groups,” *Journal of Experimental Social Psychology*, 60, 110–120.
- WEISEL, O. AND R. ZULTAN (2016): “Social Motives in Intergroup Conflict: Group Identity and Perceived Target of Threat,” *European Economic Review*, 90, 122–133.
- (2021a): “Perceived Level of Threat and Cooperation,” *Frontiers in Psychology*, 12.
- (2021b): “Perceptions of Conflict: Parochial Cooperation and Outgroup Spite Revisited,” *Organizational Behavior and Human Decision Processes*, 167, 57–71.
- WEST, E. A. AND S. IYENGAR (2020): “Partisanship as a Social Identity: Implications for Polarization,” *Political Behavior*.

- WESTWOOD, S. J., S. IYENGAR, S. WALGRAVE, R. LEONISIO, L. MILLER, AND O. STRIJBIS (2018): “The Tie That Divides: Cross-national Evidence of the Primacy of Partyism,” *European Journal of Political Research*, 57, 333–354.
- WHITT, S., A. B. YANUS, B. McDONALD, J. GRAEBER, M. SETZLER, G. BALLINGRUD, AND M. KIFER (2021): “Tribalism in America: Behavioral Experiments on Affective Polarization in the Trump Era,” *Journal of Experimental Political Science*, 8, 247–259.
- WILDER, D. A. (1984): “Predictions of Belief Homogeneity and Similarity Following Social Categorization,” *British Journal of Social Psychology*, 23, 323–333.
- ZÁRATE, M. A., B. GARCIA, A. A. GARZA, AND R. T. HITLAN (2004): “Cultural Threat and Perceived Realistic Group Conflict as Dual Predictors of Prejudice,” *Journal of Experimental Social Psychology*, 40, 99–105.
- ZHANG, Z., S. ZHU, J. MINK, A. XIONG, L. SONG, AND G. WANG (2022): “Beyond Bot Detection: Combating Fraudulent Online Survey Takers,” *Proceedings of the ACM Web Conference 2022 (WWW ’22), April 25–29, 2022, Lyon, France*, 1–11.
- ZORN, T. J., A. MATA, AND H. ALVES (2022): “Attitude Similarity and Interpersonal Liking: A Dominance of Positive over Negative Attitudes,” *Journal of Experimental Social Psychology*, 100, 104281.

## A Appendix: Instructions

On the next page, we include the instructions for subjects who are randomly assigned to the *Invasion* treatment. Afterwards, we include the news articles used in *Disagreement* and *Control*. There are a few things to note for these screenshots:

- On the first page (Prolific post), we include the information that subjects see before deciding whether to participate in the study or not. That is, this page is not strictly speaking a part of the experiment, but it is added here for completeness as it is the first information that subjects receive about the present experiment.
- On the second and third pages (consent form and demographics), we include honeypots. These are simple hidden questions that asks “Do you see this question” with responses “Yes”, “No”, and “Don’t know” (coded in JavaScript). These questions can only be read by bots; thus, any subject who answers one of these questions is confirmed to use a bot.
- On the seventh page (asymmetric Battle of the Sexes game), a dropdown menu presents the subjects with three choices for the control questions: “Person 1 and Person 2 choose A”, “Person 1 and Person 2 choose B”, and “Person 1 and Person 2 choose differently”. All three answers must be correct before the subject is allowed to continue. If at least one answer is incorrect, the subjects receive a prompt that this is the case, and they are told to try again.
- As explained in Section 3, the order in which people are shown the different parties as well as the order in which the traits appear are randomized between subjects.

### **Consent Form**

You are being invited to take part in the research study 'Study on Attitudes'. We would like to ask you for your consent to participate in the study and for us to treat your data in agreement with data protection legislation. Before you decide to participate in this study, it is important that you understand why the research is being done and what it will involve. Please take the time to read the following information carefully. Please ask the researcher if there is anything that is not clear or if you need more information. You may print this consent form for your records.

The **purpose** of this study is to learn about people's attitudes. **Your task** will be to answer questions about your attitudes and your background (e.g., gender, age, and ethnicity) as well as to read a short news article.

Your participation should take about **10 minutes**, and you must complete the study in one sitting. If you complete the study, you will receive **USD 1.3 and up to 35 cents in bonus payment**. This study is funded by Knud Højgaards Fond and William Demant Fonden, and you will be paid via Prolific's payment system.

By participating, you will contribute to research and be paid as stated above. There are no risks for participating in this study beyond those encountered in normal everyday life. Please understand that your **participation is voluntary**, and you have the right to withdraw your consent or discontinue participation at any time without penalty. To stop, simply close your browser window.

Your responses will be **confidential**. Your Prolific ID number will be kept confidential and will be deleted 6 months after the payment process is completed. Normal personal information such as your gender, age, and ethnicity is collected for the scientific analysis. When we publish the results from this study in a scientific journal, the anonymized data will also be made publicly available to comply with open science standards.

If you have questions about this research study or your participation, please contact the researcher Markus Seier from Aarhus University, Denmark, through the Prolific messaging system or by email at [mseier@econ.au.dk](mailto:mseier@econ.au.dk).

Thank you very much for your participation!

By clicking the button below, you acknowledge:

- Your participation in the study is voluntary, and you may withdraw your consent and discontinue participation at any time without penalty.
- You do not waive any legal rights or release Aarhus University and The Norwegian School of Economics or its agents from liability for negligence.
- You give consent to treating your personal data and to participate as a subject in the study as described above.



I consent, begin the study



I do not consent, I do not wish to participate

What is your Prolific ID?

*Please note that this response should auto-fill with the correct ID*

What is your **age** (in years)?

What is your **gender**?

- Male
- Female

What best describes your **ethnicity**?

- White or Caucasian
- Black or African American
- Hispanic or Latino
- Asian American
- Other

What is the highest **degree** or level of school that you have completed?

- Less than a high school diploma
- High school degree or equivalent (e.g., GED)
- Some college, no degree
- Associate degree (e.g., AA, AS)
- Bachelor's degree (e.g., BA, BS)
- Master's degree (e.g., MA, MS, MEd)
- Doctorate or professional degree (e.g., MD, DDS, PhD)

What best describes your current **employment status**?

- Employed (part or full time)
- Self-employed
- Unemployed
- Student
- Retired
- Other

What is your **year of birth**?

**Now, we would like you to read a brief article about Russia's invasion of Ukraine. Please read it carefully.**

**Based on the article, we will ask you to write 1-2 sentences about how Russia may respond to the financial sanctions that the U.S. and its allies have imposed.**

"The Russian invasion will upend the lives of 44 million Ukrainians. But the relevance of Ukraine extends far beyond its borders. Its fate has huge implications for the rest of Europe, the health of the global economy and America's place in the world.

Putin's attempt to redraw the map of Europe risks becoming the most devastating conflict on the continent since World War II. As a response to the invasion, the United States and its allies in Europe have imposed the toughest financial sanctions ever on Russia, and they have only built on these penalties since.

However, this sustained international pressure and Ukraine's resistance may still not be enough to force Russia to end its military campaign. That leaves Ukraine – and the world – in a perilous and unpredictable moment.

Scholars who study the effect of economic isolation on states – whether through sanctions, wartime blockades, or other mechanisms – find that economic isolation rarely causes its targets to capitulate outright. Rather, economic pressure can lead states at war to adopt riskier strategies, and this often leads to an escalation of the conflict."



According to the article, how might Russia respond to the imposed financial sanctions? Write 1-2 sentences in your own words.

On a scale from 1 to 5, how much have you been following the development of Russia's invasion of Ukraine?

Not at all	To a lesser extent	To some extent	To a large extent	To the fullest extent
<input type="radio"/>				

On a scale from 1 to 5, how big a threat do you consider Russia's invasion of Ukraine to be for the United States and its interest?

Very small	Small	Moderate	Somewhat severe	Severe
<input type="radio"/>				

On a scale from 1 to 5, to what extent do you consider Democrats and Republicans to disagree/agree on how to handle Russia's invasion of Ukraine?

Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

We would like you to rate how you feel towards the Democratic and Republican parties on a scale of 0 to 100, which we call a "feeling thermometer". On this feeling thermometer scale, ratings between 0 and 49 degrees mean that you feel cold and unfavorable towards the party (with 0 being the coldest). Ratings between 51 and 100 degrees mean that you feel warm and favorable (with 100 being the warmest). A rating of 50 means you have no feeling one way or the other.

How would you rate your feeling towards the **Republican Party**? Write a number between 0 (cold) and 100 (warm).

How would you rate your feeling towards the **Democratic Party**? Write a number between 0 (cold) and 100 (warm).

Now we would like know more about what you think about the Democratic Party. Below, we have given a list of words that some people might use to describe them. For each item, please indicate **how well you think it applies to the Democratic Party.**

	Not at all well	Not too well	Somewhat well	Very well	Extremely well
Honest	<input type="radio"/>				
Open-minded	<input type="radio"/>				
Intelligent	<input type="radio"/>				
Selfish	<input type="radio"/>				
Patriotic	<input type="radio"/>				

Now we would like know more about what you think about the Republican Party. Below, we have given a list of words that some people might use to describe them. For each item, please indicate **how well you think it applies to the Republican Party.**

	Not at all well	Not too well	Somewhat well	Very well	Extremely well
Honest	<input type="radio"/>				
Open-minded	<input type="radio"/>				
Intelligent	<input type="radio"/>				
Selfish	<input type="radio"/>				
Patriotic	<input type="radio"/>				

For your next task, **you will be matched with a respondent who supports the Democratic Party**. One of you will be Person 1, the other will be Person 2. You will be asked to make a decision both as Person 1 and Person 2. The actual roles will be drawn at random after your response.

Your task is to choose either **A** or **B**. Your payment will depend on what you and the Democrat choose:

- If both you and the Democrat choose **A**, then **Person 1 will earn 35 cents, and Person 2 earns 5 cents**.
- If both you and the Democrat choose **B**, then **Person 1 will earn 15 cents, and Person 2 earns 35 cents**.
- If you and the Democrat choose **differently**, then both **Person 1 and Person 2 earn nothing (0 cents)**.

The following table summarizes the different choices and their corresponding payments:

	<b>A</b>	<b>B</b>
<b>A</b>	Person 1: 35 Person 2: 5	Person 1: 0 Person 2: 0
<b>B</b>	Person 1: 0 Person 2: 35	Person 1: 15 Person 2: 0

Before you continue to your decisions, we would like to ensure that you understand the task. Please answer the following questions.

If you are selected to be **Person 1**, what will maximize your earnings?

If you are selected to be **Person 2**, what will maximize your earnings?

