

The Effects of Social Versus Economic Ideology Similarity Information on Explicit and Implicit Political Person Perception

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Supplementary Materials: Code, Data, Materials, Preregistration [see [Index of Supplementary Materials](#)]



Abstract

We tested among Democratic and Republican perceivers the relative effects of social vs. economic ideology similarity information about individual members of the opposing party (i.e., information suggesting that a member of the opposing party has similar social or economic ideological views as the perceiver) on explicit and implicit affective polarization in evaluations of these target individuals and on perceived worldview conflict with these individuals. In Studies 1a and 1b, both types of ideology information reduced explicit affective polarization on some measures. Among both Democratic and Republican perceivers, the two types of similarity information were equally effective at reducing overall worldview conflict. Neither type of ideology information shifted implicit affective polarization (Studies 2a and 2b).

Keywords

political person perception, similarity, ideology, implicit, affective polarization, worldview conflict

Affective polarization (i.e., favoring the political inparty members while disparaging outparty members; [Iyengar et al., 2012](#)) has been steadily increasing in the United States since the early 2000s ([Banda & Cluverius, 2018](#); [Bougher, 2017](#); [Iyengar et al., 2012](#)). This has not only crippled political functioning in the U.S., but has negatively impacted interpersonal relationships (see [Iyengar et al., 2019](#), for a review). Thus, it is imperative to investigate how affective polarization and its underlying causes can be diminished. The present research examined whether partisans can overcome existing prejudices against outparty targets when presented with information suggesting that an outparty member is ideologically similar to them. Moreover, the present research drew from the debate regarding the unidimensional vs. multidimensional nature of political ideology (e.g., [Crawford et al., 2017](#)) and addressed the question of whether economic or social ideology similarity information are differentially effective at reducing affective polarization—measured at both the explicit (Studies 1a and 1b) and implicit (Studies 2a and 2b) levels—and perceived worldview conflict, which is considered the predominant underlying cause of affective polarization (see [Brandt & Crawford, 2020](#), for a review).

Political Similarity and Dissimilarity: Effects on Liking

Decades of research have established that perceivers like similar others and dislike dissimilar others (e.g., [Byrne, 1961](#); see [Byrne, 1997](#), for a review). Research has imported this established finding into the domain of politics, finding that perceivers like politically similar others and dislike politically dissimilar others (e.g., [Brandt et al., 2015](#); [Byrne et al.,](#)



1969; Crawford, 2014; Stern & Crawford, 2021). For instance, similarity of political beliefs governed such outcomes as giving money in a dictator game (Ben-Ner et al., 2009).

Worldview Conflict

Much of political prejudice is due to members of different political parties having dissimilar ideas and beliefs about how the world should operate, leading to *worldview conflict* (see Brandt & Crawford, 2020, for a review). People are motivated to protect and defend their worldviews, so they derogate those who hold opposing worldviews (Brandt & Crawford, 2020).

Given the strong relationship between worldview conflict and prejudice, it is important to understand how individuating information (i.e., information other than social category information; Kunda & Thagard, 1996) suggesting less worldview conflict than expected with an outparty target might ultimately influence perceptions of worldview conflict. The limited research addressing this question found that when individuating information depicted members of a political target groups as moderate, the relationship between perceiver ideology and perceptions of target value violation was eliminated or reversed relative to when the targets were described as having extreme views (Czarnek et al., 2019, Studies 2a and 2b).

The Distinction Between Social and Economic Ideology

Political ideology traditionally has been viewed as a unidimensional construct (e.g., Jost, 2006; Jost et al., 2003) in that one's political beliefs are characterized by a unifying dimension (e.g., conservative). However, recent work argues that it is a multidimensional construct that separates social and economic ideologies (e.g., Carmines & D'Amico, 2015; Crawford et al., 2017; Czarnek et al., 2019; Feldman & Johnston, 2014).

Drawing from this multidimensional perspective, research by Crawford et al. (2017) tested competing hypotheses about whether social and economic dimensions of ideology independently related to prejudice and worldview conflict. The *dimension-specific symmetry hypothesis* argued for the economic versus social dimension-specific nature of worldview conflict (and associated prejudices). For instance, social conservatism should predict prejudice against socially liberal groups, but economic conservatism should not. Alternatively, the *social primacy hypothesis* posited that while political animus is driven by *both* economic and social worldview conflict, the effect of social worldview conflict is stronger. Crawford and colleagues found support for both hypotheses, but the dimension-specific symmetry hypothesis was more strongly supported.

