



American liberals and conservatives have different cognitive styles, but (mostly) respond the same to party cues

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ABSTRACT

How do people with different political ideologies process political information? The party cue effect is an effect where people are more likely to support a policy position if they learn their party also supports it, shifting their judgement in accordance with cues from their inparty and against their outparty. This effect has been at the center of the debate over the psychological differences between liberals and conservatives, with some scholars suggesting that differences in cognitive styles between liberals and conservatives (e.g., rigidity, cognitive reflection) should result in differences in party cue susceptibility. We advance this debate by measuring rigid cognitive styles and applying a stimuli sampling approach to party cues across four preregistered experiments (N's per study >1200). We found convincing evidence for ideological symmetries in party cues in quota matched samples of Americans (Studies 1 & 2). In Studies 3 and 4, across four measures of ideology and three self-report measures of cognitive rigidity, we found ideological differences in *self-reported* rigidity in line with previous research. In Study 3, a convenience sample, we found that conservatives were more likely to follow party cues. However, Study 4, using a quota matched sample, found no ideological differences in cue susceptibility, except with respect to right-wing authoritarianism. Exploratory analyses found that when one ideological group has greater prior awareness or stronger initial views on a topic, they show smaller cueing effects. We conclude that while liberals and conservatives differ in cognitive style, they largely share similar cognitive processes for interpreting and integrating political information.

Political psychologists have actively debated and investigated whether fundamental psychological differences exist between liberals and conservatives (Adorno et al., 1950; Altemeyer, 1981, 1996; Costello, Zmigrod, & Tasimi, 2023; Jost et al., 2003; Kteily & Brandt, 2025). The asymmetry perspective suggests that there are deep-seated psychological differences between liberals and conservatives that explain their political differences (Jost, 2017). These psychological differences are thought to be rooted in basic personality and motivational processes (Jost, 2017; Jost et al., 2003), potentially emerging from the genetic underpinnings of ideology (Smith et al., 2011). The symmetry perspective agrees that there are political and value differences between liberals and conservatives, but suggests that these are not reflective of substantially different psychological processes (Ditto, Clark, et al., 2019). Instead, liberals and conservatives are expected to have similar psychological processes (albeit, in the service of different political goals, e.g., Brandt & Crawford, 2020). This debate continues, in part, because there are real differences between liberals and conservatives (for a recent review see Kteily & Brandt, 2025). The challenge is to identify

whether those differences are due to *political* differences or differences in *apolitical psychological* processes. We advance this debate by comprehensively testing for ideological asymmetries in party cues, a specific type of reasoning process in the political domain.

1. Party cues

Party cues are information reflecting a party or party leader's position on a policy that can affect one's reasoning and conclusions (Bullock, 2020). For example, when a policy question includes a signal about which party supports the policy ("Democrats support higher vehicle emission standards" or "Donald Trump supports war with Iran"), it contains a party cue by telling respondents the position Democrats or a key Republican leader takes. Party cues do not contain any information about specific policy features (Bullock, 2020) but instead use a policy's association with a party or party leader to advance its message. The typical finding (Bullock, 2020) is that when people are given a cue from their inparty they tend to shift their choice in the same direction as the

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cue. Conversely, when people are given a cue from their outparty, they tend to shift their choice in the opposite direction. A meta-analysis of 27 party-cue experiments conducted in the United States found a robust effect of party cues on partisan's positions, regardless of their partisanship ($r = 0.251$, Ditto, Liu, et al., 2019). In extreme cases, party cues may persuade people to adopt policy positions contrary to their ideological values (e.g., conservatives supporting raising the minimum wage, Barber & Pope, 2019b; see also Bullock, 2011), although typically the effects are less dramatic (e.g., Tappin, 2022).

2. Ideological asymmetries in party cues?

There are two reasons party cues are thought to work (Bullock, 2011). One idea is that party cues are a heuristic. They provide a shortcut to avoid the complex reasoning that can arise with policy questions. Rather than needing to sort through if a policy will work well for you, your family, and your community, you can instead rely on the opinion of a political party you perceive as aligned with your best interests (e.g., Kam, 2005). The second idea is that party cues are an outgrowth of our motivation to be good group members and engage in behaviors that support our groups (e.g., Leeper & Slothuus, 2014). Learning that your group supports a policy gives you information as to what position is most supportive of the group. Although evidence is mixed, most evidence so far is consistent with the group-based motivation account (for a review Bullock, 2011). For example, consistent with the group-based account, party cues tend to be stronger when people's political identities are primed (e.g., Bolsen et al., 2014) or strong (e.g., Bakker et al., 2020), whereas party cues are not typically stronger for people prone to heuristic thinking (e.g., low need for cognition scores, Bakker & Lelkes, 2018).

Regardless of the mechanism underlying use of party cues, there is reason to believe that political conservatives will be more susceptible to cues than liberals (e.g., Baron & Jost, 2019). This is because there is extensive work which identifies psychological differences (i.e. ideological asymmetries) between conservatives and liberals that should cause differences in susceptibility to cues (Adorno et al., 1950; Altemeyer, 1981; Costello, Bowes, Baldwin, Malka, & Tasimi, 2023; Jost, 2017; Jost et al., 2003). This work finds a host of psychological variables disproportionately correlated with conservatism vs. liberalism. For example, conservatives demonstrate greater cognitive rigidity (Costello, Bowes et al., 2023; Jost, 2017), need for closure (Costello et al., 2023; Jost, 2017; Jost et al., 2003), dogmatism (Altemeyer, 1996, 2002; Costello, Bowes, et al., 2023), and lower openness to experience (Sibley et al., 2012) than liberals. Conservatism has also been associated with low effort thought (Eidelman et al., 2012), authoritarianism (Altemeyer, 1981, 1996; Engelhardt et al., 2023), and values related to group loyalty (Feinberg et al., 2020; Graham et al., 2013). This ideological asymmetry framework thus predicts that conservatives will be more receptive to party cues whether those cues serve as heuristics (e.g., exacerbated by rigidity, low-effort thought) or group motivations (e.g., exacerbated by authoritarianism and group loyalty; Baron & Jost, 2019). Predicting ideological asymmetries for party cues is consistent with broader predictions that conservatives will demonstrate greater cognitive biases and evidence for motivated reasoning than liberals (Baron & Jost, 2019; Jost et al., 2003).

3. Ideological symmetries in party cues?

In contrast, the ideological symmetry perspective suggests reasons liberals and conservatives may not differ in party cue receptivity. Although the ideological symmetry perspective does not have a cohesive theoretical perspective (a shortcoming of the approach), the perspective suggests that the default assumption should be that liberals and conservatives have similar psychological processes. Consistent with this, previously identified asymmetries such as group-based animosity have been revised, uncovering ideological symmetries in the psychological

process underlying group-based animosity (i.e. worldview conflict, Brandt & Crawford, 2020). Similarly, previous work on ideological asymmetries in threat sensitivity have not replicated (with precise nulls) in larger, more robust investigations (Arceneaux et al., 2025; Bakker et al., 2020; Johnston & Madson, 2022). Meta-analyses of cognitive rigidity find very little evidence of ideological asymmetries in more representative samples and outside of the United States (Costello, Bowes et al., 2023). Even for traditionally robust metrics, such as trust in leaders and authoritarianism, evidence shows that liberals also trust leaders (they just trust different leaders than conservatives, such as scientists; Frimer et al., 2014) and express some authoritarian sentiments (e.g., Costello et al., 2022). In experimental contexts, there is no evidence that there are ideological differences in interpretation of politically congenial or uncongenial information (Guay & Johnston, 2022). These results suggest that there are likely to be ideological symmetries in party cues.

4. Existing evidence: Ditto, Liu, et al. (2019) meta-analysis

A recent meta-analysis on partisan bias directly speaks to the symmetry and asymmetry perspectives (Ditto, Liu, et al., 2019). This work found that both liberals and conservatives are susceptible to party cues (liberals $r = 0.246$, conservatives $r = 0.253$) across 27 studies and over 10,000 participants. This is consistent with the symmetry perspective.¹ However, the conclusion of the meta-analysis was challenged by Baron and Jost (2019). We address two key critiques identified by Baron and Jost (2019) that we can test empirically. First, by necessity of the method, Ditto and colleagues' meta-analysis focused on existing studies. One possibility is that existing studies do not use a representative set of issues, limiting the generalizability of the meta-analysis' conclusion (Baron & Jost, 2019). The speculation is that if the authors of the existing studies were aiming to minimize ideological differences to isolate a different experimental factor, they may have purposefully selected policy issues without any ideological differences in their samples. The utility of representative samples of issues has been recently demonstrated in party cue experiments (Clifford et al., 2024; Tappin, 2022), with scholars finding that cue effects vary across issues. Similarly, ideological asymmetries in cue effects may also vary, such that a non-representative sample of issues may not accurately estimate ideological differences in these effects. Second, Ditto and colleagues did not assess if there were ideological asymmetries in the underlying psychology (e.g., rigidity, dogmatism), nor if these psychological factors affect cue susceptibility. We therefore contribute to this debate by addressing these two shortcomings of Ditto, Liu, et al. (2019).

There is experimental work that builds on Ditto, Liu, et al.'s (2019) meta-analysis. Party cue experiments (our focus) make up half of Ditto, Liu, et al.'s (2019) meta-analysis. The other half examined ideological asymmetries in matched-information experiments, a different test of political information-processing. These matched-information experiments look at how participants differently interpret information that is ideologically congenial or uncongenial, often by asking participants to interpret the results of a scientific study that either supports or challenges their views. Experiments from Guay and Johnston (2022) advance this half of the meta-analysis by testing if liberals and conservatives similarly evaluate politically congenial information more favorably than uncongenial information (they do) while using salient and divisive political topics. Additionally, they test if interpretations are moderated by a need for certainty (they are not). However, this study did not use a stimuli-sampling approach, a similar shortcoming as Ditto, Liu, et al. (2019). For example, to address the critique that Ditto, Liu, et al. (2019) did not use political topics where asymmetries are likely

¹ More recently, Fuller et al. (2025) found ideological similarities in party cues across three issues. However, this paper shares the shortcomings of the Ditto et al. (2019) meta-analysis that Baron and Jost (2019) identified.

to occur, Guay and Johnston (2022) use five high-salience topics, whereas our studies use a large diversity of topics (more than 30 in each study) that vary in salience both across issues and between ideological groups. Additionally, by using a more ecological set of topics and leveraging the simpler design of party cues, we're able to single out topics where asymmetries occur and explore factors that predict them (see Exploratory Analyses).

5. The current studies

The purpose of the current studies is to test for ideological asymmetries and symmetries in party cue receptivity across representative sets of issues. We test the ideological asymmetry hypothesis, which predicts that conservatives will be more susceptible to party cues than liberals. We also test the ideological symmetry hypothesis, which predicts that liberals and conservatives will be similarly susceptible to party cues. In all our studies we use many policy issues (more than 30 in each study) that aim to represent issues debated in the US American political context at the time the studies were conducted. It is possible that ideological asymmetries will emerge on some issues, but not others; however, our key analyses examine the effect across all the issues. If there are fundamental and essential psychological differences between liberals and conservatives that are relevant for their processing of party cues, then this should be apparent when looking across all issues as these fundamental differences should emerge across the idiosyncrasies of individual issues. For our project, we use large quota-based samples that aim to be representative (Studies 1, 2, & 4), multiple measures of ideology (Studies 2–4), and assess presumed psychological differences underlying potential ideological differences (Studies 3 & 4). This combination of studies helps us comprehensively map the ideological symmetries and asymmetries in party cue effects across issues and measures of ideology. Although not part of our preregistered research questions or analyses, we also take the opportunity to explore factors that may predict on which issues ideological symmetries and asymmetries emerge.