What decisions will maximize the total earnings?

If you are selected to be **Person 1** and the Democrat is Person 2, will you choose **A** or **B**?

A  
 B

If you are selected to be **Person 2** and the Democrat is Person 1, will you choose **A** or **B**?

A  
 B

Now, **you will be matched with a respondent who supports the Republican Party**. The situation is the same as before. That is, your task is to choose either **A** or **B**. Your payment will depend on what you and the Republican choose:

- If both you and the Republican choose **A**, then **Person 1 will earn 35 cents, and Person 2 earns 5 cents**.
- If both you and the Republican choose **B**, then **Person 1 will earn 15 cents, and Person 2 earns 35 cents**.
- If you and the Republican choose **differently**, then both **Person 1 and Person 2 earn nothing (0 cents)**.

The following table summarizes the different choices and their corresponding payments:

	<b>A</b>	<b>B</b>
<b>A</b>	Person 1: 35 Person 2: 5	Person 1: 0 Person 2: 0
<b>B</b>	Person 1: 0 Person 2: 0	Person 1: 15 Person 2: 35

Note that we randomize whether your bonus payment comes from this interaction or your previous interaction with the Democrat.

If you are selected to be **Person 1** and the Republican is Person 2, will you choose **A** or **B**?

A  
 B

If you are selected to be **Person 2** and the Republican is Person 1, will you choose **A** or **B**?

A  
 B

In general, how interested are you in politics?

Not at all interested	Not too interested	Somewhat interested	Very interested	Extremely interested
<input type="radio"/>				

Generally speaking, do you usually think of yourself as a Democrat, a Republican, or an Independent?

- Democrat
- Republican
- Independent

Would you call yourself a strong Democrat or not a very strong Democrat?

- Strong Democrat
- Not very strong Democrat

Your response has been recorded. Thank you for completing this study and thereby helping us with our research!

We will now examine your responses and match you with another participant to determine potential bonuses from your participation in our study. You will receive your payment via Prolific's payment system in the next 5 days.

Please click the button below to be redirected back to Prolific and register your submission.

**Now, we would like you to read a brief article about how raindrops move on car windshields. Please read it carefully.**

**Based on the article, we will ask you to list some of the factors that influence raindrop's movement.**

"As a car speeds along in the rain, some water droplets slide up the windshield, others slide down, and some seem stuck in place. Sungyon Lee and Alireza Hooshanginejad, fluid mechanics researchers at Cornell University, used mathematical equations to describe the forces on the raindrops. That work revealed several factors that determine a droplet's behavior, the pair reports March 4 in *Physical Review Fluids*.

Raindrops on a moving car's angled windshield simultaneously experience forces from gravity and from the wind that speeds over the car. The direction that a raindrop moves depends on its size, Lee and Hooshanginejad say. For larger raindrops, gravity wins, pulling the droplets down. For smaller raindrops, wind prevails, pushing them up the slope. For medium-sized raindrops, the forces balance out and the droplets sit still. The tiniest raindrops also stay put, because the wind doesn't provide enough oomph to overcome water's tendency to adhere to the glass.



Other factors affect the raindrops' behavior, too. As the car's speed, and therefore wind speed, increases, larger raindrops get pushed up the windshield. Decreasing the car's speed has the opposite effect. And if the car moves slowly enough, there won't be enough wind to coax any raindrops to move upward."

According to the article, what are some of the factors that influence raindrops' direction of movement on car windshields? Write 1-2 sentences in your own words.

**Now, we would like you to read a brief article about Russia's invasion of Ukraine. Please read it carefully.**

**Based on the article, we will ask you to write 1-2 sentences about how (some) Democrats and Republicans view the response by President Joe Biden to Russia's invasion.**

"The Russian invasion will upend the lives of 44 million Ukrainians. But the relevance of Ukraine extends far beyond its borders. Its fate has huge implications for the rest of Europe, the health of the global economy and America's place in the world.

Putin's attempt to redraw the map of Europe risks becoming the most devastating conflict on the continent since World War II. As a response to the invasion, the United States and its allies in Europe have imposed the toughest financial sanctions ever on Russia, and they have only built on these penalties since.



Some Republicans in Congress have blamed Biden for failing to deter Russian President Vladimir Putin from sending forces into Ukraine. They have called on the U.S. president to take a stronger position on the largest conflict in Europe since World War II. "There's no doubt that weakness leads to war," Representative Brian Mast, a member of the House Foreign Affairs Committee, said in a Thursday (February 24th) morning tweet. Opposingly, some Democrats like Senator Mark Warner, chairman of the Senate Intelligence Committee, have argued that the Republican critique is misguided and that pre-emptive sanctions may have been of little benefit."

According to the article, how do (some) Democrats and Republicans view the response by President Joe Biden to Russia's invasion? Write 1-2 sentences in your own words.

On a scale from 1 to 5, how much have you been following the development of Russia's invasion of Ukraine?

Not at all	To a lesser extent	To some extent	To a large extent	To the fullest extent
<input type="radio"/>				

On a scale from 1 to 5, how big a threat do you consider Russia's invasion of Ukraine to be for the United States and its interest?

Very small	Small	Moderate	Somewhat severe	Severe
<input type="radio"/>				

On a scale from 1 to 5, to what extent do you consider Democrats and Republicans to disagree/agree on how to handle Russia's invasion of Ukraine?

Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## B Appendix: Power Analysis

The following section presents the a priori power analysis that informed our study and which we used in the pre-registration. With the available funding, we planned to recruit a sample of 1425 subjects, which we planned to randomize equally to each of the three treatments. Our primary comparison is the difference in ratings on the feeling thermometer between subjects' own party and the opposing party. Based on [Boxell et al. \(2020\)](#), we expected that the subjects rate their own party at a mean of 62 with a standard deviation of 24, and we expected that the subjects rate the opposing party with a mean of 40 and a standard deviation of 26. Regarding the within-subject correlation between the two parties, one could a priori imagine two effects that work in opposite directions: On the one hand, when individuals strongly identify with one party, this may create a larger discrepancy between the two ratings, resulting in a negative within-subject correlation. On the other hand, if subjects differ in their interpretation of the scale and the notions of “warm” and “cold”, this will create a positive within-subject correlation. As we do not know which of these effect will be stronger, we assumed for the power analysis that there would be no correlation between ratings.<sup>25</sup>

Based on the above assumptions, we ran power simulations in Stata (version 17) that showed us to expect a power of 0.8 to detect a treatment effect on FT difference of approximately 5.4, equivalent to a standardized effect size of Hedge's  $g_p = 0.15$  ([Goulet-Pelletier and Cousineau, 2018](#)). For comparison, [Boxell et al. \(2020\)](#) find that the party difference is 22 points. Also, [Levendusky \(2018\)](#) uses a national news prime to find an effect of 5.6 on an out-party feeling thermometer.

## C Appendix: Screeners

In the following, we describe the pre-registered screeners that we applied to ensure high-quality data in our sample. As mentioned in Section 3, these screeners led to the exclusion of in total 13 of 1425 responses (0.9 percent).

First, we used two ‘honeypots’ (coded in JavaScript) to detect bots. Honeypots are traps set up to engage and detect bad actors in a computer system. We followed [Moss and Litman \(2018a\)](#) and used survey items that were hidden from humans but would be read by a bot. Thus, only bots would be able to answer these questions. If any response was provided to one of these questions, the respondent was confirmed to be a bot, and we dropped it from the experiment.<sup>26</sup> We detected no bots in our sample.

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<sup>25</sup>Ex post, this assumption turned out to be correct (Pearson's  $r = -.0189$ ,  $p = .480$ ).

<sup>26</sup>We prefer this honeypot to (re)CAPTCHAs because some bots are able to pass CAPTCHAs ([Sivakorn](#)

Second, we followed [Kennedy et al. \(2020\)](#) and included a consistency check in the demographic questions. The first item asked subjects about their age, and the last item asked about their year of birth (see also [Zhang et al., 2022](#)). This resulted in the exclusion of 9 subjects who answered these questions inconsistently.

Third, we followed [Chmielewski and Kucker \(2020\)](#) and used the text prime as an additional screener for farmers (see also [Dennis et al., 2020; Zhang et al., 2022](#)). Farmers are respondents who manage to access the study despite not being in the U.S. (e.g., via server farms) and not being proficient in English ([Moss and Litman, 2018b](#)). We did not identify any responses that misused the English language, used nonsense phrases, or answered in single words unrelated to the question (e.g., “nice” and “good”). Neither did we find any responses that copied entire paragraphs from the news prime.

Finally, two respondents somehow managed to answer the survey twice. We exclude these four responses from our sample.

Note that we do not test for Virtual Private Servers (VPS) or Virtual Private Networks (VPN) although recommended by [Kennedy et al. \(2020\)](#) as Prolific regularly test for this to ban respondents ([Prolific, 2021](#)). Also, our study did not use attention checks such as Instructional Manipulation Checks ([Oppenheimer et al., 2009](#)). These have been found to have limited diagnostic value as many participants in online samples are familiar with this type of question ([Hauser and Schwarz, 2016; Thomas and Clifford, 2017](#)), and they may change people’s behavior ([Hauser and Schwarz, 2015; Hauser et al., 2018](#)), resulting in recommendations from Qualtrics that researchers stop using them ([Vannette, 2017](#)).

## D Appendix: Sample Characteristics Table

The full set of sample characteristics are provided in Table D1.