Moreover, the aforementioned research by Czarnek and colleagues (2019) measured perceiver social and economic political ideology, and, among a range of target groups with varying social and economic ideologies, perceptions of value violation by and attitudes toward the groups. They found that perceivers with right-wing political beliefs perceived value violations with and held more negative attitudes toward left-wing targets; the opposite was true for left-wing perceivers. This was the case for both the social and economic dimensions of political ideology, which supported the dimension-specific asymmetry hypothesis. However, the social primacy hypothesis was also supported in that the effects were stronger for the social dimension of ideology than for the economic dimension of ideology.

In addition, using two separate samples, Czarnek and colleagues (2019) tested effects of individuating information about social vs. economic ideology on political prejudice and perceived value violation. Relative to when political outgroup members were described as having extreme views, the relationships between perceiver social ideology and (a) attitudes toward and (b) perceived value violations by social political outgroup members were eliminated or reversed in direction when individuating information described these members as having moderate political views. The same was true in the second sample regarding perceiver economic ideology and economic political group members.

Explicit vs. Implicit Political Prejudice

In the social cognition literature, it is common to distinguish between implicit and explicit attitudes (e.g., Greenwald & Banaji, 1995). Past research has found support for the dimension-specific symmetry hypothesis on an implicit measure (Crawford et al., 2017, Study 3).

Also relevant to the present research are theories regarding the speed with which implicit attitudes change. Some propose that implicit attitudes are slow to change (e.g., Rydell & McConnell, 2006), while others posit that they are fast-learning processes (e.g., De Houwer, 2014). The former theories would predict lesser effects of ideological similarity information on implicit affective polarization, whereas the latter theories would predict greater effects.

Moderators of Prejudice Effects

Two previously identified moderators of group prejudice effects also are relevant to the present research: lay theories of personality and controllability of group membership. Previous research has found that entity theories of personality (i.e., the belief that personality is fixed rather than malleable) are associated with higher levels of prejudice (see Rattan & Georgeac, 2017, for a review). Previous research also has found that social group memberships that are perceived to be under an individual's control (as political party and ideology are) elicit stronger stigmas and resulting biases than those that are perceived to be uncontrollable (e.g., Weiner et al., 1988). In theory, any factor that is found to increase prejudice (such as entity theories and controllable group membership) should reduce the effectiveness of prejudice interventions such as that utilized in the present research.

Also relevant to the present research, which focused on prejudice in *person perception*, previous research has found that prejudice against entire groups caused biases in judgments of individual members of these groups (e.g., Jussim et al., 1995). Thus, group prejudice is another factor that may reduce the effectiveness of interventions intended to reduce prejudice in person perception.

The Present Research

The present research directly tested the relative effects of social vs. economic ideological individuating information suggesting ideological similarity with an outparty target on affective polarization and dimension-specific (and overall) perceived worldview conflict in explicit and implicit person perception. While the present research builds upon the social primacy hypothesis, it differs from Crawford and colleagues' (2017) original test of this hypothesis because they compared the relative effects of economic and social ideology of perceivers and targets on political prejudice and other related constructs, whereas the present research tested the relative effectiveness of political prejudice *intervention methods* that were based on providing information about targets' social or economic ideologies. In other words, Crawford et al. investigated prejudice and worldview conflict, whereas the present research tested ways to *reduce* this prejudice and worldview conflict.

Moreover, while prior work has tested this question indirectly using separate samples (Czarnek et al., 2019), using separate samples was a major limitation to the previous research because this disallowed comparison of the magnitude of the reduction in political prejudice based on social ideological similarity information versus that which resulted from economic ideological similarity information. Thus, that research was less capable of testing the social primacy hypothesis than was the present research. While the observed effects were present for both types of similarity information, it is possible that the effect of social ideology similarity information would have been stronger than that for economic ideology similarity information, and this would constitute potential support for the social primacy hypothesis that that research was incapable of providing. The present research was the first to our knowledge to directly assess (using a single sample) whether social versus economic ideology individuating similarity information differentially affected political prejudice and worldview conflict. Thus, the present research compared the relative strength of the effects of social vs. economic ideological similarity information on affective polarization and therefore took a different (albeit indirect) approach to testing the social primacy hypothesis. Given the mixed support for the social primacy hypothesis (Crawford et al., 2017; Czarnek et al., 2019), variation in conceptual approaches to testing it is beneficial for the literature.