6. Transparency and openness

All studies, measures, manipulations, and data/participant exclusions are reported in the manuscript or its Supplementary Materials. For Studies 1 and 2, we obtained the data from <https://osf.io/t2bpj/> and Doi: <https://doi.org/10.7910/DVN/NNAVTE>. The materials for these studies are detailed in the original publications and their supplemental materials (Clifford et al., 2024; Tappin, 2022). Our analytic code for Studies 1 and 2, as well as the materials, code, and data for Studies 3 and 4 are available from https://osf.io/ad324/?view_only=cafa57651d0949d5bbc38bafc69b39b7. Tables of all model output are also at this link. We preregistered our hypotheses and analytic plan for Studies 1 and 2. These studies were preregistered before we downloaded the existing data. We preregistered our hypotheses, data collection plan, and analytic plan for Studies 3 and 4. These studies were preregistered before data collection began: Study 1 https://osf.io/c9z5r/?view_only=ddf2f5a5495c45949326ceba631a0208, Study 2 https://osf.io/6ajv7/?view_only=22e23c2a0fe9485b8d5016a5bceaa601, Study 3 https://osf.io/zne67/?view_only=3056a7e88ead40b18140f34c0950b9ff, Study 4 https://osf.io/eb4j6/?view_only=4fd4a799af0c481a86c426ffe5899603. We complied with APA ethics standards in the treatment of our participants. Studies 1 and 2 were conducted before generative AI and so we are confident that they represent human participants. Studies 3 and 4 both used sample providers that take active steps to reduce non-human respondents. We additionally included attention checks and captchas.

Data were analyzed using R (version 4.5.0, R Core Team, 2025) in RStudio (Posit Team, 2025) using broom (Robinson et al., 2025), broom.mixed (Bolker & Robinson, 2024), modelbased (Makowski et al., 2025), lmerTest (Kuznetsova et al., 2017), patchwork (Pedersen, 2024), grf (Tibshirani et al., 2018), randomforest (Breiman, Cutler, Liaw, Wiener,

& Liaw, 2018) and tidyverse (Wickham et al., 2019).

7. Studies 1 and 2

In our first two studies, we use data from published experiments to test the ideological symmetry and asymmetry hypotheses. These experiments use representative samples of issues and include measures that can serve as proxies for ideology. Because of the similarities between the studies, we describe them concurrently.

7.1. Methods

In Studies 1 and 2, we used existing data from Tappin (2022) and Clifford et al. (2024) to test if ideological asymmetries emerge when looking across a sample of issues representative of contemporary political events. Tappin (2022) studied how party cues can vary across a wide range of issues, finding that the party cue effect varies across issues. Clifford et al. used a party cue design as an application of topic sampling, a research method for drawing more generalizable conclusions using a large and representative sample of topics (a design we also use throughout our studies). However, neither Tappin nor Clifford et al. tested if party cue effects vary by participant ideology. This was our goal. Complete details of these studies were reported in Tappin (2022) and Clifford et al. (2024).

7.2. Participants

Tappin (2022) conducted their survey using the Lucid platform and received 1591 participants with a total of 9607 observations.² The survey used quota sampling to match US Census demographics on age, gender, education, and region. Tappin (2022) removed people who reported that they were politically independent. In our work, we included those independents who also reported leaning towards one party to capture a broader range of political attachments. This means that the sample size we used (and report above) was somewhat larger than the sample analyzed by Tappin (2022).

In Tappin (2022), participants were given a thorough attention check, where they had to type the word “hello” with the letters in alphabetical order (“ehllo”). When only participants who passed the attention-check were included, the number of respondents dropped from 1591 to 516. Because of this large reduction, we preregistered that we would estimate our models using two samples, one with all respondents and one with only those who passed the attention-check (see Tappin, 2022 for a similar strategy). The low attention levels combined with the greater representativeness were consistent with research assessing the quality of Lucid samples (Stagnaro et al., 2026). Results for the attentive subset are presented in the supplemental materials.

Clifford et al. (2024) collected data using Survey Sampling International (now Dynata), which aims to create diverse national samples targeted at demographic representativeness, and assigned a party cue design to 2764 respondents (pure independents removed).³ We analyzed data from 16,584 observations (6 policy measures for each respondent).⁴ As Ditto, Liu, et al. (2019) primarily analyzed studies with non-representative samples, the studies used here were better suited to estimate ideological differences in the general population.

7.2.1. Policy issues

A primary benefit for relying on existing data from Tappin (2022) and Clifford et al. (2024) is that they included a large sample of topics

² This sample sizes gives us 80% to detect very small effects, $f^2 = 0.005$

³ This sample sizes gives us 80% to detect very small effects, $f^2 = 0.003$

⁴ In the same survey, a separate sample of 252 participants were randomly assigned to instead record their awareness of the policies used in the focal experiment.

pooled from a diverse population of contemporary policy issues. While both used a representative sample of policy issues for other reasons, we used this topic sampling strategy to address a key criticism from Baron and Jost (2019), that a representative sample of issues is needed for a strong test of the symmetry and asymmetry hypotheses.

Tappin (2022) identified issues on the website www.isidewith.com. The website includes the stances of the most important party leaders in US American politics on each issue. At the time of the experiment, these leaders were Donald Trump and Barack Obama. Tappin's experiment included 34 policy issues where Obama and Trump had different stances across a wide range of policy domains (see supplemental materials for all issues). Examples of issues included "Should gay couples have the same adoption rights as straight couples?" and "Should there be more or less privatization of veterans' healthcare?"

Clifford et al. sought a large sample of issues that were contemporary, relevant, and diverse in salience. To satisfy these requirements, they identified issues from the Roper iPoll database, which included polling questions from the prior calendar year. They used a stratified random sample with equal probability of issue categories to select a diversity of issues. Then, they selected each issue with the two party's positions opposing one another. They used a total of 48 unique policy issues such as "Do you favor or oppose raising the minimum wage?" and "Do you favor or oppose federal funding for abortion under Medicaid?"

7.2.2. Experimental treatments

In Tappin (2022), participants were given a random set of eight policy issues. For each issue, they were randomly assigned a treatment or control condition. In the treatment condition, participants were shown the stances of Barack Obama and Donald Trump on the issue, which served as simultaneous Democratic (Obama) and Republican (Trump) party cues. Stances were shown using text ("Barack Obama said Yes" "Donald Trump said No") paired with a photo of the politician. Regardless of partisanship, participants were shown both inparty and outparty cues on each issue. In the control condition, these cues were absent, only displaying the policy issue. Participants responded to each policy they were given with a 1–7 Likert scale representing their level of agreement with the policy. Most items ranged from "Definitely Not" to "Definitely Yes". However, some issues used different anchors, such as from "Definitely Decrease" to "Definitely Increase". All policy support responses were recoded so that higher scores indicated more support for the participants' inparty vs outparty cue (thus, if the cue is effective, the cue should have positive effects, Tappin, 2022).

In addition to the 34 policy issues where the Republican and Democratic cues disagreed with one another, the experiment also included 11 additional, supplementary policies where Trump and Obama took the same position. These supplementary policies were used to mask the purpose of the experimental procedure and were not included in Tappin's nor our analyses. Participants were randomly assigned 8 issues from the total of 45, resulting in approximately 6 non-supplementary policies each.

Clifford et al.'s (2024) primary difference from Tappin (2022) was their party cue design. Participants were presented a random set of 6 policy issues and asked to give their position on a 1–7 Likert scale ranging from "Strongly Favor" to "Strongly Oppose". The first 5 policy issues were presented as the control condition, showing only the policy. On the sixth issue, participants were given the treatment condition: a party cue stating if Democrats and Republicans were more likely to favor or oppose the policy. While Tappin (2022) used cues from party leaders, Clifford et al. (2024) used cues based on the party's consensus. All participants were cued on their in-party and out-party. All policies had cues where parties had opposing stances. Responses were recoded so that higher scores indicated party agreement (and therefore cue effectiveness) regardless of participant party.

7.2.3. Measures

All ideology measures were assessed prior to the experimental

procedure. Tappin (2022) measured participants partisanship, which we used as a proxy of ideology given its moderate-to-strong correlation with ideological identification in the United States (e.g., Abramowitz, 2022).⁵ Participants first described their political affiliation ranging from 1 (Strong Democrat) to 7 (Strong Republican). Participants who picked the midpoint, 4 (Independent/Don't Know), were given a follow-up question asking them "if they had to choose" with three options (Democratic Party, Republican Party, neither of these parties). This measure was recoded to remove true independents and only included independents who leaned (4 = independent leaning Democrat; 5 = independent leaning Republican), making it range from 1 to 8 points. This variable was rescaled to range from 0 to 1 and then centered on 0.5 (its midpoint), so that it ranged from –0.5 (Strong Democrat) to 0.5 (Strong Republican).⁶ To assess for strength of partisanship, we took the absolute value of the midpoint centered measure of partisanship. For analyses, we centered strength on its mean.

Clifford et al. included two measures in their study that we used to assess ideology: partisanship (Democrat/Republican) and ideological identification (Liberal/Conservative). For partisanship, participants were asked two branching questions, the first asking their identity (i.e. "Democrat" or "Republican") and then either the strength of that identity (i.e. "Strong Democrat" or "Not a Strong Democrat") or the way they leaned if they didn't express a partisan identity. We removed true independents and recoded these variables into a single linear scale ranging from 1 (strong Democrat) to 6 (strong Republican). For conservative/liberal ideology, participants responded to a 1–7 Likert scale ranging from 1 (very liberal) to 7 (very conservative). For both partisanship and ideology, we rescored the measures to range from –0.5 (strong Democrat/liberal) to 0.5 (strong Republican/conservative). We also took the absolute value of this measure to assess strength of identification, ranging from 0 (no clear identification) to 0.5 (strong Democrat/liberal or strong Republican/conservative). We mean-centered the strength measures so that models were estimated controlling for the sample-average strength of identification.

7.3. Results

7.3.1. Analytic strategy

For both studies, we tested our hypotheses using OLS regression and multilevel models estimated in R's (R Core Team, 2025) lme4 (Bates et al., 2015) and lmerTest (Kuznetsova et al., 2017) packages. For each policy, we regressed policy support on cue (0 = control, 1 = cue), ideology (midpoint centered), ideological strength (mean centered), the cue by ideology interaction, and the cue by ideological strength interaction. We did this for all measures of ideology (partisanship and ideological identification). Support for the asymmetry hypothesis for a given issue was a significant and positive cue by ideology interaction indicated by our 95% CI (equivalent to $p < .05$). Support for the symmetry hypothesis for a given issue was a non-significant cue by ideology interaction. We preregistered that an interaction effect of 0.05 was the smallest effect size of interest, given that our variables were rescaled to 0–1. Following Rainey's (2014) (see also Lakens, 2017) method for testing for negligible effects, if our 90% CI (consistent with a one-sided p -value) does not overlap with ± 0.05 we would count this as evidence for the symmetry hypothesis. A negative significant interaction effect was also technically possible but not predicted by any perspective and so would speak against both.