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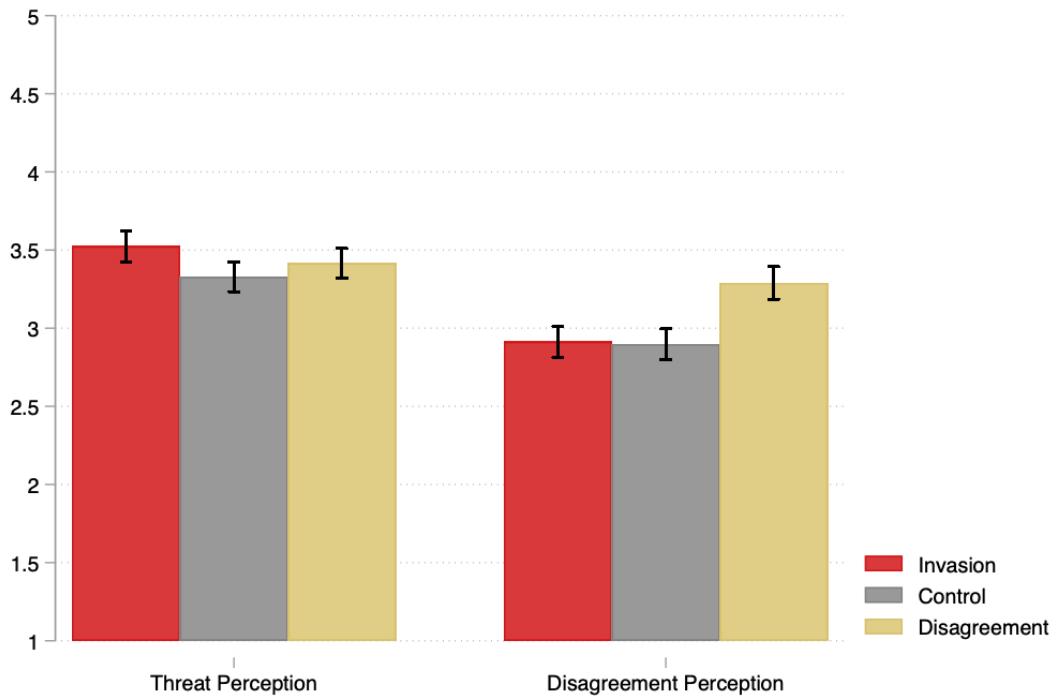
et al., 2016; [Al-Fannah, 2017](#)), and the honeypot is unobtrusive, saving time and making it easier for people with vision impairment to complete the study ([Bursztein et al., 2010](#)). We applied the honeypots to both the consent form and the demographic survey as [Kaiser \(2022\)](#) demonstrates that bots and humans may work in hybrid, using bots to complete only some parts of a survey.

Table D1: Sample Characteristics

<b>Variable</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>Min.</b>	<b>Max.</b>
Age	40.00	14.38	18	80
Male	0.50	0.50	0	1
<b>Ethnicity</b>				
White	0.82	0.38	0	1
Asian American	0.07	0.25	0	1
Hispanic	0.05	0.22	0	1
Black	0.04	0.21	0	1
Other Ethnicity	0.01	0.12	0	1
<b>Employment Status</b>				
Employed	0.72	0.45	0	1
Self Employed	0.10	0.30	0	1
Student	0.08	0.27	0	1
Retired	0.07	0.25	0	1
Other Employment	0.03	0.16	0	1
<b>Education Level</b>				
Less Than High School	0.01	0.09	0	1
High School	0.12	0.33	0	1
Some College	0.20	0.40	0	1
Associate Degree	0.10	0.30	0	1
Bachelors Degree	0.40	0.49	0	1
Masters Degree	0.14	0.34	0	1
Doctorate Degree	0.04	0.20	0	1
<b>Political Attitudes</b>				
Democrat	0.51	0.50	0	1
Strong Supporter	0.48	0.50	0	1
Political Interest	3.34	0.98	1	5
<b>Experimental Characteristics</b>				
Duration in Seconds	569.15	353.65	134	4,050
Fraud Score	0.86	5.08	0	75
Prolific Score	99.83	0.39	98	100

## E Appendix: Manipulation Check

Figure E1: Manipulation check



*Note:* This figure shows for each treatment the average perceived threat and the average perceived political disagreement between the two parties. Whiskers denote 95 percent confidence intervals.

## F Appendix: Asymmetric Battle of the Sexes

Table F2: Treatment effects on Player 1 probability of choosing B

<b>Invasion vs. Control</b>						
	<b>Own-Party Condition</b>			<b>Opposite-Party Condition</b>		
Invasion	0.053 (0.033)	0.062* (0.034)	0.061* (0.034)	0.059* (0.032)	0.065** (0.033)	0.062* (0.033)
N	926	926	926	926	926	926
Demographics	No	Yes	Yes	No	Yes	Yes
Attitudes	No	No	Yes	No	No	Yes
<b>Disagreement vs. Control</b>						
	<b>Own-Party Condition</b>			<b>Opposite-Party Condition</b>		
Disagreement	0.033 (0.032)	0.028 (0.033)	0.027 (0.034)	0.035 (0.032)	0.033 (0.032)	0.030 (0.033)
N	947	943	943	947	943	943
Demographics	No	Yes	Yes	No	Yes	Yes
Attitudes	No	No	Yes	No	No	Yes

*Note:* The table shows marginal effects (average partial effects) from logistic regressions with Player 1 probability of choosing B as the dependent variable. Demographics include age, gender, dummies for ethnicity and dummies for level of schooling. Attitudes include political interest (5-point Likert scale), strength of partisan affiliation (dummy with value 1 if subject is a strong supporter), and how much the subject has been following the invasion (5-point Likert scale). Robust standard errors calculated using Delta method in parentheses.

\*  $p < .10$ , \*\*  $p < .05$ , \*\*\*  $p < .01$

Table F3: Treatment effects on Player 1 type in aBoS

<b>Invasion vs. Control</b>			
Invasion			
(AA)	-0.065** (0.033)	-0.074** (0.034)	-0.074** (0.034)
(AB)	0.012 (0.013)	0.006 (0.006)	0.005 (0.005)
(BA)	0.006 (0.021)	0.009 (0.020)	0.010 (0.019)
(BB)	0.047 (0.031)	0.058* (0.033)	0.060* (0.033)
N	926	926	926
Demographics	No	Yes	Yes
Attitudes	No	No	Yes
<b>Disagreement vs. Control</b>			
Disagreement			
(AA)	-0.024 (0.032)	-0.020 (0.033)	-0.020 (0.034)
(AB)	-0.009 (0.011)	-0.008 (0.010)	-0.008 (0.009)
(BA)	-0.010 (0.021)	-0.013 (0.020)	-0.012 (0.019)
(BB)	0.043 (0.031)	0.041 (0.031)	0.040 (0.032)
N	947	947	947
Demographics	No	Yes	Yes
Attitudes	No	No	Yes

*Note:* The table shows marginal effects (average partial effects) from multinomial logistic regressions with Player 1 type as the dependent variable. For Player types, the first letter refers to subjects' Player 1 decision when Player 2 is affiliated with own party, second letter refers to their Player 1 decision when Player 2 is affiliated with the opposite party. Demographics include age, gender, dummies for ethnicity and dummies for level of schooling. Attitudes include political interest (5-point Likert scale), strength of partisan affiliation (dummy with value 1 if subject is a strong supporter), and how much the subject has been following the invasion (5-point Likert scale). Robust standard errors calculated using Delta method in parentheses.

\*  $p < .10$ , \*\*  $p < .05$ , \*\*\*  $p < .01$

Table F4: Relation between FT difference and Player 1 type in aBoS

FT difference			
(AA)	0.001 (0.000)	0.001* (0.000)	0.002*** (0.001)
(AB)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
(BA)	0.002*** (0.000)	0.002*** (0.000)	0.002*** (0.000)
(BB)	-0.003*** (0.000)	-0.003*** (0.000)	-0.003*** (0.001)
N	1403	1403	1403
Demographics	No	Yes	Yes
Attitudes	No	No	Yes

*Note:* The table shows the marginal effects (average partial effects) from FT difference in multinomial logistic regressions with Player 1 type as the dependent variable. For Player types, the first letter refers to subjects' Player 1 decision when Player 2 is affiliated with own party, second letter refers to their Player 1 decision when Player 2 is affiliated with the opposite party. Demographics include age, gender, dummies for ethnicity and dummies for level of schooling. Attitudes include political interest (5-point Likert scale), strength of partisan affiliation (dummy with value 1 if subject is a strong supporter), and how much the subject has been following the invasion (5-point Likert scale). Robust standard errors calculated using Delta method in parentheses.

\*  $p < .10$ , \*\*  $p < .05$ , \*\*\*  $p < .01$ .

Table F5: Treatment effects on Player 1 probability of choosing B by party affiliation

Invasion vs. Control: Own-Party Condition						
	Democrats			Republicans		
Invasion	0.026 (0.046)	0.038 (0.047)	0.035 (0.048)	0.079* (0.046)	0.100** (0.049)	0.109** (0.050)
N	472	472	472	454	448	448
Demographics	No	Yes	Yes	No	Yes	Yes
Attitudes	No	No	Yes	No	No	Yes
Invasion vs. Control: Opposite-Party Condition						
	Democrats			Republicans		
Invasion	0.041 (0.046)	0.048 (0.047)	0.048 (0.047)	0.077* (0.045)	0.095** (0.047)	0.094* (0.048)
N	472	472	472	454	446	446
Demographics	No	Yes	Yes	No	Yes	Yes
Attitudes	No	No	Yes	No	No	Yes
Disagreement vs. Control: Own-Party Condition						
	Democrats			Republicans		
Disagreement	0.002 (0.046)	-0.019 (0.048)	-0.022 (0.048)	0.066 (0.045)	0.073 (0.047)	0.067 (0.048)
N	479	478	478	468	465	465
Demographics	No	Yes	Yes	No	Yes	Yes
Attitudes	No	No	Yes	No	No	Yes
Disagreement vs. Control: Opposite-Party Condition						
	Democrats			Republicans		
Disagreement	0.007 (0.045)	-0.005 (0.047)	-0.006 (0.047)	0.063 (0.044)	0.070 (0.046)	0.064 (0.047)
N	479	478	478	468	460	460
Demographics	No	Yes	Yes	No	Yes	Yes
Attitudes	No	No	Yes	No	No	Yes

*Note:* The table shows for each party marginal effects (average partial effects) from logistic regressions with probability of choosing B as the dependent variable. Demographics include age, gender, dummies for ethnicity and dummies for level of schooling. Attitudes include political interest (5-point Likert scale), strength of partisan affiliation (dummy with value 1 if subject is a strong supporter), and how much the subject has been following the invasion (5-point Likert scale). Robust standard errors calculated using Delta method in parentheses.