In addition, the present research was the first to our knowledge to examine the effects of dimension-specific ideology similarity information (i.e., social vs. economic) on dimension-specific worldview conflict (as opposed to overall worldview conflict). Evidence that individuating information relevant to one dimension affects worldview conflict to a greater extent on that same dimension than it does on the other dimension would provide further support for the perspective that political ideology is a multidimensional construct.

In addition, to our knowledge, the extant literature testing the effects of social and economic individuating information on political prejudice (Czarnek et al., 2019) has exclusively relied on explicit measures. Building on this work, the present studies utilized both explicit *and* implicit measures of affective polarization to extend previous research testing the relative effects of social and economic ideology on implicit political prejudice (Crawford et al., 2017, Study 3) to the domain of implicit political prejudice *reduction*.

Finally, previous research has found that worldview conflict mediates the effects of dimension-specific ideology on dimension-specific affective polarization (Crawford et al., 2017; Czarnek et al., 2019). The present research tested the related yet conceptually different question of whether global and dimension-specific worldview conflict moderate the effects of ideology similarity information on affective polarization in person perception. In addition, given the aforementioned link between entity theory of personality and prejudice, we tested whether lay theories of *political beliefs* moderate the effects of ideology similarity information on affective polarization in explicit person perception. Finally, given the previously discussed connection between group prejudice and prejudice in person perception, we also tested whether polarization specifically in the domain of beliefs about how fundamentally good or bad Republicans and Democrats *in general* are moderated by the effects of ideology similarity information on affective polarization in evaluations of the *individual* targets.

Studies 1a and 1b

Research Questions and Hypotheses

Given mixed prior relevant empirical evidence, Studies 1a and 1b addressed the following research questions: (1) What are the relative effects of economic vs. social ideology information suggesting that an outparty target has similar ideological views to the perceiver on partisan affective polarization in explicit person perception?; (2) What are the relative effects of these two types of information on perceived worldview conflict in explicit person perception?; (3) What moderates potential effects of these two types of information on affective polarization in explicit person perception?; and (4) Do the two types of dimension-specific ideological similarity information differentially impact the two forms of dimension-specific worldview conflict? Study 1a tested these questions among Democrats, and Study 1b did so among Republicans.

Preregistered, Primary Hypotheses Tested in Studies 1a and 1b

In addressing these questions, we tested a series of competing hypotheses. Those labeled *a* are derived from the social primacy hypothesis (Crawford et al., 2017). Those labeled *b* are drawn from past research showing that both economic and social ideology individuating information affect the extent to which perceiver ideology predicts attitudes and perceived value violation in political person perception (Czarnek et al., 2019). Hypotheses labeled *c* are consistent with research showing that stigmas resulting from controllable group memberships are stronger than those resulting from uncontrollable group memberships (e.g., Weiner et al., 1988) and thus may be more difficult to eliminate.

H1a: Affective polarization in explicit person perception will be reduced to a greater extent by social ideology similarity information than by economic ideology similarity information.

H1b: Social and economic ideology similarity information will reduce affective polarization to an equal extent.

H1c: Ideology similarity information will not influence affective polarization in explicit person perception.

H2a: Differences between an inparty and outparty target in perceived worldview conflict will be reduced to a greater extent by social ideology similarity information than by economic ideology similarity information.

H2b: Social and economic ideology similarity information will reduce differences between an inparty and outparty target in perceived worldview conflict to an equal extent.

H2c: Ideology similarity information will not affect differences between an inparty and outparty target in perceived worldview conflict.

Preregistered Secondary Hypotheses Tested in Studies 1a and 1b

We also tested a series of preregistered, secondary hypotheses in Studies 1a and 1b.

H3-H5: Affective polarization reduction effects should be smaller among participants who score high on worldview conflict measures (*H3*), hold entity theories of political beliefs (*H4*), and who perceive greater differences between Democrats and Republicans in general in how fundamentally good or bad they are (*H5*), compared to those who have low scores on these measures.