To estimate an overall effect across all issues, we estimated a similar model, but with a cross-classified multilevel model. We nested policy

⁵ In our studies including both measures, the correlations ranged from 0.58 to 0.89.

⁶ Throughout this manuscript, when measures have a meaningful midpoint (e.g., moderate ideology, independent partisanship), we center on the midpoint. When measures have less meaningful midpoints, we center on the mean.

responses within participants and issues. Then we regressed policy support on cue (0 = control, 1 = cue), ideology (midpoint centered), ideological strength (mean centered), the cue by ideology interaction, and the cue by ideological strength interaction. We included a random effect for policy and for participant. The cue slope was included as a random slope for both issue and participant. The preregistered evidentiary standards were the same as the policy specific models.

For all of our interaction analyses, we estimated simple slopes of cue at high and low levels of partisanship and ideology. We picked meaningful points on the relevant scales. For Study 1, partisanship was probed at -0.357 and 0.357 , representing “Democrat” and “Republican”. For Study 2, partisanship was probed at -0.3 and 0.3 , representing “Not a Strong Democrat” and “Not a Strong Republican”. This point is the option between “Strong” partisan and “Leaning” partisan. Ideology was probed at -0.333 and 0.333 , representing “Liberal” and “Conservative”.

7.3.2. Partisanship $\times$ cue analysis

We tested the asymmetry hypothesis and the symmetry hypothesis. The asymmetry hypothesis predicted that conservatives would show greater susceptibility to party cues than liberals. The symmetry hypothesis predicted that both liberals and conservatives would show an equal effect. The coefficients estimating the interaction effects for all models in Study 1 and Study 2 were visualized in Figs. 1 and 2 respectively. Support for the asymmetry hypothesis for a given issue was depicted by a significant and positive interaction. For example, the datapoint in Fig. 1 that was second from the top, “Should the U.S. remain in NATO?” was significantly different from zero in the positive direction, indicating that conservatives responded more to the party cue than liberals for that policy. Moreover, the datapoint at the bottom, “Should the President offer tax breaks to individual companies to keep jobs in the U.S.?” was significant in the *negative* direction, so liberals responded more to the cue for that policy.

When we estimated cue susceptibility by partisanship, we got near identical results in both Studies 1 and 2. Estimating issues individually, a few appeared where conservatives responded significantly more to party cues than liberals, such as “Should the U.S. remain in NATO?” in Study 1 and “Do you favor or oppose raising the minimum wage?” in Study 2. While this might have been evidence of the asymmetry hypothesis, around the same number of issues found that liberals showed greater cue susceptibility, as indicated by a *negative* and significant interaction. Moreover, the bulk of policy issues lay somewhere between these, having no significant difference from zero.

As we aimed to draw conclusions on the larger population of contemporary policy issues, our *focal analysis* was the estimate across all policy issues in the study (Study 1 $N = 34$, Study 2 $N = 48$). Here, we found significant support for the symmetry hypothesis. Across all policies, we found a non-significant interaction that was smaller than our smallest effect size of interest according to its 90% confidence interval (see Figs. 1 and 2, Top Row). This indicated that Democrats and Republicans were equally susceptible to party cues, moving in the same direction as their party and the opposite of the opposing party.

While not preregistered, we conducted an exploratory analysis testing if support for Trump specifically predicted party cue effects. It could be the case that Trump support is unique from conservative ideology more generally (e.g. Barber & Pope, 2019a). We used a measure from Tappin (2022) asking participants on a 1–7 Likert scale for their “preference of Obama versus Trump”. We tested this similarly to partisanship and again found equal susceptibility to party cues (see supplemental materials).

7.3.3. Ideology $\times$ cue analysis

Clifford et al. (2024) also included a measure of ideological identification. As with our analysis using partisanship, we found a few policy issues with estimates that were significant and *positive* (higher effect in conservatives) and significant and *negative* (higher effect in liberals). Furthermore, the rest of the issues were not different from zero, but they

were also not convincing evidence of the null hypothesis. In our overall estimate, we found a small and non-significant interaction between ideology and party cue (see Fig. 3, Top Row). The 90% CI of this small effect slightly exceeded our smallest effect size of interest (high end of 90% CI = 0.056). In other words, this last null effect was not as conclusive as the others: It did not provide evidence that the interaction effect was different from 0, nor did it provide evidence that the interaction effect was smaller than our *a priori* threshold for a meaningful difference.

8. Study 3

Our first two studies found strong support for the symmetry hypothesis when using partisanship as a predictor of party cue susceptibility. The effects for ideological identification were also non-significant and near zero, but not significantly smaller than our smallest effect size of interest. Across both measures, both liberals and conservatives demonstrated party cue effects that were similar in size. In Study 3, we adapted the experimental design from Tappin (2022) with the goal of investigating why we observed no differences despite the asymmetry perspective suggesting otherwise (Baron & Jost, 2019; Jost, 2017). First, we re-examine our measures of ideology; it could be the case that a more thorough analysis of participant ideology could lead to ideological asymmetries in cue effects. For example, the partisanship measure used in both Studies 1 and 2 might be tapping into a different kind of construct than expected by ideological asymmetry theorists. We address this issue by including four distinct measures of ideology, including two that are designed to capture more extreme versions of ideology: One for the left (progressive values scale; Magazin et al., in press; Proulx et al., 2023) and one for the right (right-wing authoritarianism; Altemeyer, 1981; Bizumic & Duckitt, 2018).

Additionally, the asymmetry hypothesis posits that conservative ideology is more attractive to people with certain psychological profiles, such as those who are cognitively rigid, less deliberate thinkers, and more trusting of group leaders (Jost, 2017). This perspective suggests that these cognitive styles make up a psychological profile in conservatives that is more “cue susceptible”. We deploy three tests of cognitive style to test the claim that conservatives have a profile that is cognitively rigid and if these cognitive styles in fact predict greater susceptibility to party cues. First, we tested if conservatives are less deliberate and more intuitive thinkers, two potential aspects of a “cue susceptible” profile, by using the Cognitive Reflection Test (CRT). This tests participants on their ability to find the correct answer by using reflective thinking and overriding their intuitive processing (Frederick, 2005). We use a version that can be scored to identify people who are deliberative, by answering correctly, and those that are intuitive, by giving the incorrect yet intuitive answer. Second, we tested if conservatives have a higher need for closure than liberals. Need for closure is characterized by one's desire for definite and assured answers and aversion to ambiguity or confusion (Webster & Kruglanski, 1994). Third, we measured dogmatism (Altemeyer, 2002) to test if conservative were more cognitively rigid than liberals. Across all of these four measures, scholars have identified ideological asymmetries (e.g., Altemeyer, 2002; Costello, Bowes, et al., 2023; Federico & Goren, 2009; Federico & Malka, 2018; Jost, 2017; Jost et al., 2003) that are theorized to cause observable differences in the psychological processes of liberal and conservatives (e.g., Baron & Jost, 2019).

8.1. Methods

8.1.1. Participants

We conducted our survey using Prolific on August 12th, 2024, and

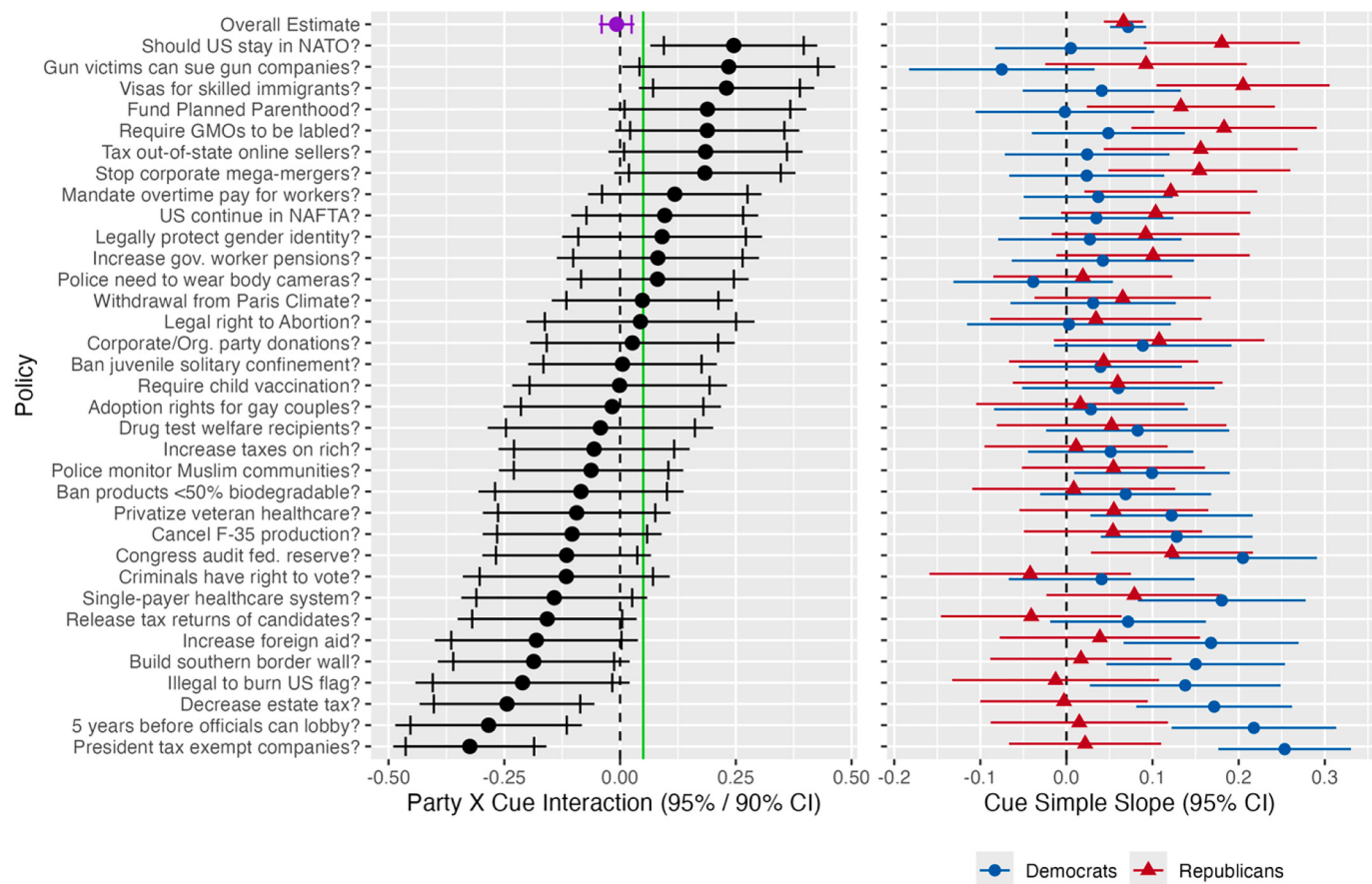


Fig. 1. Study 1 party $\times$ cue analysis.
Note: Interaction between participants' party affiliation and the experimental party cue for each issue, including an overall estimate across all issues (purple estimate). The green line represents our preregistered smallest effect size of interest. The error bars represent 90% confidence intervals (until the cross) and 95% confidence intervals (until the end of the bar).

received 1659 participants ($M_{age} = 40.8$; 824 male, 814 female, and 21 other) with a total of 12,299 observations (multiple policies per participant).⁷ We sampled participants using convenience sampling and gathered an equal proportion of Republican and Democratic participants (851 Reps and 808 Dems). Like our analysis of Tappin (2022), participants who reported being politically independent were included if they reported leaning towards a party. We included a different attention check than Tappin (2022) prior to the experimental treatment, with our sample size above representing only those who passed the check ($n = 54$ failed the check).