\*  $p < .10$ , \*\*  $p < .05$ , \*\*\*  $p < .01$

Table F6: Treatment effects on Player 1 type in aBoS by party affiliation

Invasion vs. Control						
	Democrats			Republicans		
Invasion						
(AA)	-0.018 (0.046)	-0.037 (0.048)	-0.034 (0.049)	-0.112** (0.046)	-0.130*** (0.047)	-0.139*** (0.048)
(AB)	-0.008 (0.016)	-0.000 (0.000)	-0.000 (0.000)	0.033 (0.022)	0.029* (0.016)	0.024 (0.017)
(BA)	-0.023 (0.032)	-0.015 (0.028)	-0.016 (0.027)	0.035 (0.029)	0.036 (0.024)	0.038 (0.023)
(BB)	0.049 (0.045)	0.052 (0.048)	0.051 (0.048)	0.044 (0.043)	0.065 (0.041)	0.077* (0.042)
N	472	472	472	454	454	454
Demographics	No	Yes	Yes	No	Yes	Yes
Attitudes	No	No	Yes	No	No	Yes
Disagreement vs. Control						
	Democrats			Republicans		
Disagreement						
(AA)	0.007 (0.045)	0.025 (0.048)	0.027 (0.049)	-0.057 (0.046)	-0.068 (0.044)	-0.067 (0.044)
(AB)	-0.009 (0.015)	-0.001 (0.002)	-0.000 (0.002)	-0.009 (0.017)	-0.008 (0.012)	-0.009 (0.011)
(BA)	-0.014 (0.032)	-0.023 (0.033)	-0.023 (0.032)	-0.006 (0.026)	-0.001 (0.006)	-0.001 (0.005)
(BB)	0.016 (0.045)	-0.001 (0.047)	-0.004 (0.047)	0.072* (0.042)	0.077* (0.042)	0.076* (0.043)
N	479	479	479	468	468	468
Demographics	No	Yes	Yes	No	Yes	Yes
Attitudes	No	No	Yes	No	No	Yes

*Note:* The table shows for each party marginal effects (average partial effects) from multinomial logistic regressions with Player 1 type as the dependent variable. For Player types, the first letter refers to subjects' Player 1 decision when Player 2 is affiliated with own party, second letter refers to their Player 1 decision when Player 2 is affiliated with the opposite party. Demographics include age, gender, dummies for ethnicity and dummies for level of schooling. Attitudes include political interest (5-point Likert scale), strength of partisan affiliation (dummy with value 1 if subject is a strong supporter), and how much the subject has been following the invasion (5-point Likert scale). Robust standard errors calculated using Delta method in parentheses.

\*  $p < .10$ , \*\*  $p < .05$ , \*\*\*  $p < .01$

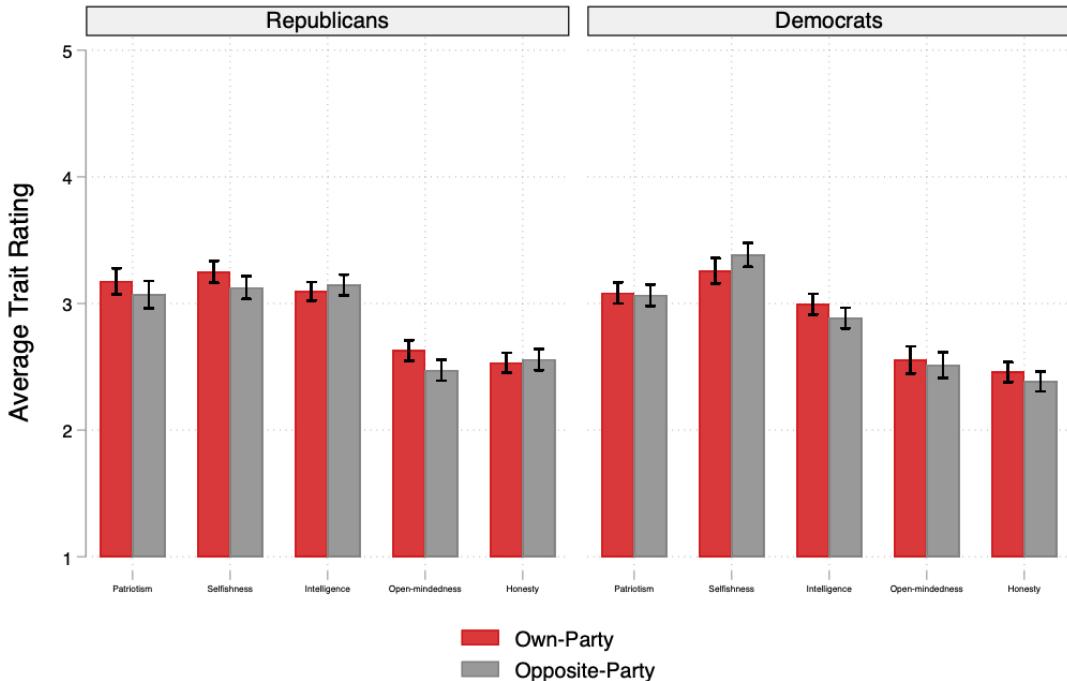
## G Appendix: Stereotypes Analysis

We present in this section the analyses related to the stereotypes that we elicited in the experiment (see Section 3.3). We present descriptive statistics that document very little existence of affective polarization in trait ratings. Further, we present analyses in accordance to our pre-registration, which shows that the treatments had little impact on trait ratings.

### G.1 Descriptives: Baseline Affective Polarization

Subjects rate both parties on a 5-point Likert scale on the following traits: Patriotism, selfishness, intelligence, open-mindedness, and honesty. Subjects on average rate their own and the opposite party similar on all traits (see Figure G2). Further, there is little difference between Republicans and Democrats with the exception that Republicans rate the Republican Party as significantly more open-minded than the Democratic Party (2.63 vs. 2.47,  $t = -2.4, p < .02$ ).

Figure G2: Affective polarization in Stereotypes



*Note:* This figure shows for each party how subjects rate their own party and the opposite party on the following traits (from left to right): Patriotism, selfishness, intelligence, open-mindedness, and honesty. Whiskers denote 95 percent confidence intervals.

## G.2 Treatment Effects

In the following, we present regression outputs related to our three pre-registered hypotheses with net trait rating of each of the traits as the dependent variable. We include only the outputs from the regressions with the maximum number of controls. The treatment effects remain insignificant in specifications with fewer controls and the conclusion is the same in Mann-Whitney U-tests.

**H1: Affective Polarization in *Invasion* and *Control*** Table G7 reports the regression outputs. We do not find any statistically significant treatment effect for any of the traits.

Table G7: Effect of *Invasion* treatment on stereotypes

	Patriotism	Selfishness	Intelligence	Open-mindedness	Honesty
Invasion	-0.089 (0.144)	-0.026 (0.141)	0.012 (0.113)	0.063 (0.148)	-0.014 (0.116)
Constant	0.223 (0.416)	0.239 (0.391)	-0.054 (0.319)	0.027 (0.407)	-0.126 (0.333)
N	926	926	926	926	926
Adj. R2	-0.00	-0.00	-0.01	0.00	-0.00
Demographics	Yes	Yes	Yes	Yes	Yes
Attitudes	Yes	Yes	Yes	Yes	Yes

*Note:* OLS regressions with the following traits (left to right) as the dependent variables: Patriotism, selfishness, intelligence, open-mindedness, and honesty. Demographics include age, gender, dummies for ethnicity and dummies for level of schooling. Attitudes include political interest (5-point Likert scale), partisan affiliation (dummy with value 1 if subject identifies as a Democrat, strength of partisan affiliation (dummy with value 1 if subject is a strong supporter), and how much the subject has been following the invasion (5-point Likert scale). Robust standard errors in parentheses.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

**H2: Affective Polarization in *Disagreement* and *Control*** Table G8 reports the regression outputs. We find a marginally significant treatment effect on *Honesty*. The coefficient estimate is negative and suggests that subjects in the *Disagreement* treatment rate a .2 smaller difference in how well their own- and the opposite-party is described by honesty. This should, however, be interpreted in the context that there is no affective polarization in honesty in the first place as subjects on average rate the other party as more honest than their own party.

Table G8: Effect of *Disagreement* treatment on stereotypes

	Patriotism	Selfishness	Intelligence	Open-mindedness	Honesty
Disagreement	-0.174 (0.141)	0.137 (0.136)	-0.178 (0.112)	-0.117 (0.145)	-0.204* (0.112)
Constant	0.304 (0.410)	0.132 (0.386)	0.273 (0.318)	0.147 (0.408)	-0.019 (0.336)
N	947	947	947	947	947
Adj. R2	0.01	0.01	0.01	0.02	0.01
Demographics	Yes	Yes	Yes	Yes	Yes
Attitudes	Yes	Yes	Yes	Yes	Yes

*Note:* OLS regressions with the following traits (left to right) as the dependent variables: Patriotism, selfishness, intelligence, open-mindedness, and honesty. Demographics include age, gender, dummies for ethnicity and dummies for level of schooling. Attitudes include political interest (5-point Likert scale), partisan affiliation (dummy with value 1 if subject identifies as a Democrat, strength of partisan affiliation (dummy with value 1 if subject is a strong supporter), and how much the subject has been following the invasion (5-point Likert scale). Robust standard errors in parentheses.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

**H3: Affective Polarization in *Invasion* and *Disagreement*** Table G9 reports the regression outputs. We find a statistically significant treatment effect at the 10 percent level on *Honesty* as in the *Disagreement vs. Control* comparison and note the same caveat with there not being affective polarization on this trait in the first place.

Table G9: Difference in treatment effects on stereotypes between *Invasion* and *Disagreement*

	Patriotism	Selfishness	Intelligence	Open-mindedness	Honesty
Disagreement	-0.077 (0.144)	0.192 (0.138)	-0.185 (0.113)	-0.230 (0.146)	-0.210* (0.114)
Constant	-0.437 (0.400)	0.321 (0.358)	-0.109 (0.306)	0.333 (0.382)	-0.202 (0.308)
N	933	933	933	933	933
Adj. R2	-0.00	0.00	-0.01	0.00	-0.00
Demographics	Yes	Yes	Yes	Yes	Yes
Attitudes	Yes	Yes	Yes	Yes	Yes

*Note:* OLS regressions with the following traits (left to right) as the dependent variables: Patriotism, selfishness, intelligence, open-mindedness, and honesty. The baseline is a subject in the *Invasion* treatment. Demographics include age, gender, dummies for ethnicity and dummies for level of schooling. Attitudes include political interest (5-point Likert scale), partisan affiliation (dummy with value 1 if subject identifies as a Democrat, strength of partisan affiliation (dummy with value 1 if subject is a strong supporter), and how much the subject has been following the invasion (5-point Likert scale). Robust standard errors in parentheses.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

## H Appendix: Affective polarization in *Disagreement* and *Invasion*

Table H10: Difference in treatment effects on FT difference between *Invasion* and *Disagreement*

Invasion vs. Disagreement			
Invasion	0.456	0.839	-0.407
	(1.850)	(1.852)	(1.574)
Constant	48.474***	35.787***	18.872***
	(1.285)	(3.748)	(4.038)
N	933	933	933
Adj. R2	-0.00	0.03	0.29
Demographics	No	Yes	Yes
Attitudes	No	No	Yes

*Note:* OLS regressions with FT difference as the dependent variable. The baseline is a subject in the *Disagreement* treatment. Demographics include age, gender, dummies for ethnicity and dummies for level of schooling. Attitudes include political interest (5-point Likert scale), partisan affiliation (dummy with value 1 if subject identifies as a Democrat, strength of partisan affiliation (dummy with value 1 if subject is a strong supporter), and how much the subject has been following the invasion (5-point Likert scale). Robust standard errors in parentheses.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

Table H11: Difference in treatment effects on Player 1 probability of choosing B in aBoS between *Invasion* and *Disagreement*

Invasion vs. Disagreement						
	Own-Party Condition			Opposite-Party Condition		
Invasion	0.020	0.021	0.019	0.025	0.026	0.026
	(0.033)	(0.034)	(0.034)	(0.032)	(0.033)	(0.033)
N	933	933	933	933	933	933
Demographics	No	Yes	Yes	No	Yes	Yes
Attitudes	No	No	Yes	No	No	Yes

*Note:* The table shows marginal effects (average partial effects) from logistic regressions with Player 1 probability of choosing B as the dependent variable. Demographics include age, gender, dummies for ethnicity and dummies for level of schooling. Attitudes include political interest (5-point Likert scale), strength of partisan affiliation (dummy with value 1 if subject is a strong supporter), and how much the subject has been following the invasion (5-point Likert scale). Robust standard errors calculated using Delta method in parentheses.