Non-Preregistered Secondary Hypotheses Tested in Studies 1a and 1b

Some secondary hypotheses tested in Studies 1a and 1b were not preregistered. These were (labels of *a* and *b* are unrelated to previous such labels):

H6a: Consistent with multidimensional accounts of political ideology (e.g., Carmines & D'Amico, 2015) and previous models of political person perception (Crawford et al., 2011), differences between an inparty and outparty target in social worldview conflict should decrease more in response to social ideology similarity information than in response to economic ideology similarity information (and likewise for reductions in economic worldview conflict given economic ideology similarity information compared to social ideology similarity information).

H6b: In accordance with unidimensional models of political ideology (e.g., Jost, 2006; Jost et al., 2003), differences between an inparty and outparty target in both types of domain-specific worldview conflict should be affected similarly by economic and social ideology similarity information.

Method

Preregistration for Studies 1a and 1b is available in (Rubinstein & Bock, 2021a). All measures, manipulations, and exclusions in all studies in this program of research are disclosed in-text or in [Supplementary Materials](#). Also see [Supplementary Materials](#) for details of power analysis, data exclusions, stimulus development, and measures, and all data. Data collection stopped before analyses were performed; sample size was determined before any data analysis.

Experimental Design

The experimental design for both studies was a 3 (information: social category vs. social ideology similarity vs. economic ideology similarity) \times 2 (target: Democrat vs. Republican) mixed-model design. Target was the within-subjects factor.

Study 1a and 1b Participants

An a priori power analysis revealed that, in Studies 1a and 1b, a sample size of $N = 111$ was required to detect the effect of interest. We intentionally over-collected data by threefold due to preregistered data discard criteria, and at that point, we stopped data collection. We recruited participants via Prime Panels for all studies. Sample characteristics can be seen in [Table 1](#).

Table 1

Summary of Sample Characteristics

Study Characteristics	Study 1a	Study 1b	Study 2a	Study 2b
Sample	Prime Panels (U.S. Democrats)	Prime Panels (U.S. Republicans)	Prime Panels (U.S. Democrats)	Prime Panels (U.S. Republicans)
Initial <i>N</i>	362	363	247	268
Final <i>N</i>	177	192	124	155
Age	<i>M</i> = 53.29, <i>SD</i> = 19.92	<i>M</i> = 58.04, <i>SD</i> = 17.24	<i>M</i> = 60.91, <i>SD</i> = 15.80	<i>M</i> = 68.08, <i>SD</i> = 11.22
Race/ethnicity	White/European American (78.0%) Black/African American (11.3%) Asian/Asian American (5.1%) All others (< 5%)	White/European American (93.8%) Black/African American (0.5%) Asian/Asian American (1.0%) All others (< 2%)	White/European American (76.6%) Black/African American (12.1%) Asian/Asian American (7.3%) All others (< 3%)	White/European American (93.5%) Black/African American (0.6%) Asian/Asian American (1.3%) All others (< 2.6%)
Gender	Man (38.4%) Woman (59.9%) Non-binary/third gender/other (1.7%) Transgender (5.1%)	Man (38%) Woman (61.5%) Non-binary/third gender/other (0.5%) Transgender (0.5%)	Man (37.1%) Woman (62.9%) Non-binary/third gender/other (0%) Transgender (0%)	Man (43.9%) Woman (56.1%) Non-binary/third gender/other (0%) Transgender (1.3%)
Global political orientation	<i>M</i> = 2.35, <i>SD</i> = 1.12	<i>M</i> = 6.21, <i>SD</i> = 0.96	<i>M</i> = 2.37, <i>SD</i> = 1.09	<i>M</i> = 6.06, <i>SD</i> = 1.08
Social political orientation	<i>M</i> = 2.24, <i>SD</i> = 1.28	<i>M</i> = 6.10, <i>SD</i> = 1.14	<i>M</i> = 2.26, <i>SD</i> = 1.21	<i>M</i> = 6.01, <i>SD</i> = 1.23
Economic political orientation	<i>M</i> = 2.42, <i>SD</i> = 1.14	<i>M</i> = 6.35, <i>SD</i> = 0.94	<i>M</i> = 2.53, <i>SD</i> = 1.28	<i>M</i> = 6.13, <i>SD</i> = 1.14

Note. *M* = mean; *SD* = standard deviation. For political orientation, higher scores show a more conservative ideology.