8.1.2. Issues

Like Tappin (2022), we used the website www.isidewith.com to identify a large sample of policy issues that are representative of contemporary American politics. We gathered all of the issues from the database which had the stances of both presidential candidates at the time of data collection (Summer 2024) Donald Trump (Republican) and Joe Biden (Democrat). We only included issues if the source of the party leaders' position came from their voting record or public statements, thus making them verifiable positions. After collecting these issues, we removed policy issues where party leaders were not in disagreement, or the issue was no longer relevant (e.g., sending troops to fight ISIS). Then, we randomly sampled 50% of issues by category (economy, social, etc.), leaving us with 37 distinct policy issues across multiple categories (see

supplemental materials for all issues).

8.1.3. Experimental treatments

We largely followed Tappin's (2022) method (Study 1 above) with two changes. First, participants were randomly assigned 10 policy issues instead of 8. Like Tappin, we included 13 additional, supplementary policies where Trump and Biden took the same positions. These supplementary policies were used to mask the purpose of the experimental procedure and were not included in our analyses. Of the 10 issues participants were randomly assigned to, on average 7.4 were non-supplementary policies. Second, rather than mentioning the specific president, we indicated to participants the positions of "Republican leaders" and "Democratic leaders", to further generalize across cue type. In the control condition, these cues were absent, only displaying the policy issue.

8.1.4. Measures

8.1.4.1. Ideology. To explore why no differences emerged between liberals and conservatives in our previous studies, we included the measures of ideology from Studies 1 and 2, along with two more. We employed the same political party identification used in Study 1. This measure was also important because it determined whether the cue from the Republican or Democratic leader was consistent with the participants' identity. As in Study 1, participants who did not identify nor lean towards a particular party were not analyzed because it was not possible to identify a party-consistent cue for this subsample. Partisanship was rescaled to range from 0 to 1 and then centered on 0.5 (its midpoint), so

⁷ This sample sizes gives us 80% to detect very small effects, $f^2 = 0.005$, $r = 0.07$

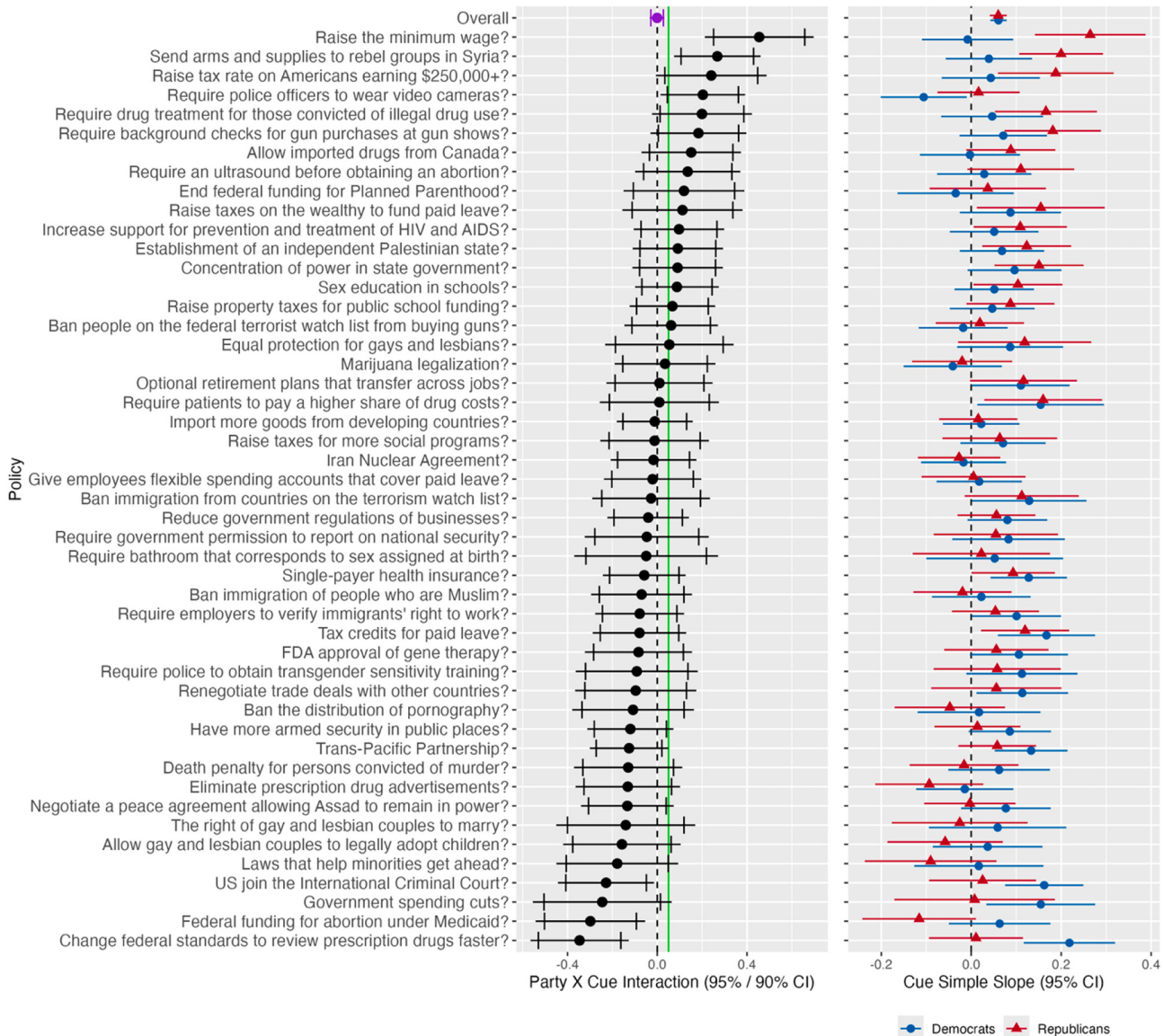


Fig. 2. Study 2 party $\times$ cue analysis.

Note: Interaction between participants' party affiliation and the experimental party cue for each issue, including an overall estimate across all issues (purple estimate). The green line represents our preregistered smallest effect size of interest. The error bars represent 90% confidence intervals (until the cross) and 95% confidence intervals (until the end of the bar).

that it ranged from -0.5 (Strong Democrat) to 0.5 (Strong Republican).

We also included the single-item measure of ideological identification used in Study 2, which ranged from 1 (Strongly liberal) to 7 (Strongly conservative). Participants could also report “don't know” and “haven't thought about it”, which were re-coded as 4 (Moderate). This measure was rescaled to range from 0 to 1 and then centered on its midpoint, so that it ranged from -0.5 (Strongly liberal) to 0.5 (Strongly conservative).

In addition to the previous measures of ideology, we included two expansive, multiple-item scales that tap into orientations underlying facets of political ideology. First, we included an adaptation of Altemeyer's (1981) Right-wing Authoritarian scale [RWA], a classic measure of right-wing ideology, including right-wing manifestations of authoritarian submission, traditionalism, and authoritarian aggression (Bizumic & Duckitt, 2018). This adaptation shortened the original RWA scale to six items while maintaining reliability and distinct subscales measuring the three subcomponents. Each item asked the participant to rate their level of agreement or disagreement on a 1–7 scale. An example

item was “What our country needs most is discipline, with everyone following our leaders in unity.” We averaged all six items to create an aggregate score (RWA), with more positive scores indicating higher RWA ($\alpha = 0.84$). This was rescaled to range from 0 to 1 and then centered on its midpoint, so that it ranged from -0.5 to 0.5 . Additionally, we conducted the same analysis in our supplemental materials using the three subscales (conservatism $\alpha = 0.60$, traditionalism $\alpha = 0.86$, authoritarianism $\alpha = 0.61$).

The RWA focuses on right-wing ideology, so to better distinguish facets of left-wing ideology, we included the Progressive Values Scale [PVS] (Proulx et al., 2023). This scale measures values characterizing a progressivism construct part of left-wing ideology. This orientation is described as a type of liberalism that places a central focus on identity (Proulx et al., 2023). Participants rated their level of agreement on 14 items using a 1–7 scale, which included items such as “Making some people feel ashamed about their views is a small price to pay when fighting against historical injustice.” We averaged the score of each item to create an aggregate score (PVS, $\alpha = 0.83$), then reversed the direction

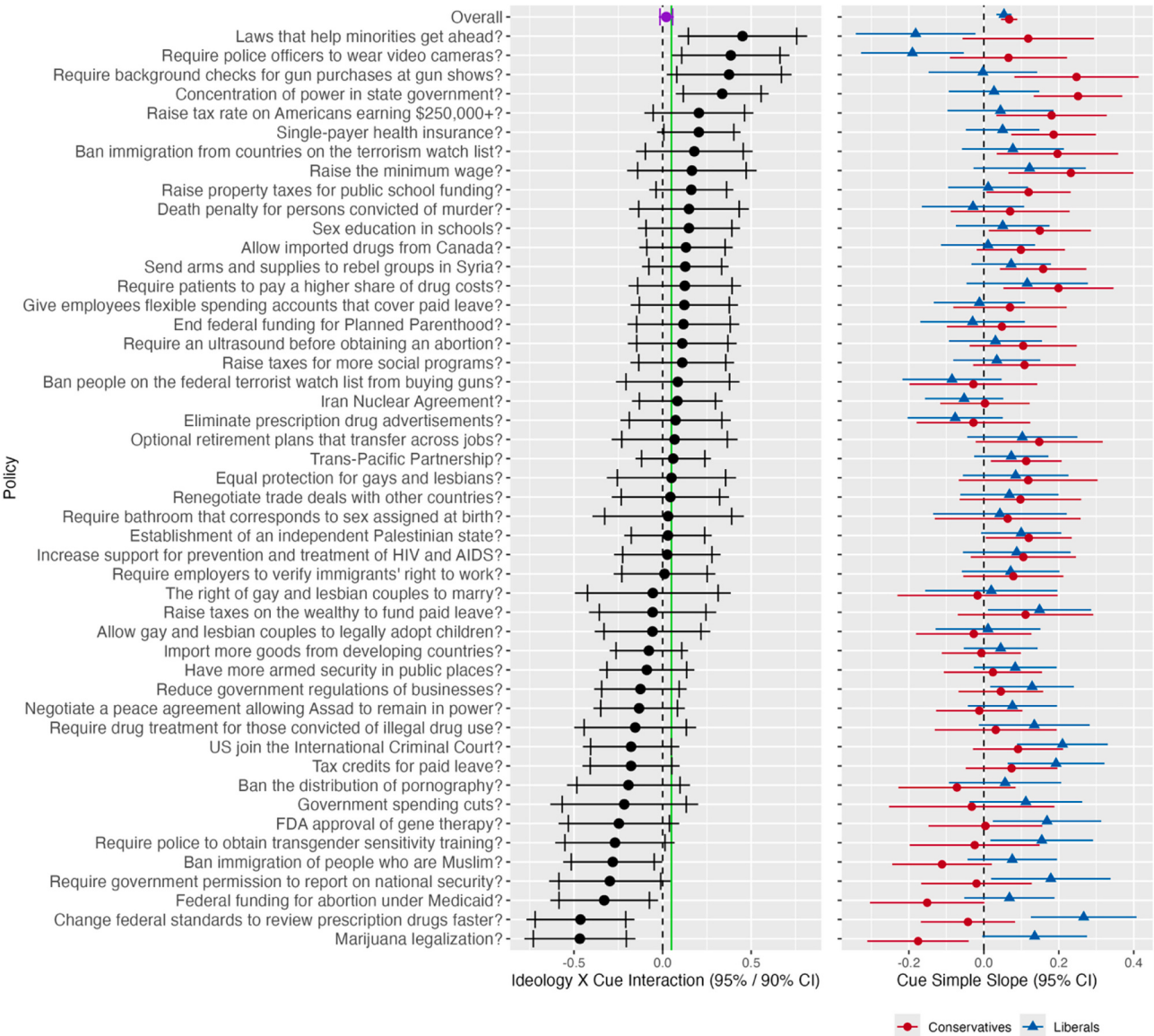


Fig. 3. Study 2 ideology $\times$ cue analysis.
Note: Interaction between participants' ideology and the experimental party cue for each issue, including an overall estimate across all issues (purple estimate). The green line represents our preregistered smallest effect size of interest. The error bars represent 90% confidence intervals (until the cross) and 95% confidence intervals (until the end of the bar).

of this score so that progressive values were lower, ensuring that the direction of the predicted effects was the same across all measures of ideology. We rescored this measure to range from 0 to 1, and then centered it on its midpoint, so that it ranged from -0.5 to 0.5 .