\*  $p < .10$ , \*\*  $p < .05$ , \*\*\*  $p < .01$

Table H12: Difference in treatment effects on Player 1 type in aBoS between *Invasion* and *Disagreement*

Invasion vs. Disagreement			
Invasion			
(AA)	-0.041 (0.033)	-0.043 (0.034)	-0.041 (0.034)
(AB)	0.021* (0.013)	0.020* (0.012)	0.020* (0.011)
(BA)	0.016 (0.021)	0.017 (0.019)	0.013 (0.018)
(BB)	0.004 (0.032)	0.006 (0.033)	0.008 (0.033)
N	933	933	933
Demographics	No	Yes	Yes
Attitudes	No	No	Yes

*Note:* The table shows marginal effects (average partial effects) from multinomial logistic regressions with Player 1 type as the dependent variable. For Player types, the first letter refers to subjects' Player 1 decision when Player 2 is affiliated with own party, second letter refers to their Player 1 decision when Player 2 is affiliated with the opposite party. Demographics include age, gender, dummies for ethnicity and dummies for level of schooling. Attitudes include political interest (5-point Likert scale), partisan affiliation (dummy with value 1 if subject identifies as a Democrat, strength of partisan affiliation (dummy with value 1 if subject is a strong supporter), and how much the subject has been following the invasion (5-point Likert scale). Robust standard errors calculated using Delta method in parentheses.

\*  $p < .10$ , \*\*  $p < .05$ , \*\*\*  $p < .01$

## I Appendix: Multiple Hypothesis Testing

In accordance with our pre-registration, we control for multiple hypothesis testing to investigate the robustness of our findings. We follow the recommendation by e.g. [Cao and Zhang \(2014\)](#), [Cramer et al. \(2016\)](#), and [List et al. \(2019\)](#) and report both the results when we control for the family-wise error rate (FWER) and when we control for the false discovery rate (FDR). For this exercise, we consider as our ‘family’ the two main hypotheses with the test for our primary measure ([Farcomeni, 2008](#)), which is FT difference and we do not control for multiple hypothesis testing in exploratory analysis ([Bender and Lange, 2001](#)). In controlling for both the FWER and the FDR, we adjust the p-values from the regression with all control variables as this is our preferred specification (see Table 3).

We use the Romano-Wolf resampling procedure to control for FWER ([Romano and Wolf, 2005a,b, 2016](#)), and we implement this in Stata using the package developed by [Clarke et al. \(2020\)](#). The advantage of this approach is that it is a resampling procedure and thus takes the dependency between tests into account. We conduct this adjustment using 1000 resamples, which gives a Romano-Wolf adjusted  $p$ -value of .089 (unadjusted  $p = .048$ ) in the *Invasion vs. Control* comparison. The adjustment does not change the  $p$ -value in the *Disagreement vs. Control* comparison ( $p = .$ ).

Note that FWER strong control implies FDR control, and only use the above. XXX

To control for FDR, we employ the Benjamini-Hochberg procedure ([Benjamini and Hochberg, 1995](#)). This is a step-down procedure where the  $p$ -values are sorted in ascending order. In our case, the adjusted  $p$ -value is simply two times the unadjusted  $p$ -value ( $p = .096$ ) in the *Invasion vs. Control* comparison and the  $p$ -value is unaffected in the *Disagreement vs. Control* comparison.

Thus, in controlling for both FWER and FDR, we conclude that the treatment effect in the *Invasion vs. Control* comparison remains marginally significant.

## J Appendix: Reweighting Sample

## K Appendix: Additional Discussion

### K.1 Out-Party Animosity

As mentioned in Section 3.7, we expect one effect of the threat prime to be that subjects’ superordinate identity of being an American becomes more salient. Following the common ingroup identity model ([Gaertner et al., 1989, 1993; Gaertner and Dovidio, 2000](#)), this change

of group boundaries should not change attitudes towards people's own party as these already belonged to the 'ingroup'. In contrast, as individuals re-categorize people affiliated with the opposite party to be a part of the ingroup, the motivations and cognitive processes that led to favorable views towards once own party now extend to the opposing party as well (e.g., [Levendusky, 2018](#)). Thus, we would expect that improvements in opposite-party feeling thermometer ratings are driving the observed treatment effect. We test whether this is the case by changing the outcome to be opposite-party feeling thermometer rating rather than FT difference.

For the full sample, both the *Invasion* and the *Disagreement* treatments increase ratings of the opposite party relative to *Control*, but we fail to detect any significant treatment effects in both the *Invasion vs. Control* and the *Disagreement vs. Control* comparisons (see Table K13). Yet, building on the heterogeneous treatment effects described in Section 5.1, we find that Republicans in *Invasion* rate the Democratic Party 4.7 degrees warmer than Republicans in *Control* ( $p = .016$ ). Republicans in *Disagreement* rate the Democratic Party 3 degrees warmer than in *Control* ( $p = .097$ ). Among Democrats, however, we find a statistically insignificant reduction in opposite-party feeling thermometer rating of .8 degrees in *Invasion* compared to *Control* ( $p = .590$ ), and the 2.2 degrees difference among Democrats between *Disagreement* and *Control* is also statistically insignificant ( $p = .164$ ).

Table K13: Treatment effects on opposite-party FT rating

	Invasion vs. Control			Disagreement vs. Control		
Invasion	1.541 (1.342)	1.634 (1.328)	1.487 (1.211)			
Disagreement				1.578 (1.301)	1.789 (1.293)	0.780 (1.172)
Constant	19.751*** (0.921)	20.352*** (2.653)	36.927*** (3.240)	19.751*** (0.921)	20.908*** (2.788)	37.033*** (3.261)
N	926	926	926	947	947	947
Adj. R2	0.00	0.02	0.19	0.00	0.02	0.20
Demographics	No	Yes	Yes	No	Yes	Yes
Attitudes	No	No	Yes	No	No	Yes

*Note:* OLS regressions with opposite-party FT rating as the dependent variable. Demographics include age, gender, dummies for ethnicity and dummies for level of schooling. Attitudes include political interest (5-point Likert scale), partisan affiliation (dummy with value 1 if subject identifies as a Democrat, strength of partisan affiliation (dummy with value 1 if subject is a strong supporter), and how much the subject has been following the invasion (5-point Likert scale). Robust standard errors in parentheses.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

Table K14: Treatment effects on opposite-party FT rating by party affiliation

<b>Invasion vs. Control</b>						
	<b>Democrats</b>			<b>Republicans</b>		
Invasion	-1.115 (1.629)	-0.968 (1.643)	-0.831 (1.540)	4.424** (2.065)	4.893** (2.023)	4.700** (1.937)
N	472	472	472	454	454	454
Adj. R2	-0.00	0.02	0.15	0.01	0.06	0.19
Demographics	No	Yes	Yes	No	Yes	Yes
Attitudes	No	No	Yes	No	No	Yes

<b>Disagreement vs. Control</b>						
	<b>Democrats</b>			<b>Republicans</b>		
Disagreement	-1.491 (1.644)	-1.329 (1.648)	-2.163 (1.551)	4.698** (1.927)	4.375** (1.925)	2.962* (1.783)
N	479	479	479	468	468	468
Adj. R2	-0.00	0.03	0.15	0.01	0.06	0.20
Demographics	No	Yes	Yes	No	Yes	Yes
Attitudes	No	No	Yes	No	No	Yes

*Note:* OLS regressions with opposite-party FT rating as the dependent variable and estimated separately for each party. Demographics include age, gender, dummies for ethnicity and dummies for level of schooling. Attitudes include political interest (5-point Likert scale), partisan affiliation (dummy with value 1 if subject identifies as a Democrat, strength of partisan affiliation (dummy with value 1 if subject is a strong supporter), and how much the subject has been following the invasion (5-point Likert scale). Robust standard errors in parentheses.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

## K.2 Strength of Partisan Identity and Political Interest

Drawing on the social identity approach (Tajfel et al., 1971; Tajfel and Turner, 1979; Tajfel, 1986), we expect that the partisan identity is more emotionally significant for the individuals who more strongly identifies with either of the parties relative to people who merely lean towards a party. We therefore expect that affective polarization is more pronounced for the former. We test this and possible moderating effects of strength of party support in the following.

Almost half (48 percent) of our sample identifies as “strong supporters” of either of the parties. These subjects display both more “ingroup love” and “outgroup hate”: They rate their own party significantly better (78.5 vs. 62.9,  $p < .001$ ) and the opposite party significantly worse (13.8 vs. 27.3,  $p < .001$ ). In investigating whether the strength of partisan affiliation moderates the treatment effects, one could imagine an effect in either direction: On the one hand, the lower opposite-party and higher own-party feeling thermometer rating leaves more room for reducing the FT difference. On the other hand, if individuals’ partisan identity is sufficiently strong, their attitudes might be rather immovable. We test this by including an interaction between our treatment indicator and our strong supporter indicator in an OLS regression (see Table K15). The coefficient estimates suggest that strong supporters reduce their FT difference by 2.65 degrees more in *Invasion* ( $p = .395$ ) and 3.05 degrees more in *Disagreement* ( $p = .315$ ) relative to *Control*.<sup>27</sup> These effects are statistically insignificant, but we also note that our sample size is chosen to ensure power for the main comparisons and not moderation effects of these.