Studies 1a and 1b initially consisted of 361 self-categorized Democrats and 367 self-categorized Republicans, respectively (see [Supplementary Materials](#) for details of self-categorization). After performing preregistered data exclusions, Studies 1a and 1b consisted of 177 Democrats and 192 Republicans, respectively. It should be noted that among these exclusions were Democratic participants in the social category information condition who self-identified as having a conservative overall political ideology, and Democratic participants in the social and economic ideology similarity conditions who self-identified as having conservative social and economic ideologies, respectively. The same was true for Republican participants who had these three types of liberal ideologies in these same experimental conditions¹.

Data were analyzed including and excluding outliers and suspicious participants. Suspicious participants were retained in both studies because their exclusion did not affect the pattern of results. However, outliers (responses > ± 2.5 *SDs*) affected the results of several analyses across Studies 1a and 1b, so they were excluded from all reported analyses for consistency (see [Supplementary Materials](#) for results of analyses where their exclusion changed patterns of significance and for effects of discarding inattentive participants).

Stimuli and Measures

Stimuli — In all conditions in both studies, participants viewed the same photos of two individuals from the Chicago Face Database (Ma et al., 2015) that were pilot tested to be neutral in likeability and perceived political party affiliation. These individuals were given names that were pilot tested to be neutral in perceived political party affiliation: Justin William Davis (always designated as a Republican) and Gary Charles Smith (always designated as a Democrat).

In the social category information condition, the target descriptions contained only the targets' photos, names, and party affiliations. In the social ideology similarity information condition, this same information was provided along with the information that both the Democratic and the Republican target had liberal (Study 1a) or conservative (Study 1b) social policy views (with some specific examples of social policy issues adapted from Crawford et al., 2017, Study 5). Similarly, in the economic ideology similarity information condition, targets were described as economically liberal or

1) Removal of all participants with opposite ideologies from all three conditions did not change patterns of results.

conservative, and corresponding concrete examples of economic policy issues (adapted from Crawford et al., 2017, Study 5) were provided.

Measures — Measures were identical in Studies 1a and 1b. In addition to demographics, participants reported on two measures of affective polarization. In the first, participants rated their feelings toward each target using a feeling thermometer on a scale from 0 (*Very cold*) to 100 (*Very warm*). They also rated their liking of each target using a 1 (*Dislike very much*) to 7 (*Like very much*) Likert-type scale (see [Supplementary Materials](#) for discussion of why these measures were not standardized and combined). This research measured affective polarization (rather than general political prejudice) because the measures were administered as they related to both the inparty and the outparty target, and differences between the targets on these measures were computed and analyzed.

Participants also completed three measures of perceived worldview conflict. To measure overall worldview conflict, we adapted a measure from [Wetherell and colleagues \(2013\)](#). Here, participants reported whether a target violated their core values and beliefs using a 1 (*Strongly disagree*) to 7 (*Strongly agree*) Likert-type scale. To measure social and economic worldview conflict, we adapted two items used in previous research ([Brandt et al., 2015](#); [Crawford et al., 2017](#)). For these two items, participants reported whether a target held social and economic beliefs that were similar or different from their own using a 1 (*Very similar to me*) to 7 (*Very different from me*) Likert-type scale.

In addition, participants completed a measure of their lay theories of political beliefs to assess the extent to which they believed that political beliefs are fixed vs. malleable (see [Dweck et al., 1995](#)). This measure used a balanced subset of four items adapted from a standard measure of lay theories of personality ([Levy et al., 1998](#); [Plaks et al., 2001](#)) to relate to political beliefs (e.g., “A person’s political beliefs are something basic about the person, and they can’t be changed very much”). Items were rated on a 1 (*Strongly agree*) to 6 (*Strongly disagree*) Likert-type scale. Two items were reverse-scored, and we then averaged together the four items to form a lay theory of political beliefs measure (Study 1a: $\alpha = .80$; Study 1b: $\alpha = .88$), where higher scores indicated stronger beliefs that political beliefs can change (incremental theories of political beliefs), and lower scores indicated stronger beliefs that political beliefs are fixed (entity theories of political beliefs).

Participants also indicated how fundamentally good or bad Republicans and Democrats *in general* are. This measure utilized a 1 (*Very fundamentally bad*) to 7 (*Very fundamentally good*) Likert-type scale.

Participants reported their global, social, and economic political orientations using items adapted from [Crawford and colleagues \(2017\)](#). Global political orientation was measured by asking participants “How politically liberal (left-wing) or conservative (right-wing) is your overall political orientation?” Social and economic political orientations were measured by asking participants “How liberal (left-wing) or conservative (right-wing) are you on [social/economic] issues?” All items used a 1 (*Very liberal*) to 7 (*Very conservative*) Likert-type scale, while also including “Do not know” and “Cannot pick one label” as response options (see [Table 1](#) for descriptive statistics).