For all four proxies of ideology, we created an additional variable to assess the strength of that ideology in each participant. We did this by taking the absolute value of the final recoded variable to capture the extent of each participants' distance from the scale's midpoint. We mean centered this strength measure for our analyses.

8.1.4.2. Cognitive style. We included three measures of psychological traits related to cognitive rigidity that are thought to make conservatives more "cue susceptible." We used an adaptation of the Cognitive Reflection Test (CRT) that includes three items and a four-option multiple choice format (Sirota & Juanchich, 2018). For example, one question asked, "If it takes 5 machines 5 minutes to make 5 widgets, how long would it take 100 machines to make 100 widgets?". The idea was that participants would need to use reflective thinking to deliberately

reject the incorrect but intuitive answer (100 min) to reach the correct answer (5 min). In other words, choosing the correct answer indicated reflective thinking (reflectiveness) while choosing the answer that was both incorrect and intuitive was indicative of less-deliberate reasoning (intuitiveness). This form of the CRT provided separate (but highly correlated) scores of *reflectiveness* and *intuitiveness*. The reflectiveness score was measured by summing correct answers, while the intuitiveness score was measured by summing the number of answers that were incorrect and intuitive. We reverse scored reflectiveness so that positive scores corresponded to less reflectiveness and higher intuitiveness, indicators of higher cognitive rigidity. Both were rescaled to range from 0 to 1, then centered on their mean. After the CRT items, we asked participants if they had completed similar items before to gauge familiarity (46% answering "yes", 43% "no", and 11% "I'm not sure").

We measured the need for closure using a shortened adaptation of Webster and Kruglanski's NFC scale (Roets & Van Hiel, 2011). This measure included 15 items, ranging from 1 (strongly disagree) to 6 (strongly agree), which were averaged to find the aggregate score (NFC,

$\alpha = 0.88$). This score was rescaled to range from 0 to 1, then centered on its mean.

We used the most frequently used measure of dogmatism, Altemeyer's DOG scale (Altemeyer, 2002). This scale included 20 items with self-report agreement measures ranging from 1 to 7, such as "Anyone who is honestly and truly seeking the truth will end up believing what I believe." We averaged the score of all items to get an aggregate score ($\alpha = 0.91$). We rescaled this measure to range from 0 to 1, then centered it on its mean.

8.2. Results

8.2.1. Analytic strategy

We first tested for the presence of a "cue susceptible" profile in conservatives by testing for correlations between measures of ideology and cognitive style. Based on the asymmetry perspective, we expected more conservative ideologies to be associated with less cognitive reflection, more intuitiveness, more need for closure, and more dogmatism. As preregistered, correlations less than $|0.10|$ would be considered small, while 90% CIs less than $|0.05|$ would be considered consistent with a null effect.

For the party cue analyses, we used a similar strategy as our earlier studies, but with four proxies of ideology and four measures of cognitive style (from three scales). We tested our hypotheses using OLS regression and multilevel models estimated in R's (R Core Team, 2025) lme4 (Bates et al., 2015) and lmerTest (Kuznetsova et al., 2017) packages. For each policy, we regressed policy support on cue (0 = control, 1 = cue), ideology (midpoint centered), ideological strength (mean centered), the cue by ideology interaction, and the cue by ideological strength interaction. We did this for all measures of ideology (partisanship, ideological identification, RWA, PVS) in separate models. For all measures of cognitive style, we regressed policy support on cue, cognitive style (mean centered), and the cue by cognitive style interaction. For CRT, we also regressed policy support on familiarity (1 = yes, 0 = no/I'm not sure). The asymmetry hypothesis was supported for any variable (ideology, cognitive style) if there was a significant and positive "cue by ideology" or "cue by cognitive style" interaction, indicated by our 95% CI. We did this for all measures of cognitive style (reflectiveness, intuitiveness, need for closure, dogmatism) in separate models.

Support for the symmetry hypothesis was a non-significant "cue by ideology" interaction. We suggested that an interaction effect of 0.05 was the smallest effect size of interest. So, if our 90% CI did not overlap with ± 0.05 we would count this as evidence consistent with the symmetry hypothesis. Given the smaller sample sizes (and reduced precision) of the individual issue analyses, we did not suspect many (if any) effects and their 90% CI would fall in this window. The symmetry hypothesis does not claim that cognitive styles are not significantly related to cue susceptibility, so this perspective made no predictions about the cognitive style variables.

To estimate an overall effect across all issues, we estimated a similar model, but with a cross-classified multilevel model. We nested policy responses within participants and issue. For ideology, we regressed policy support on cue (0 = control, 1 = cue), ideology (midpoint centered), ideological strength (mean centered), the cue by ideology interaction, and the cue by ideological strength interaction. For cognitive style, we regressed policy support on cue, cognitive style (mean centered), and the cue by cognitive style interaction (for CRT we added our familiarity variable). We included a random effect for policy and for participant. The cue slope was included as a random slope for both issue and participant. The preregistered evidentiary standards were the same as the policy-specific models.

For all of our interaction analyses, we estimated simple slopes of cue at high and low levels of ideology and cognitive style. We picked meaningful points on the relevant scales. Partisanship was probed at -0.357 and 0.357 , representing "Democrat" and "Republican". Ideology was probed at -0.333 and 0.333 , representing "Liberal" and

"Conservative". RWA, PVS, and dogmatism were all probed at -0.333 and 0.333 , representing "2" (Disagree) and "6" (Agree) on a 7-point scale. Reflectiveness was probed at -0.528 and 0.472 , representing three correct answers and zero correct answers. Intuitiveness was probed at -0.458 and 0.542 , representing zero incorrect intuitive answers and three incorrect intuitive answers. NFC was probed at -0.3 and 0.3 , representing a "2" (Moderately Disagree) and a "5" (Moderately Agree) on a 6-point scale.

8.3. Cue susceptible profile

We found significant associations between conservative ideology and cognitive styles that were less reflective, more intuitive, higher in need for closure, and more dogmatic. As visualized in Fig. 4, participants who were Republican on party identification, conservative on ideological identification, and high in RWA performed worse on the CRT and showed higher need for closure and dogmatism. That is, we found the makings of a "cue susceptible" profile in conservatives, and thus would expect conservatives to show greater treatment effects in our cue analysis.

8.4. Ideology $\times$ cue analysis

For our main analysis, we used our overall estimates across all issues. Results for individual policy interactions can be found in the supplemental materials.

In contrast to the first two studies, in Study 3 we found robust evidence for the asymmetry hypothesis (see Fig. 5). The party cue effect was stronger for conservatives than for liberals. We found significant and positive interactions for party cue effects on party identification, ideological identification, and RWA. On PVS, we found no significant support for ideological asymmetry. The 90% CI was smaller than our smallest effect size of interest (0.05), which was the only evidence for the symmetry hypothesis in Study 3.

8.5. Cognitive style $\times$ cue analysis

On our measures of cognitive style, we found some support for the idea that more rigid and intuitive cognitive styles are susceptible to party cues. This is an assumption of the asymmetry hypothesis. For need for closure and dogmatism, we found significant cognitive differences in party cue effects. Participants higher in need for closure and dogmatism demonstrated greater receptivity to party cues. On our tests of cognitive reflection, we found ambiguous results, supporting neither similarities or differences (i.e. they were not significantly different from zero and their 90% CIs overlapped with our smallest effect size of interest).

8.6. Considering discrepancies between studies 1 & 2 and study 3

In Study 3, we found robust evidence for ideological asymmetry in party cue effects: conservative participants were significantly more susceptible to party cues than liberals. This was inconsistent with the null interactions we found in Studies 1 and 2, where conservatives and liberals showed effectively equal responses to party cues. We considered possibilities for the discrepancies. First, these differences may have occurred because of random chance, with either Study 3 or our earlier studies being a fluke. However, since every study used large samples and had precise estimates, we did not think that this was likely. Second, Study 3 may have led to a different conclusion because it used a different set of policy issues than Studies 1 and 2. We addressed this discrepancy empirically, as there were nine policy issues that were identical between Studies 1 and 3. We conducted a separate analysis including only the issues that overlapped between Studies 1 and 3 and found that the ideological asymmetry shown in Study 3 persisted among these individual issues and the overall conclusions remained (see supplemental materials). This suggested that the difference in policy-issues was not

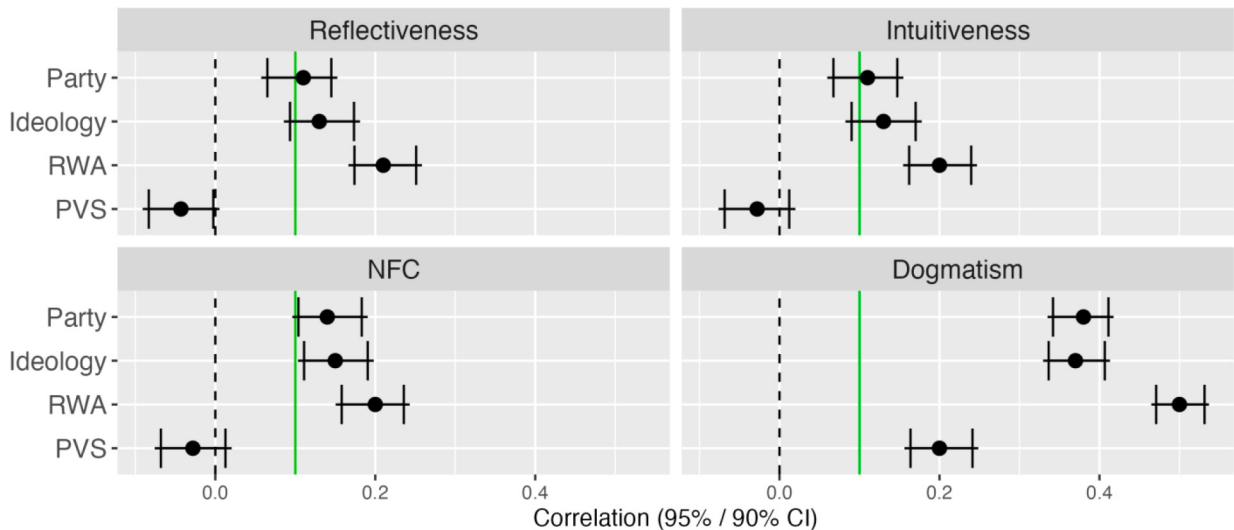


Fig. 4. Study 3 ideology-cognitive style correlations.
Note: Correlation between measures of ideology and cognitive styles. All ideology measures are scored so that higher scores are more conservative ideological beliefs. All cognitive style measures are scored so that higher scores are more rigid/intuitive cognitive styles. The green line represents our preregistered benchmark for a small effect size (0.10). The error bars represent 90% confidence intervals (until the cross) and 95% confidence intervals (until the end of the bar). RWA = right wing authoritarianism. PVS = progressive values scale. NFC = need for closure.