We next examine the moderating effect of being interested in politics. In our sample, 42.3 percent rate themselves “very” or “extremely” interested in politics. Similar to “strong supporters”, we find suggestive evidence that the politically interested subjects reduce their FT difference relatively more following the primes (4.7 degrees more in *Invasion* and 3.9 degrees more in *Disagreement*, see Table K17). These interactions are, however, also statistically insignificant (all  $p$ 's  $> .137$ ).<sup>28</sup>

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<sup>27</sup>We perform this test of moderation effects for Democrats and Republicans separately as well (see Table K16. The interactions are statistically insignificant (all  $p$ 's  $> .460$ ), but the signs suggest that following one of treatment primes, strong supporters of both the Democratic and Republican Party reduces FT difference relative to partisan “leaners”.

<sup>28</sup>Looking at Democrats and Republicans separately (see Table K18), we actually find that politically interested Democratic subjects reduce their FT difference significantly more ( $p = .031$ ) in the *Disagreement* treatment.

Table K15: Moderating effect of strength of party support on treatment effect

	Invasion vs. Control			Disagreement vs. Control		
Invasion	-1.411 (2.268)	-1.970 (2.276)	-1.432 (2.256)			
Disagreement				-0.419 (2.207)	-0.747 (2.179)	-0.162 (2.134)
Treatment×Strong Supporter	-3.502 (3.167)	-2.586 (3.148)	-2.652 (3.115)	-3.645 (3.100)	-3.320 (3.090)	-3.048 (3.032)
Strong Supporter	31.462*** (2.158)	30.690*** (2.184)	26.671*** (2.284)	31.462*** (2.158)	30.341*** (2.190)	26.330*** (2.287)
Constant	36.239*** (1.534)	34.657*** (3.344)	22.472*** (4.099)	36.239*** (1.534)	29.773*** (3.471)	18.385*** (4.204)
N	926	926	926	947	947	947
Adj. R2	0.28	0.28	0.31	0.28	0.29	0.32
Demographics	No	Yes	Yes	No	Yes	Yes
Attitudes	No	No	Yes	No	No	Yes

*Note:* OLS regressions with FT difference as the dependent variable. The main independent variable of interest is Treatment×Strong Supporter, which is an interaction between the treatment dummy and a dummy for strongly supporting one's party. Demographics include age, gender, dummies for ethnicity and dummies for level of schooling. Attitudes include political interest (5-point Likert scale), partisan affiliation (dummy with value 1 if subject identifies as a Democrat, strength of partisan affiliation (dummy with value 1 if subject is a strong supporter), and how much the subject has been following the invasion (5-point Likert scale). Robust standard errors in parentheses.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

Table K16: Moderating effect of strength of party support on treatment effect by party affiliation

Invasion vs. Control						
	Democrats			Republicans		
Invasion	1.798 (3.103)	0.938 (3.134)	1.730 (3.099)	-4.198 (3.211)	-5.466* (3.178)	-4.395 (3.217)
Treatment×Strong Supporter	-3.926 (4.207)	-1.951 (4.211)	-3.046 (4.161)	-4.667 (4.738)	-3.073 (4.700)	-2.693 (4.615)
Strong Supporter	27.363*** (3.137)	25.390*** (3.226)	21.497*** (3.361)	36.001*** (2.978)	34.861*** (3.056)	31.597*** (3.098)
Constant	38.212*** (2.368)	36.747*** (4.410)	20.108*** (5.243)	34.763*** (2.013)	32.310*** (4.932)	25.643*** (6.029)
N	472	472	472	454	454	454
Adj. R2	0.23	0.23	0.27	0.31	0.33	0.35
Demographics	No	Yes	Yes	No	Yes	Yes
Attitudes	No	No	Yes	No	No	Yes
Disagreement vs. Control						
	Democrats			Republicans		
Disagreement	4.715 (3.319)	3.479 (3.323)	4.227 (3.281)	-4.074 (2.882)	-4.166 (2.818)	-2.835 (2.789)
Treatment×Strong Supporter	-6.593 (4.380)	-4.242 (4.399)	-4.199 (4.330)	-3.148 (4.422)	-3.455 (4.501)	-3.480 (4.346)
Strong Supporter	27.363*** (3.137)	24.103*** (3.264)	21.024*** (3.397)	36.001*** (2.978)	35.159*** (3.038)	31.505*** (3.023)
Constant	38.212*** (2.368)	31.797*** (4.959)	16.781*** (5.697)	34.763*** (2.012)	28.509*** (4.916)	22.688*** (5.982)
N	479	479	479	468	468	468
Adj. R2	0.20	0.23	0.25	0.34	0.35	0.39
Demographics	No	Yes	Yes	No	Yes	Yes
Attitudes	No	No	Yes	No	No	Yes

*Note:* OLS regressions with FT difference as the dependent variable, estimated separately for each party. The main independent variable of interest is Treatment×Strong Supporter, which is an interaction between the treatment dummy and a dummy for strongly supporting one's party. Demographics include age, gender, dummies for ethnicity and dummies for level of schooling. Attitudes include political interest (5-point Likert scale), partisan affiliation (dummy with value 1 if subject identifies as a Democrat, strength of partisan affiliation (dummy with value 1 if subject is a strong supporter), and how much the subject has been following the invasion (5-point Likert scale). Robust standard errors in parentheses.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

Table K17: Moderating effect of political interest on treatment effect

	Invasion vs. Control			Disagreement vs. Control		
Invasion	0.090 (2.372)	-0.034 (2.372)	-1.089 (2.107)			
Disagreement				0.865 (2.316)	0.969 (2.323)	-0.267 (2.044)
Treatment×Political Interested	-5.767 (3.511)	-5.574 (3.519)	-4.655 (3.127)	-7.381** (3.462)	-7.665** (3.444)	-3.904 (3.056)
Political Interested	22.155*** (2.413)	21.305*** (2.445)	10.503*** (2.377)	22.155*** (2.413)	20.968*** (2.460)	11.083*** (2.349)
Constant	41.723*** (1.605)	42.100*** (3.695)	32.839*** (4.014)	41.723*** (1.605)	36.631*** (3.874)	30.391*** (4.199)
N	926	926	926	947	947	947
Adj. R2	0.12	0.12	0.30	0.11	0.13	0.32
Demographics	No	Yes	Yes	No	Yes	Yes
Attitudes	No	No	Yes	No	No	Yes

*Note:* OLS regressions with FT difference as the dependent variable. The main independent variable of interest is Treatment×Political Interest, which is an interaction between the treatment dummy and a dummy for being politically interested. Demographics include age, gender, dummies for ethnicity and dummies for level of schooling. Attitudes include a dummy for being politically interested, partisan affiliation (dummy with value 1 if subject identifies as a Democrat, strength of partisan affiliation (dummy with value 1 if subject is a strong supporter), and how much the subject has been following the invasion (5-point Likert scale). Robust standard errors in parentheses.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

Table K18: Moderating effect of strength of party support on treatment effect by party affiliation

Invasion vs. Control						
	Democrats			Republicans		
Invasion	2.415 (3.229)	2.786 (3.213)	3.189 (2.981)	-1.955 (3.388)	-2.471 (3.408)	-4.626 (2.960)
Treatment×Political Interested	-5.334 (4.563)	-4.939 (4.543)	-6.262 (4.114)	-7.604 (5.452)	-7.784 (5.533)	-4.159 (4.772)
Political Interested	18.655*** (3.363)	17.504*** (3.374)	8.908*** (3.348)	25.578*** (3.576)	24.601*** (3.714)	12.181*** (3.428)
Constant	44.212*** (2.446)	41.125*** (4.720)	28.451*** (5.122)	39.712*** (2.119)	41.643*** (5.538)	37.245*** (5.946)
N	472	472	472	454	454	454
Adj. R2	0.09	0.11	0.26	0.13	0.14	0.35
Demographics	No	Yes	Yes	No	Yes	Yes
Attitudes	No	No	Yes	No	No	Yes

Disagreement vs. Control						
	Democrats			Republicans		
Disagreement	6.027* (3.317)	7.282** (3.352)	6.140** (3.121)	-3.823 (3.140)	-3.913 (3.121)	-4.477* (2.677)
Treatment×Political Interested	-9.501** (4.679)	-11.478** (4.625)	-9.362** (4.328)	-6.720 (5.150)	-6.367 (5.182)	-1.108 (4.414)
Political Interested	18.655*** (3.363)	17.040*** (3.373)	8.915*** (3.350)	25.578*** (3.576)	25.067*** (3.695)	13.798*** (3.321)
Constant	44.212*** (2.446)	35.208*** (5.225)	23.080*** (5.886)	39.712*** (2.118)	37.654*** (5.679)	38.465*** (5.564)
N	479	479	479	468	468	468
Adj. R2	0.07	0.12	0.25	0.14	0.17	0.39
Demographics	No	Yes	Yes	No	Yes	Yes
Attitudes	No	No	Yes	No	No	Yes

*Note:* OLS regressions with FT difference as the dependent variable, estimated separately for each party. The main independent variable of interest is Treatment×Political Interest, which is an interaction between the treatment dummy and a dummy for being politically interested. Demographics include age, gender, dummies for ethnicity and dummies for level of schooling. Attitudes include a dummy for being politically interested, partisan affiliation (dummy with value 1 if subject identifies as a Democrat, strength of partisan affiliation (dummy with value 1 if subject is a strong supporter), and how much the subject has been following the invasion (5-point Likert scale). Robust standard errors in parentheses.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

### K.3 Age

In the following, we test whether different age cutoffs has a moderating effect on the influence of our treatments. Surveys have demonstrated that age matters for people's attitudes towards the war ([Economist, 2022](#)). This is understandable from the intergroup conflict theory, which suggests that individuals are more likely to perceive a threat between two groups if these have a history of conflict, and the older generation has first-hand experience of living during the Cold War.

As expected, we find that threat perception is positively correlated with age (Spearman's  $\rho = .19$ ,  $p < .001$ ). To test for the moderating effect of age, we report two sets of regressions that use indicator variables for either (i) the subject being older than 30 (69.1 percent of the sample) or (ii) the subject being older than 40 (42.0 percent of the sample). We interact this with our treatment indicators to investigate whether age moderates the effect of the treatment primes. We find no evidence that subjects' age moderates our treatment effect in either *Invasion* or *Disagreement* (see Table K19).<sup>29</sup>.