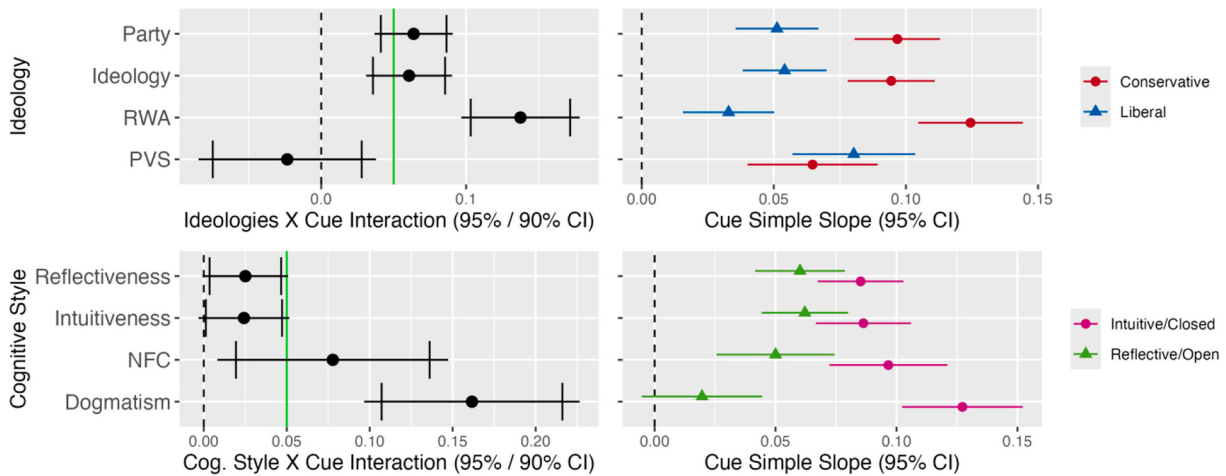


Fig. 5. Study 3 ideology and cognitive style $\times$ cue interactions and simple slopes.
Note: Estimates across all issues for each measure of ideology and the experimental cues (top) and each measure of cognitive style and the experimental cues (bottom). All ideology measures are scored so that higher scores are more conservative ideological beliefs. All cognitive style measures are scored so that higher scores are more rigid/intuitive cognitive styles. The green line represents our preregistered smallest effect size of interest (0.05). The error bars represent 90% confidence intervals (until the cross) and 95% confidence intervals (until the end of the bar). RWA = right-wing authoritarianism. PVS = progressive values scale. NFC = need for closure.

responsible for the discrepancy since the discrepancy persisted when the issues were the same.

9. Study 4

There are two additional possibilities for the discrepancy between Studies 1 and 2 and Study 3 that we address in Study 4. The first possibility we address is that Study 3 used a different sample type than our earlier studies. While Studies 1 and 2 sampled participants with an aim for demographic representativeness, Study 3 used convenience sampling aimed only at gathering equal proportions of Republicans and Democrats. Moreover, Prolific samples, like those used in Study 3, are known to provide responses that are higher quality (e.g., on attention, effort), but with a sample that is less representative of the general population compared to the sample sources in Studies 1 and 2 (Stagnaro et al.,

2026). Additionally, a recent investigation comparing samples found that well known political framing effects replicate in samples like those used in Studies 1 and 2, but not in Prolific samples (Stagnaro et al., 2026). This suggests that Prolific samples may be unique in how they respond to political information. It is also consistent with other findings that Prolific and similar samples have much larger correlations between ideology and measures of rigidity than do more representative samples (Costello, Bowes, et al., 2023). To investigate the possibility that different sample-types caused our discrepancy, we conducted Study 4 on Forthright Access using their quota sampling of Americans. This uses quotas based on ACS 5-year estimates to compose a more representative sample based on age, gender, race/ethnicity, and region. It is also one of the samples recommended by Stagnaro et al. (2026) in their comparison of sampling sources.

The second possibility we address for the discrepancy is that over

time, the conservative population has become more cue susceptible. This speculation could hold merit, as Study 1 was conducted in 2020 and Study 2 in 2018 (Clifford et al., 2024; Tappin, 2022), while Study 3 was conducted in 2024. If the political dynamics in the United States changed between 2020 and 2024 (e.g., due to COVID and its aftermath), this might affect which ideology is more susceptible to party cues. It's possible that influences over time, such as changes in coalitions or signals of followership, could result in groups demonstrating different party cue susceptibility. Although not a complete test of this idea, if Study 4 finds the same conclusions as Study 3, it will lend support to the possibility that ideological asymmetries have emerged over time.

9.1. Methods

Study 4 was a replication of Study 3 (same measures, experimental cue design, policy issues, analytical procedure, etc.). The only differences were that Study 4 was conducted with a quota-based representative sample of participants using Forthright Access and included additional attention checks due to the less attentive nature of Forthright Access samples (Stagnaro et al., 2026). Forthright Access used quota sampling to recruit a sample of participants that aimed to be representative of national US demographics on age, gender, race/ethnicity, and region.

Additionally, we included three new attention checks (presented in a random order) after our consent form and before our measures of demographics, ideology, and cognitive style. Participants who failed any of these attention checks were excluded from the rest of the survey. We used this process because surveys on Forthright have been shown to be more representative, but also less attentive than other similar samples (Stagnaro et al., 2026).⁸ We recruited 1389 participants ($M_{\text{age}} = 47.4$, 692 female, 680 male, and 17 other) with 10,196 observations.⁹ All other measures, issues, and experimental procedures were the same. All of the scales were reliable (RWA $\alpha = 0.71$, PVS $\alpha = 0.77$, NFC $\alpha = 0.84$, Dogmatism $\alpha = 0.90$). For study 4, Reflectiveness was probed at -0.751 and 0.249 , representing three correct answers and zero correct answers. Intuitiveness was probed at -0.630 and 0.370 , representing zero incorrect intuitive answers and three incorrect intuitive answers. The other scales were probed at the same scale points as Study 3.

9.2. Results

The analytic strategy was the same as Study 3.

9.2.1. Cue susceptible profile

Again, we found the presence of a “cue susceptible” profile in conservatives (see Fig. 6). Participants who were conservative on party affiliation, ideological identification, and right-wing authoritarianism, were all significantly more likely to be less deliberate thinkers, higher in need for closure, and more dogmatic than liberals. The effect sizes were largely similar to Study 3. This was in-line with the asymmetry perspective, which posits that conservatives are more “cognitively rigid” than liberals. Thus, we could expect them to be more susceptible to cueing.

⁸ It is possible that filtering on attention could negatively affect representativeness; however, this does not appear to be the case (Stagnaro et al., 2026). We collected demographic information after participants were filtered by attention; however, we do have access to a subset of demographic information on file for Forthright participants that is used in the quota sampling. Using this data, we found that participants who were filtered out were not significantly different from those who remained in the study on age ($t(679.89) = 0.121$, $p = .904$), region ($\chi^2(3) = 1.21$, $p = .750$), gender ($\chi^2(2) = 4.56$, $p = .102$), or ethnicity ($\chi^2(4) = 6.24$, $p = .182$).

⁹ This sample sizes gives us 80% to detect very small effects, $f^2 = 0.006$, $r = 0.08$

9.3. Ideology $\times$ cue analysis

Unlike Study 3, in Study 4, we found liberals and conservatives had similar responses to party cues, with one exception. As seen in Fig. 7, when we estimated party cue effects by party affiliation or ideology identification, we found convincing nulls. This was consistent with Studies 1 and 2, which indicated that people on both sides of our ideology scales responded to party cues similarly. For PVS, we found an ambiguous conclusion, as there was no significant difference nor similarity in party cue effects. The confidence intervals were relatively large, preventing clear conclusions either way. Consistent with Study 3, we found support for the asymmetry perspective when using RWA. People higher in RWA demonstrated greater susceptibility to party cues than those low on RWA. For RWA, we found a significant association with susceptibility to cueing.

9.4. Cognitive style $\times$ cue analysis

For Study 4, we found no significant evidence that any cognitive style predicted greater “cue susceptibility.” We found a convincing null effect for the cognitive reflection test; there was no relationship between cognitive reflection and receptivity to party cues. For need for closure and dogmatism, we found no significant evidence for either differences or similarities in party cue effects (the confidence intervals are wide). Despite conservatives demonstrating a psychological profile that was higher in “cognitive rigidity” (see correlations above), we found no support for this profile being more “cue susceptible” and some evidence that it was not. This spoke against the asymmetry theoretical model.

10. Exploratory analyses

Following our primary experiments and analyses, we conducted additional exploratory analyses to better contextualize our findings.

First, we conducted analyses to try and further understand the variation between Study 3 and the other studies, as well as ensure that there were not un-detected ideological asymmetries in Studies 1, 2, and 4. We first used random forest models (Breiman, 2001; Montgomery & Olivella, 2018) along with the measures shared between Studies 3 and 4 to predict which respondents belong to each sample. This was done to try and understand how the samples might differ from each other. The full results are summarized in the supplemental materials. Both age and education showed differences between the samples, with the Prolific sample being both younger and more educated than the Forthright sample. We theorized these factors may explain the differing results. To test that possibility, we re-ran the partisanship and ideological identification analyses from Study 4 with age and, in a separate model, education as moderators. Age (p 's = 0.946 & 0.360) and education (p 's = 0.361 & 0.743) were not significant moderators of party cue effects. This suggests that although the samples have observable differences on these factors, the differences do not explain the differences in our findings across studies.

Second, we used causal forest analyses (Fuller et al., 2025; Wager & Athey, 2018) to assess if our models, which assume linear relationships, might have obscured ideological asymmetries that are non-linear (e.g., if only extreme conservatives show increased cue susceptibility) or have failed to identify non-theorized deep interactive effects. The full results are summarized in the supplemental materials. The findings from these additional analyses suggest two things. First, our primary analytic methods did not miss unidentified heterogeneity. This can give us greater confidence in our conclusions. Second, the non-linear treatment effect estimates of our causal forest analyses suggest that the population of conservatives from our Prolific sample (Study 3) appears to show unexpectedly large cue effects compared to liberals in the Prolific sample, as well as liberals and conservatives in our remaining studies. This might suggest that conservatives on Prolific are atypical for conservatives in the United States.

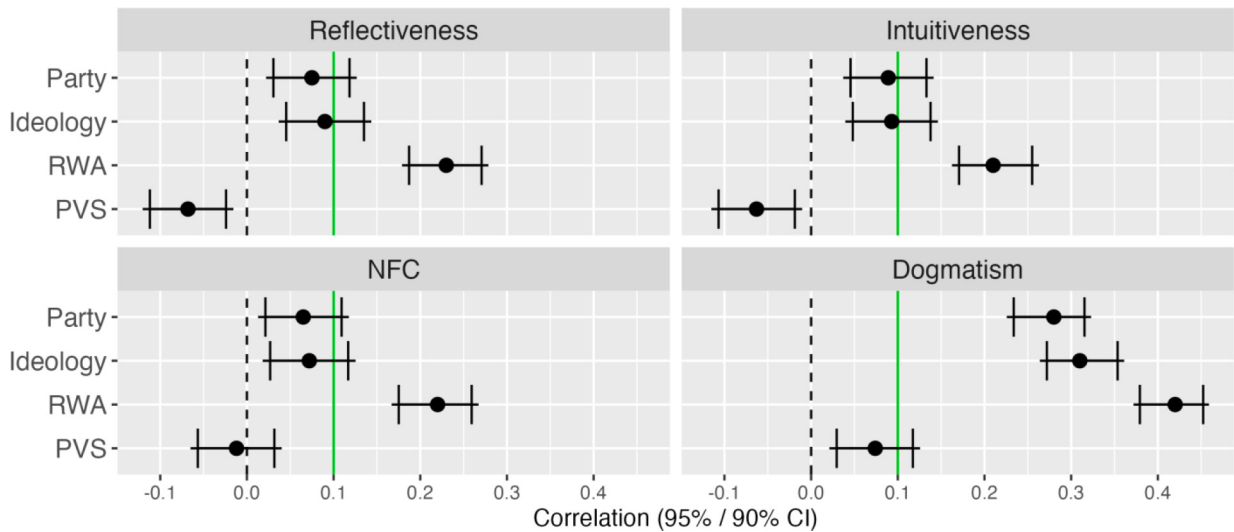


Fig. 6. Study 4 ideology-cognitive style correlations.
Note: Correlation between measures of ideology and cognitive styles. All ideology measures are scored so that higher scores are more conservative ideological beliefs. All cognitive style measures are scored so that higher scores are more rigid/intuitive cognitive styles. The green line represents our preregistered benchmark for a small effect size (0.10). The error bars represent 90% confidence intervals (until the cross) and 95% confidence intervals (until the end of the bar). RWA = right wing authoritarianism. PVS = progressive values scale. NFC = need for closure.

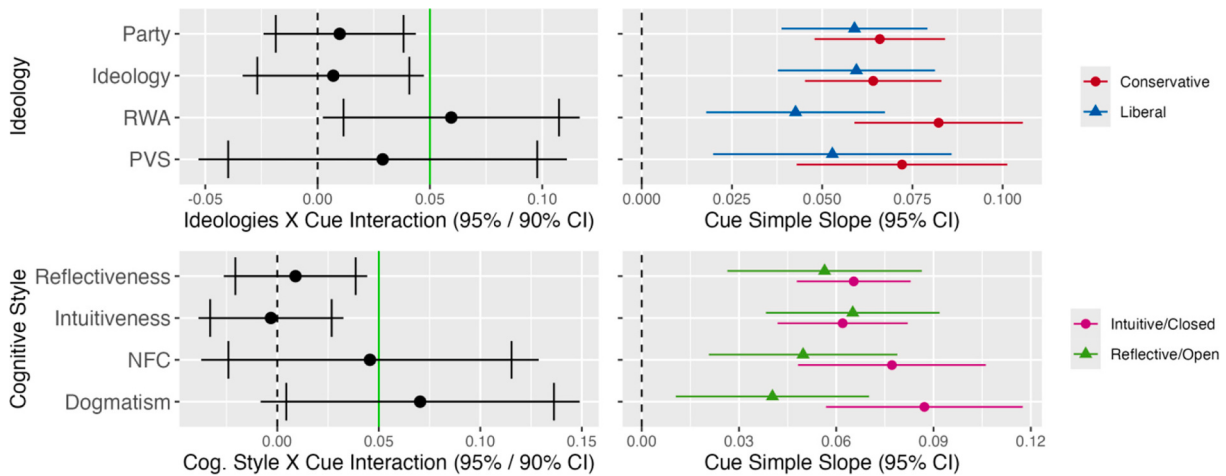


Fig. 7. Study 4 ideology and cognitive style $\times$ cue interactions and simple slopes.
Note: Estimates across all issues for each measure of ideology and the experimental cues (top) and each measure of cognitive style and the experimental cues (bottom). All ideology measures are scored so that higher scores are more conservative ideological beliefs. All cognitive style measures are scored so that higher scores are more rigid/intuitive cognitive styles. The green line represents our preregistered smallest effect size of interest (0.05). The error bars represent 90% confidence intervals (until the cross) and 95% confidence intervals (until the end of the bar). RWA = right-wing authoritarianism. PVS = progressive values scale. NFC = need for closure.

Third, because the issues came from different policy domains (e.g., economic issues, national security), we preregistered that we would explore if our findings differed across domains. To test this, we re-ran the multilevel models described above including domain as a moderator. We did not find evidence that the effects differed across domains, with only one of 11 tests $p < .05$ (p 's range [0.033, 0.828], see supplemental tables for full statistics).

Fourth, we explored the variation in ideological symmetries and asymmetries that we observed across individual policy issues. Across all four studies, we find variation in party cue effects when looking at policy issues individually (see figures in supplemental materials). For example, in each experiment we find some policies where liberals respond significantly more to cues than conservatives, and on others the opposite. This variation highlights the importance of using a representative sample of issues for estimating ideological symmetries and asymmetries.

The variation can also offer insight into the emergence of symmetries and asymmetries in party cue effects. We speculate that significant asymmetry in cue effects might arise on policy issues where liberals and conservatives hold the issue with *differing* amounts of strength prior to cueing. For example, if liberals strongly support an issue prior to cueing and conservatives do not, liberals will likely show smaller cueing effects than conservatives. This could be because liberals either feel more committed to the issue (e.g., an attitude strength effect) or have little room to move if cued (e.g., a ceiling effect). If liberals and conservatives have similarly strong or weak attitudes, then there should be symmetry in cue effects.

To examine this empirically in all four studies, we estimated ideological asymmetries in strength using means estimated separately for liberals and conservatives of the responses from the control condition for each issue. These issue-level measures of strength difference were then

included as part of the ideology multilevel models described above. Across most of the analyses, there were significant three-way interactions (p 's range $[<0.001, 0.227]$, see supplemental tables for full statistics). The only study without any significant interactions was Clifford et al., perhaps because there was only one policy cued for each participant and so power was reduced for this analysis. The only other non-significant three-way interaction was for PVS in Study 4 ($b = 0.065$, $SE = 0.038$, $p = .088$). We plot the results in figures in the supplemental materials. These figures show that there are meaningful ideological asymmetries in party cue effects when there are ideological asymmetries in attitude strength prior to cueing. When liberals have stronger attitudes compared to conservatives, the party cue effect is smaller among liberals than conservatives. Conversely, when conservatives have stronger attitudes compared to liberals, the party cue effect is smaller among conservatives than liberals.

A related possibility is that liberals and conservatives differ in the ideological content they're exposed to (Broockman & Kalla, 2025). This may lead to differential awareness of specific policies. As such, we examine if ideological asymmetry in awareness moderates variation in cue effects by testing policy issues where conservatives and liberals differ most on their awareness. We do this analysis in Study 2, which used a separate sample to estimate the general public's awareness of where parties stand on policy issues. We created new awareness variables that isolate the mean awareness of conservative and liberal participants. We did this separately for partisanship and ideological identification. The two partisan groups ($r(46) = -0.43$, $p = .002$) and ideological groups ($r(46) = -0.09$, $p = .566$) do not share a sense of awareness as the estimates across policies were significant and non-significantly negatively correlated. We re-estimated our primary models above, but this time included ideological asymmetries in awareness as a moderator. The three-way interaction between participant ideology, cue, and ideological asymmetry in awareness was significant ($b = 0.582$, $SE = 0.161$, $p = .0003$), however the same interaction for partisanship was not ($b = 0.116$, $SE = 0.085$, $p = .171$).¹⁰ Figures are included in the supplemental materials. We find that on issues where liberals are more aware, they tend to move their position significantly less than conservatives when cued. On issues where conservatives are more aware, the difference in cue effects reverses. Although the interaction for partisanship was not significant, the qualitative pattern of cue effects is the same. The issue strength and awareness results suggest that ideological asymmetries that emerge in party cues are likely caused by pre-existing differences in attitude strength and issue awareness, rather than differences in psychological processes. However, these analyses are exploratory and should be replicated in stronger designs in future scholarship.

11. General discussion

Prior research has identified psychological differences between liberals and conservatives (Adorno et al., 1950; Altemeyer, 1981; Costello, Bowes, et al., 2023; Jost, 2017; Jost et al., 2003; Kteily & Brandt, 2025), yet it remains unclear if these differences manifest in psychological processes. We address one area of this debate by examining how liberals and conservatives respond to party cues, a central concept in the political reasoning literature. One prominent line of thought suggests that

conservative citizens should respond more to cues as they report higher measures of cognitive rigidity like need for closure and dogmatism (Altemeyer, 2002; Baron & Jost, 2019; Federico & Malka, 2018; Jost et al., 2003). While recent research has disputed the claim that conservatives are more prone to partisan bias (Ditto, Liu, et al., 2019; Eichmeier & Stenhouse, 2019; Guay & Johnston, 2022; Ryan & Aziz, 2021), work examining party cues has shortcomings. Particularly, no studies examining asymmetries across ideology use a large and representative sample of policy issues. The utility of using representative samples of issues has been recently demonstrated in party cue experiments (Clifford et al., 2024; Tappin, 2022), with scholars finding that cue effects do in fact vary across issues. Additionally, prior work on party cues does not assess for cognitive rigidity in participants, which the asymmetry perspective argues is an antecedent to cue susceptibility. We first test the claim that conservatives are disproportionately higher in these features of a cue susceptible profile, and then if these features in fact predict greater susceptibility to party cues. We therefore contribute meaningfully to this debate by addressing these shortcomings.

Our four studies analyze party cues across many issues, with careful consideration put towards including topics that are representative of contemporary politics. We focus our discussion and conclusions primarily on Studies 1, 2, and 4. We put less emphasis on Study 3 because we conclude from the full pattern of data, including our exploratory analyses, that the conservatives in the Study 3 sample may be idiosyncratic and not representative of conservatives in general. In our three studies that had more representative samples of participants (e.g. sampling by US census demographics vs convenience), both Democrats and Republicans responded equally to party cues. Regardless of partisanship, participants similarly moved in the direction of their inparty and against their outparty. Moreover, for ideological identification (i.e. between liberals and conservatives), asymmetries in party cue effects are null (Study 4) or very near zero (Study 2). Such effects emerged across multiple measures of ideology and using cues from specific party leaders (Obama/Trump), cues from non-specific party leaders (Democratic leaders/Republican leaders), and consensus cues (Democrats/Republicans). Although there are some exceptions, we argue that the results are primarily in favor of the symmetry hypothesis, that party cue effects are similar across liberals and conservative ideologies. This suggests that when it comes to party cues, liberals and conservatives have similar processes for interpreting and integrating partisan information. Our results are consistent with recent work in the literature, which has found ideological symmetries across other tests of political information-processing (Eichmeier & Stenhouse, 2019; Fuller et al., 2025; Guay & Johnston, 2022).