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<sup>29</sup>We tested this for Democrats and Republicans separately as well. We did not observe any significant moderating effect of age (see Table K20 and Table K21)

Table K19: Moderating effect of age on treatment effect

Subjects >30 years old cutoff						
	Invasion vs. Control			Disagreement vs. Control		
Invasion	0.398 (3.096)	-0.148 (3.107)	-2.898 (2.602)			
Disagreement				-4.410 (3.130)	-5.198 (3.213)	-3.721 (2.566)
Treatment×Older than 30	-3.850 (3.861)	-3.467 (3.875)	0.119 (3.262)	2.664 (3.839)	2.947 (3.920)	2.954 (3.201)
Older than 30	6.417** (2.789)	4.594 (2.918)	1.740 (2.310)	6.417** (2.789)	4.600 (2.938)	1.546 (2.315)
Constant	46.792*** (2.315)	52.590*** (3.255)	26.097*** (4.059)	46.792*** (2.315)	51.801*** (3.213)	25.757*** (3.842)
N	926	926	926	947	947	947
Adj. R2	0.00	0.01	0.30	0.02	0.03	0.31
Demographics	No	Yes	Yes	No	Yes	Yes
Attitudes	No	No	Yes	No	No	Yes
Subjects >40 years old cutoff						
	Invasion vs. Control			Disagreement vs. Control		
Invasion	-2.320 (2.367)	-2.777 (2.394)	-4.139** (2.005)			
Disagreement				-4.889** (2.332)	-5.453** (2.364)	-3.400* (1.942)
Treatment×Older than 40	-0.073 (3.798)	0.476 (3.817)	3.158 (3.243)	5.057 (3.696)	4.966 (3.709)	3.811 (3.114)
Older than 40	5.458** (2.626)	4.072 (2.675)	1.057 (2.222)	5.458** (2.626)	4.119 (2.665)	1.031 (2.211)
Constant	49.042*** (1.694)	53.773*** (2.895)	27.116*** (3.883)	49.042*** (1.694)	52.637*** (2.815)	26.726*** (3.684)
N	926	926	926	947	947	947
Adj. R2	0.01	0.01	0.31	0.02	0.03	0.31
Demographics	No	Yes	Yes	No	Yes	Yes
Attitudes	No	No	Yes	No	No	Yes

Note: OLS regressions with FT difference as the dependent variable. The main independent variables of interest are Treatment×Older than 30 (40), which is an interaction between the treatment dummy and a dummy for the subject being older than 30 (40) years. Demographics include, gender, dummies for ethnicity and dummies for level of schooling. Attitudes include political interest (5-point Likert scale), partisan affiliation (dummy with value 1 if subject identifies as a Democrat, strength of partisan affiliation (dummy with value 1 if subject is a strong supporter), and how much the subject has been following the invasion (5-point Likert scale). Robust standard errors in parentheses.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

Table K20: Moderating effect of age on treatment effect by party affiliation

Invasion vs. Control: Subjects >30 years old cutoff						
	Democrats			Republicans		
Invasion	0.830 (3.819)	0.905 (3.932)	-1.605 (3.335)	-0.490 (5.161)	-2.394 (5.202)	-3.900 (4.323)
Treatment×Older than 30	-1.149 (4.879)	-1.356 (4.943)	2.346 (4.244)	-5.707 (6.168)	-4.118 (6.230)	-2.193 (5.120)
Older than 30	7.609** (3.713)	5.869 (3.938)	0.709 (3.232)	5.816 (4.235)	3.619 (4.399)	3.155 (3.319)
Constant	48.342*** (3.003)	55.026*** (4.206)	23.948*** (5.593)	44.807*** (3.616)	48.698*** (5.083)	28.101*** (5.753)
N	472	472	472	454	454	454
Adj. R2	0.01	0.01	0.27	0.00	0.03	0.35
Demographics	No	Yes	Yes	No	Yes	Yes
Attitudes	No	No	Yes	No	No	Yes
Disagreement vs. Control: Subjects >30 years old cutoff						
	Invasion vs. Control			Disagreement vs. Control		
Disagreement	-4.377 (4.040)	-3.540 (4.247)	-4.263 (3.594)	-4.342 (4.905)	-5.691 (4.935)	-0.948 (3.707)
Treatment×Older than 30	8.465* (4.985)	6.889 (5.136)	9.590** (4.444)	-2.875 (5.857)	-1.548 (5.967)	-4.748 (4.597)
Older than 30	7.609** (3.713)	7.343* (4.023)	2.373 (3.287)	5.816 (4.234)	4.299 (4.341)	2.843 (3.325)
Constant	48.342*** (3.003)	55.200*** (4.268)	25.193*** (5.357)	44.807*** (3.615)	46.276*** (4.924)	25.397*** (5.548)
N	479	479	479	468	468	468
Adj. R2	0.05	0.06	0.26	0.01	0.03	0.39
Demographics	No	Yes	Yes	No	Yes	Yes
Attitudes	No	No	Yes	No	No	Yes

Note: OLS regressions with FT difference as the dependent variable. The main independent variables of interest are Treatment×Older than 30, which is an interaction between the treatment dummy and a dummy for the subject being older than 30 years. Demographics include, gender, dummies for ethnicity and dummies for level of schooling. Attitudes include political interest (5-point Likert scale), partisan affiliation (dummy with value 1 if subject identifies as a Democrat, strength of partisan affiliation (dummy with value 1 if subject is a strong supporter), and how much the subject has been following the invasion (5-point Likert scale). Robust standard errors in parentheses.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

Table K21: Moderating effect of age on treatment effect by party affiliation

Invasion vs. Control: Subjects >40 years old cutoff						
	Democrats			Republicans		
Invasion	0.815 (2.920)	0.628 (2.968)	-1.463 (2.513)	-6.939* (3.892)	-7.950** (3.965)	-6.163* (3.318)
Treatment×Older than 40	-1.068 (4.973)	-0.910 (4.934)	4.129 (4.438)	4.172 (5.667)	4.924 (5.716)	1.118 (4.714)
Older than 40	9.827*** (3.627)	8.300** (3.699)	1.096 (3.200)	1.612 (3.787)	-0.531 (3.784)	1.247 (2.985)
Constant	49.571*** (2.212)	55.060*** (3.676)	24.563*** (5.346)	48.444*** (2.613)	51.992*** (4.470)	29.999*** (5.637)
N	472	472	472	454	454	454
Adj. R2	0.02	0.02	0.27	0.00	0.03	0.35
Demographics	No	Yes	Yes	No	Yes	Yes
Attitudes	No	No	Yes	No	No	Yes
Disagreement vs. Control: Subjects >40 years old cutoff						
	Invasion vs. Control			Disagreement vs. Control		
Disagreement	-2.039 (2.988)	-2.318 (3.072)	-2.246 (2.647)	-8.273** (3.636)	-8.786** (3.637)	-3.173 (2.874)
Treatment×Older than 40	8.506* (4.804)	8.027* (4.794)	10.343** (4.335)	3.573 (5.386)	3.952 (5.385)	-2.676 (4.310)
Older than 40	9.827*** (3.627)	8.300** (3.706)	1.869 (3.244)	1.612 (3.787)	0.854 (3.785)	2.217 (2.985)
Constant	49.571*** (2.212)	55.919*** (3.681)	28.013*** (5.053)	48.444*** (2.612)	48.721*** (4.294)	26.599*** (5.433)
N	479	479	479	468	468	468
Adj. R2	0.07	0.08	0.26	0.01	0.03	0.38
Demographics	No	Yes	Yes	No	Yes	Yes
Attitudes	No	No	Yes	No	No	Yes

*Note:* OLS regressions with FT difference as the dependent variable. The main independent variables of interest are Treatment×Older than 40, which is an interaction between the treatment dummy and a dummy for the subject being older than 40 years. Demographics include, gender, dummies for ethnicity and dummies for level of schooling. Attitudes include political interest (5-point Likert scale), partisan affiliation (dummy with value 1 if subject identifies as a Democrat, strength of partisan affiliation (dummy with value 1 if subject is a strong supporter), and how much the subject has been following the invasion (5-point Likert scale). Robust standard errors in parentheses.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

## K.4 Gender

It has long been well-known that there are large gender differences in attitudes towards war and that men tend to be more favorable towards war than women (Stagner, 1938; Putney and Middleton, 1962; Ås, 1982; Schroeder et al., 1993; Lester, 1994; Covell, 1996; Dupuis and Cohn, 2011). As our primary treatment involves priming subjects with an armed conflict, we therefore test for a possible moderating role of gender in the following. We stratified our sample to include an equal number of men and women. Men and women rate the average level of threat perception similarly (3.38 vs. 3.46,  $p = .169$ ) and they show similar levels of affective polarization in FT difference (49.8 vs. 49.4,  $p = .811$ ). We test whether gender moderates the effect of the treatments by including an interaction between our treatment indicator and the male indicator in an OLS regression (see Table K22). The coefficient estimates suggest that men reduce their FT difference 1.9 degrees less than women in *Invasion* relative to *Control* ( $p = .549$ ). We find a small and statistically insignificant difference between men and women in the *Disagreement vs. Control* comparison.<sup>30</sup>

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<sup>30</sup>We perform this test of gender moderation effects for Democrats and Republicans separately as well (see Table K26). The interactions are statistically insignificant ( $p's > .663$ ).

Table K22: Moderating effect of gender on treatment effect

	Invasion vs. Control			Disagreement vs. Control		
Invasion	-3.978 (2.679)	-3.432 (2.683)	-4.048* (2.253)			
Disagreement				-3.082 (2.636)	-2.999 (2.597)	-1.669 (2.214)
Treatment×Male	2.975 (3.721)	1.935 (3.733)	1.889 (3.153)	0.268 (3.662)	-0.097 (3.583)	-0.459 (3.068)
Male	-0.651 (2.602)	-0.522 (2.590)	-0.310 (2.159)	-0.651 (2.602)	0.243 (2.585)	0.463 (2.150)
Constant	51.751*** (1.847)	47.391*** (3.956)	34.510*** (4.116)	51.751*** (1.847)	40.374*** (4.001)	31.287*** (4.209)
N	926	926	926	947	947	947
Adj. R2	-0.00	0.02	0.30	-0.00	0.04	0.31
Demographics	No	Yes	Yes	No	Yes	Yes
Attitudes	No	No	Yes	No	No	Yes

*Note:* OLS regressions with FT difference as the dependent variable. The main independent variable of interest is Treatment×Male, which is an interaction between the treatment dummy and a dummy for being male. Demographics include age, dummies for ethnicity and dummies for level of schooling. Attitudes include a dummy for being politically interested, partisan affiliation (dummy with value 1 if subject identifies as a Democrat, strength of partisan affiliation (dummy with value 1 if subject is a strong supporter), and how much the subject has been following the invasion (5-point Likert scale). Robust standard errors in parentheses.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