12. What might account for cue effects?

This conclusion raises the question as to what might account for cue effects. One key argument underlying the asymmetry hypothesis is that conservative ideology is more attractive to people who are cognitively rigid and therefore more prone to partisan bias, suggesting a psychological profile in conservatives that is more cue susceptible. We test this in Studies 3 and 4 by deploying three classic tests of cognitive rigidity: cognitive reflection, need for closure, and dogmatism (Costello, Bowes, et al., 2023; Jost, 2017). We rely primarily on our results from Study 4 for our conclusion, as it is consistent with Studies 1 and 2 that also include more representative samples of participants. We find that right-wing participants are significantly more dogmatic, higher in need for closure, and less reflective. This is consistent with prior work on the psychological profiles of liberals and conservatives (e.g., Jost, 2017). However, in Study 4 we find no link between any cognitive style and susceptibility to party cues. This suggests that although conservatives have a psychological profile that should be cue susceptible, this profile is not in fact more cue susceptible. This is consistent with other recent work finding that measures of cognitive style have negligible associations with political information-processing (Eichmeier & Stenhouse,

¹⁰ We found that ideological differences ($r = 0.58$, $p < .001$) and party differences ($r = 0.28$, $p = .055$) in awareness and strength were correlated across issues in Study 2. Therefore, we re-estimated these models including differences in awareness and strength simultaneously. The conclusions above did not change. The three-way interaction between participant ideology, cue, and ideological asymmetry in awareness was still significant and the same interaction for partisanship was not. The interactions for ideological asymmetries in strength continued to be non-significant. See tables in supplemental materials for more information.

2019; Guay & Johnston, 2022).

Our exploratory analyses point to one possible explanation for cue effects. An additional advantage to using many different issues in our studies is that we can examine variation in ideological asymmetries across issues. In all our studies, we did find that there were some issues where liberals responded more strongly to cues than conservatives and others where conservatives responded more strongly to cues than liberals. This shows that scholars advocating for representative designs for testing ideological asymmetries were right in their concerns (Baron & Jost, 2019); the results can vary depending on the issues. We used this variation to explore why this might be the case. Across our studies, we found evidence that pre-existing ideological asymmetries in awareness (Study 2) and attitude strength (all studies) predicted how people respond to cues. People respond to cues less when they are already aware of the issue or have strong attitudes about the issue. If there are ideological asymmetries in these factors, asymmetry in cues will emerge. That means that pre-existing ideological differences in attitude strength or awareness, rather than fundamental differences in psychological processes explain the ideological asymmetries we do find. These exploratory findings might also help to explain results in prior studies that find ideological asymmetry when sampling one issue. They underscore the necessity for better stimulus sampling when testing ideological asymmetries (see also Brandt & Crawford, 2019).

Previous theory on party cues has suggested two different mechanisms for cueing processes. The first is the heuristic process, where people use party cues to efficiently reach a policy position. The second is the group-based motivation account, where participants are motivated to be good group members and protect their social identity, and thus follow party cues to form a position in support of their group. The interactions with cognitive style provide an indirect test of the heuristic account. If party cues are used for their efficiency, then people who are less likely to think things through and to think intuitively may be more susceptible to cues. This would predict positive interactions between the cognitive reflection task and cues in Studies 3 and 4. In both studies, we do not find evidence for this interaction effect. The interactions with the different measures of ideology and partisan strength that were included as controls in all of our models is relevant for the group-based account. If party cues are used as a way of being a good group member, people who more strongly identify with the group should show stronger cue effects. We did find some evidence for this (see tables in supplemental materials on the OSF). In particular, participants with more extreme (regardless of direction) partisanship (Study 1, Study 3, Study 4), ideological identification (Study 2, Study 3, Study 4), and right-wing authoritarianism (Study 3) all showed stronger party cue effects (the exceptions are partisanship in Study 2 and progressive values scale in Study 3 and Study 4). Additional work could try to experimentally induce heuristic or group-based processing and test if those ways of processing information work similarly for liberals and conservatives.

13. The curious case of RWA

One measure of ideology where we are more confident in ideological asymmetry in cues is the measure of RWA. This emerges both in Study 3 using a community sample and in the higher quality Study 4. One straightforward interpretation of this finding is that people who score higher on RWA are more likely to obey (including following the cues) of right-wing politicians and groups (i.e. people scoring high on a measure about obeying authority, obey authority). If this is the case, then one might predict that RWA subscales directly related to authoritarian submission (called “conservatism” in the RWA scale we used) would produce strong cue effects. This was not obviously the case (see figures in supplemental materials). In Study 3, the point estimate for conservatism was higher than the other subscales, but the confidence intervals were all overlapping with each other. In Study 4, conservatism did not have the largest point estimate of the subscales, and it was not significantly different from zero (none of the subscales, on their own, showed

significant difference).

Another interpretation may link our finding with other work that suggests that ideological asymmetries, especially in cognitive style may be particularly likely for social and cultural conservatism (vs. economic conservatism, e.g., (Malka & Soto, 2015)). The idea is that social conservatism, in particular, helps people manage feelings of uncertainty and ambiguity and so it “naturally attracts” (Malka & Soto, 2015, p. 137) people with socially conservative attitudes. Indeed, a large meta-analysis found that the association between rigidity and ideology was the strongest for measures assessing social conservatism, with right-wing authoritarianism being one of the strongest correlates of rigidity (Costello, Bowes, et al., 2023). Based on this reasoning, cognitive style should be a more proximal moderator of party cue effects than ideology. However, we did not find clear evidence that cognitive styles were moderators of party cue effects (e.g., Fig. 7). This presents a challenge for suggestions that such processing differences are a natural part of right-wing authoritarianism.

A third possibility that we are not able to further test with our data comes from work on partisan affect. Fuller et al. (2025) found that strong partisan affect (e.g., disliking of political outgroups) was a key predictor of party cue effects. Other work has suggested that people with authoritarian tendencies are more likely to experience strong partisan affect (Luttig, 2017; Renström et al., 2022). If high levels of RWA are particularly linked with strong partisan affect, this may explain the moderating effect. It would also suggest that if there are liberal and left-wing ideologies (e.g., left-wing authoritarianism) that are similarly linked with strong partisan affect, there may be asymmetries in the left-wing direction. Although we included the progressive values scale to tap into such ideologies and we did not find asymmetries in cue effects with this measure, it is possible that this measure did not sufficiently tap into strong partisan affect. Additional studies are necessary to fully test this idea.

14. Strengths, limitations, and future research

One key limitation of our studies and the party cue literature more generally is that although our studies show how party cues can affect attitudes, we do not have information about the effects of cues on attitude-relevant behaviors. Although the psychological mechanism is not specified, it is logically possible that liberals and conservatives have similar attitudinal responses to cues, but that conservatives are more likely to follow through with cue relevant behavior. For example, if there are cues to protest, contact political representatives, or vote it may be the case that there are ideological asymmetries in following through on these cued behaviors. Future research should directly test this possibility.

Our work contributes to a body of work that aims to understand who is more or less likely to follow party cues (e.g., Bullock, 2020). However, rather than concluding that there are people with clear differences in their responses, our work suggests that some plausible predictors, including multiple measures of ideology and cognitive style are unlikely to play a role. Instead, it seems that features of the policy under study, including how aware people are of the policy or the strength of their attitudes around that policy, is key. These factors were only an exploratory part of our project and so we cannot speak with confidence to their role. However, the type of designs we used here can be extended to better study these questions (e.g., including pre-treatment measures of strength, individual level measures of awareness). Additionally, our work purposefully did not mislead participants; the party cues shown accurately described party positions. This is not a limitation by itself and made our work more ecologically valid. However, it means that the cues participants saw may be consistent with their prior policy preferences. Cues that are inconsistent with participants' prior preferences may operate differently. It is possible that future studies using less ecological methods, or ones that purposefully mislead participants, may find different cueing effects.

We used multiple measures of ideology in our studies, including those tapping into ideological identifications, right wing authoritarianism, and progressive values. Our goal with these choices was to include common measures (e.g., ideological identification, right wing authoritarianism), including measures that may better identify people with more extreme points of view (e.g., progressive values scale, right wing authoritarianism). However, this is not a comprehensive set of ideology measures. For example, some scholars might prefer measures of economic ideology, left-wing authoritarianism, system justification, social dominance orientation, moral foundations, or other measures related to peoples moral and ideological worldviews (cf. Costello, Zmigrod, et al., 2023). We cannot rule out that when studied across a representative sample of ideology measures, as well as stimuli, some ideological asymmetries will emerge. The key challenge for theorists will be to then accommodate or create theories to address the full context of such hypothetical findings.

At this stage, our work finds (much) more evidence for ideological symmetry than asymmetry with respect to receptivity to party cues in samples from the USA. This is a descriptive claim and does not speak to the prescriptive question as to whether it is good or bad for people to follow the policy opinions of their political leaders. Party cues can serve as shortcuts that help people cut through complicated policies; people know what policies to support without the hard, if not impossible, work of knowing the details of all policies. Such a shortcut can be useful if party leaders are trustworthy and adopt policy positions that are consistent with both people's personal values and democratic values. However, enterprising politicians can and do also take advantage of party cues, using their influence to sow discord and attack the foundations of democratic societies. In this way, party cues represent both a psychological phenomenon reflecting people's processing of political information, but also a tool that can be used for a variety of ends. We find that the psychological phenomenon is largely similar between liberals and conservatives. The ends that tool is used for will differ depending on the values and goals of the people wielding the tool.

15. Constraints on generality

Our experiments had strengths, as they all included a large and representative sample of policy issues and all but one had nearly representative samples of US American participants. Our results are generalizable to the American population more broadly and to contemporary American politics. We think it is likely that party cue effects will emerge outside of the US in countries with political systems centered around political parties (e.g., in Europe, Pannico, 2017). We also expect that ideological symmetries will generalize, especially in more representative samples. We are less sure the extent our findings will generalize across measures of ideology. Although we find similar results across three of our measures, we did find consistent asymmetry for RWA. It might be possible that left-wing manifestations of authoritarianism will also show ideological asymmetry (Costello et al., 2022); we do not know. Scholarship that extends our study design across countries and measures of ideology will help quantify the generalizability of our findings.

16. Conclusions

Ditto and colleagues (2019) concluded from their meta-analysis that liberals and conservatives respond similarly to party cues. The work was critiqued, suggesting that with a better sampling of issues, conservatives' enhanced party cue susceptibility would be revealed (Baron & Jost, 2019). We did that sampling. Our conclusions further support and strengthen the conclusions of Ditto and colleagues (2019). The only exception to this is for right-wing authoritarianism (RWA), which may be uniquely able to identify the most biased conservatives. Critically, we also show that cognitive style is not an important predictor of party cue effects, providing evidence against the theoretical mechanism proposed

by the asymmetry perspective. Taken together, these findings speak against the viability of the asymmetry perspective and show that the perspective makes inaccurate predictions about ideological differences in the psychological processes underlying party cue effects.

CRedit authorship contribution statement

Aymin Triki: Writing – original draft, Visualization, Software, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Abigail L. Cassario:** Writing – review & editing, Visualization, Software, Methodology, Formal analysis. **Mark J. Brandt:** Writing – review & editing, Supervision, Project administration, Methodology, Investigation, Conceptualization.

Declaration of competing interest

The authors declare no conflicts of interest.

Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.jesp.2026.104994>.

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