Table K23: Moderating effect of gender on treatment effect by party affiliation

Invasion vs. Control						
	Democrats			Republicans		
Invasion	-1.461 (3.379)	-1.050 (3.360)	-1.950 (3.027)	-6.513 (4.122)	-6.252 (4.132)	-5.591* (3.364)
Treatment×Male	2.256 (4.800)	2.766 (4.721)	4.066 (4.125)	3.472 (5.668)	1.498 (5.736)	-1.201 (4.728)
Male	-2.153 (3.575)	-3.219 (3.520)	-3.889 (3.047)	1.112 (3.784)	3.155 (3.689)	3.707 (2.954)
Constant	54.640*** (2.472)	46.867*** (4.890)	31.629*** (5.229)	48.638*** (2.745)	45.664*** (6.085)	37.652*** (6.130)
N	472	472	472	454	454	454
Adj. R2	-0.01	0.03	0.26	0.00	0.03	0.35
Demographics	No	Yes	Yes	No	Yes	Yes
Attitudes	No	No	Yes	No	No	Yes
Disagreement vs. Control						
	Democrats			Republicans		
Disagreement	0.132 (3.502)	0.671 (3.391)	1.349 (3.177)	-5.814 (3.861)	-5.456 (3.864)	-4.074 (3.031)
Treatment×Male	1.263 (4.880)	0.310 (4.705)	0.592 (4.279)	-1.722 (5.373)	-2.299 (5.280)	-1.611 (4.256)
Male	-2.153 (3.574)	-2.478 (3.498)	-2.835 (3.062)	1.112 (3.784)	3.522 (3.713)	3.960 (2.959)
Constant	54.640*** (2.472)	41.206*** (5.218)	26.489*** (5.831)	48.638*** (2.745)	38.045*** (6.118)	38.088*** (5.598)
N	479	479	479	468	468	468
Adj. R2	-0.01	0.07	0.24	0.01	0.04	0.39
Demographics	No	Yes	Yes	No	Yes	Yes
Attitudes	No	No	Yes	No	No	Yes

Note: OLS regressions with FT difference as the dependent variable, estimated separately for each party. The main independent variable of interest is Treatment×Male, which is an interaction between the treatment dummy and a dummy for being male. Demographics include age, dummies for ethnicity and dummies for level of schooling. Attitudes include political interest (5-point Likert scale), partisan affiliation (dummy with value 1 if subject identifies as a Democrat, strength of partisan affiliation (dummy with value 1 if subject is a strong supporter), and how much the subject has been following the invasion (5-point Likert scale). Robust standard errors in parentheses.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

## K.5 Fade-out of Treatment Primes

In this section, we investigate whether the treatment effects depend on the time between subjects receive the news prime and answer the feeling thermometer questions. One critique of the priming method is that it only uncovers effects that do not last long. Since our study runs online, it is possible that some respondents take breaks and therefore spend more time than required to complete the study (see times in Figure ??). Although these breaks do not occur at random, we test whether the treatment effects correlate with the time respondents take from receiving their prime to answering the questions related to affective polarization as any correlation will indicate a rapid fade-out of the treatment effect. In conducting this test, we are aware that some subjects may be faster than others; so, we use subjects' response times for the demographic questions as a control for speed. We find no significant interaction effect between time spent and the treatment indicator, suggesting no immediate fade-out in the treatment effect (see Table K24).

Table K24: Fade-out of the effect of primes on FT difference

	Invasion vs. Control			Disagreement vs. Control		
Invasion	-3.244 (2.178)	-3.131 (2.149)	-3.098* (1.770)			
Disagreement				-2.721 (2.185)	-2.768 (2.117)	-1.885 (1.749)
Time before first FT answer	-0.036 (0.084)	-0.028 (0.080)	0.003 (0.058)	-0.036 (0.085)	-0.044 (0.076)	-0.009 (0.056)
Treatment×Time	0.058 (0.089)	0.051 (0.084)	0.027 (0.064)	-0.026 (0.098)	-0.029 (0.091)	0.024 (0.071)
Time spent on demograph.	0.050 (0.053)	0.046 (0.054)	0.054 (0.044)	0.016 (0.047)	0.003 (0.048)	0.047 (0.043)
Constant	51.107*** (1.908)	46.459*** (3.925)	22.151*** (4.162)	51.636*** (1.870)	40.665*** (4.030)	18.548*** (4.233)
N	926	926	926	947	947	947
Adj. R2	-0.00	0.02	0.31	-0.00	0.04	0.32
Demographics	No	Yes	Yes	No	Yes	Yes
Attitudes	No	No	Yes	No	No	Yes

*Note:* OLS regressions with FT difference as the dependent variable. The main independent variable of interest is Treatment×Time, which is an interaction between the treatment dummy and the time between receiving the prime and answering feeling thermometer questions. Time spent on demograph. is the time a subject uses to answer demographic questions (in seconds). Demographics include age, gender, dummies for ethnicity and dummies for level of schooling. Attitudes include political interest (5-point Likert scale), partisan affiliation (dummy with value 1 if subject identifies as a Democrat, strength of partisan affiliation (dummy with value 1 if subject is a strong supporter), and how much the subject has been following the invasion (5-point Likert scale). Robust standard errors in parentheses.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

## K.6 Followers and Non-followers

We now test whether the extent to which subjects have been following the Russian invasion of Ukraine has moderating effect on the influence of our treatments. In designing the experiment, our intention was not to provide subjects with any new information, but rather to only provide subtle situation cues by drawing subjects' attention towards threat or political disagreement. As we provide basic information from mainstream media, this informational effect is especially plausible for the subjects who have not been very attentive to the development during the first month of the invasion. We therefore test for informational effects by comparing treatment effects among followers and non-followers.

Fewer than half of the subjects (39.8 percent) rate that they have been following the invasion “to a large extent” or “to the fullest extent”. We find no statistically significant difference in the treatment effects between these subjects and the subjects who have paid less attention to the conflict in neither *Invasion* or *Disagreement* (see Table ??).<sup>31</sup> However, the signs on the coefficient estimates suggest that subjects who have been following the invasion a lot respond to both treatments by decreasing their FT difference more relative to subjects who have paid less attention to the conflict.<sup>32</sup>

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<sup>31</sup>A similar result is found when we test this separately for Democrats and Republicans (see Table K25).

<sup>32</sup>Note that this effect is not causal as individuals decide by themselves how closely they wish to follow the invasion. For instance, it is likely that people who care more about the development in Ukraine pay more attention to it. Their responsiveness to the prime may thus be a result of the fact that they care more about the development rather than the fact that they have been following the war more closely.

Table K25: Moderating effect of following the invasion on treatment effect

	Invasion vs. Control			Disagreement vs. Control		
Invasion	-0.414 (2.362)	-0.201 (2.376)	-1.503 (2.025)			
Disagreement				-1.261 (2.327)	-1.017 (2.319)	-0.326 (1.967)
Treatment×Following	-6.314* (3.743)	-6.637* (3.784)	-3.015 (3.251)	-5.115 (3.667)	-5.634 (3.623)	-3.377 (3.120)
Following	12.804*** (2.590)	11.105*** (2.630)	-1.172 (2.310)	12.804*** (2.590)	10.625*** (2.624)	-0.666 (2.310)
Constant	46.639*** (1.636)	44.690*** (3.913)	19.316*** (4.005)	46.639*** (1.636)	39.073*** (4.011)	15.873*** (4.109)
N	926	926	926	947	947	947
Adj. R2	0.03	0.04	0.31	0.03	0.06	0.32
Demographics	No	Yes	Yes	No	Yes	Yes
Attitudes	No	No	Yes	No	No	Yes

*Note:* OLS regressions with FT difference as the dependent variable. The main independent variable of interest is Treatment×Following, which is an interaction between the treatment dummy and a dummy for the subject responding that she follows the invasion “to a large extent” or “to the fullest extent”. Demographics include age, gender, dummies for ethnicity and dummies for level of schooling. Attitudes include political interest (5-point Likert scale), partisan affiliation (dummy with value 1 if subject identifies as a Democrat, strength of partisan affiliation (dummy with value 1 if subject is a strong supporter), and how much the subject has been following the invasion (5-point Likert scale). Robust standard errors in parentheses.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

Table K26: Moderating effect of following the invasion on treatment effect by party affiliation

	Invasion vs. Control					
	Democrats			Republicans		
Invasion	2.253 (3.124)	2.307 (3.138)	1.270 (2.779)	-3.248 (3.559)	-3.285 (3.601)	-4.816 (2.978)
Treatment×Following	-4.911 (4.723)	-4.148 (4.788)	-2.990 (4.298)	-6.801 (5.928)	-7.534 (5.887)	-3.589 (4.884)
Following	14.386*** (3.444)	11.604*** (3.552)	3.398 (3.268)	9.872** (4.101)	7.966* (4.171)	-2.695 (3.390)
Constant	46.969*** (2.418)	45.018*** (4.868)	35.631*** (4.262)	46.386*** (2.226)	43.487*** (5.936)	33.022*** (4.845)
N	472	472	472	454	454	454
Adj. R2	0.05	0.06	0.25	0.01	0.04	0.35
Demographics	No	Yes	Yes	No	Yes	Yes
Attitudes	No	No	Yes	No	No	Yes
	Disagreement vs. Control					
	Democrats			Republicans		
Disagreement	3.076 (3.271)	3.285 (3.273)	3.072 (3.012)	-5.147 (3.269)	-4.374 (3.278)	-3.337 (2.617)
Treatment×Following	-4.795 (4.743)	-4.849 (4.657)	-3.226 (4.298)	-6.310 (5.692)	-7.779 (5.684)	-4.949 (4.678)
Following	14.386*** (3.444)	10.749*** (3.521)	3.685 (3.316)	9.872** (4.100)	8.235** (4.175)	-3.720 (3.363)
Constant	46.969*** (2.418)	39.233*** (5.269)	31.133*** (4.884)	46.386*** (2.225)	37.306*** (6.208)	28.474*** (4.792)
N	479	479	479	468	468	468
Adj. R2	0.05	0.09	0.24	0.02	0.05	0.39
Demographics	No	Yes	Yes	No	Yes	Yes
Attitudes	No	No	Yes	No	No	Yes

*Note:* OLS regressions with FT difference as the dependent variable. The main independent variable of interest is Treatment×Following, which is an interaction between the treatment dummy and a dummy for the subject responding that she follows the invasion “to a large extent” or “to the fullest extent”. Demographics include age, gender, dummies for ethnicity and dummies for level of schooling. Attitudes include political interest (5-point Likert scale), partisan affiliation (dummy with value 1 if subject identifies as a Democrat, strength of partisan affiliation (dummy with value 1 if subject is a strong supporter), and how much the subject has been following the invasion (5-point Likert scale). Robust standard errors in parentheses.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$