Procedure

The procedure was identical in both studies. We embedded attention and manipulation checks throughout the survey, as well as suspicion probes. After providing informed consent, participants were instructed to memorize the full names of and information about two individuals. These individuals were the Democratic and Republican targets whose pictures were shown with their full names and the descriptions of them for that particular information condition (social category, social ideology similarity, or economic ideology similarity). Participants then were asked questions about the content of the information that had been presented. If they answered incorrectly, they were allowed up to two additional attempts before their data would ultimately be discarded (though these participants were allowed to complete the survey). They then completed demographic items and a second set of manipulation checks about the targets to ensure they had retained the information and to further reinforce the manipulation. Participants were once again allowed up to three total attempts to answer the questions correctly. After answering these questions, they completed the dependent measures, followed by the suspicion probes, and finally were debriefed.

Preliminary Data Transformations and Reporting Strategy

In preparation for our analyses, we created difference scores for all within-subjects measures². All difference scores were scored such that higher scores reflected more negative sentiment toward or worldview conflict with the political outgroup (i.e., anti-Republican in Study 1a, anti-Democratic in Study 1b). Raw cell means (i.e., non-difference scores) are reported in [Supplementary Materials](#).

The preliminary tests of our hypotheses were the omnibus *F*-tests in the one-way ANOVAs (information: social category information vs. social ideology similarity information vs. economic ideology similarity information) performed on the difference scores. All were significant unless otherwise noted, and all difference scores showed anti-Republican bias in all three experimental conditions. These analyses and the omnibus ANOVAs are reported in [Supplementary Materials](#) because the more precise tests of our hypotheses were the pairwise comparisons (using Tukey's HSD) discussed below. Although Tukey's HSD already corrects for familywise error, we set an even more conservative standard by adjusting alpha for Tukey's HSD to .0167 in accordance with Bonferroni's correction.

Results and Discussion: Study 1a

Affective Polarization

Feeling Thermometer – Tukey's HSD revealed that there was more anti-Republican bias in the social category information than in the social ideology similarity, $p < .001$, and economic ideology similarity, $p = .008$, information conditions (see [Table 2](#) for descriptive statistics).

Table 2

Descriptive Statistics for Study 1a Difference Scores

Dependent variable	Information Condition		
	Social Category Information ^a	Social Ideology Similarity Information ^b	Economic Ideology Similarity Information ^c
	<i>M</i> (<i>SD</i>) 95% CI	<i>M</i> (<i>SD</i>) 95% CI	<i>M</i> (<i>SD</i>) 95% CI
Feeling thermometer	36.37 (37.03) [27.04, 45.69]	11.18 (22.97) [4.65, 17.71]	19.73 (25.64) [12.87, 26.60]
Liking scale	1.14 (1.77) [0.70, 1.59]	0.58 (1.26) [0.22, 0.94]	1.25 (1.58) [0.83, 1.67]
Overall WC	1.98 (2.63) [1.32, 2.65]	0.75 (1.38) [0.36, 1.13]	1.34 (1.88) [0.82, 1.86]
Social WC	2.73 (2.26) [2.15, 3.30]	0.65 (1.38) [0.27, 1.04]	1.95 (2.08) [1.39, 2.50]
Economic WC	1.80 (2.86) [1.09, 2.51]	1.47 (2.31) [0.82, 2.12]	0.55 (1.49) [0.16, 0.95]

Note. WC = worldview conflict. All means are difference scores where higher scores show more anti-Republican sentiment or beliefs (see [Supplementary Materials](#) for raw score descriptive statistics).

^a $n = 67$. ^b $n = 53$. ^c $n = 57$.

2) This was done instead of the preregistered 3 X 2 factorial ANOVA to be able to more precisely test our hypotheses. One-way between-subjects ANOVAs performed on difference scores are statistically identical to within-between subjects interactions in factorial ANOVA.

The difference between the social and economic ideology similarity information conditions was nonsignificant, $p = .305$. These results supported *H1b*, which predicted equal effects of social and economic ideology similarity information on affective polarization; both social and economic ideology similarity information reduced affective polarization relative to the social category information condition, and the difference between these two conditions in affective polarization was nonsignificant.

Liking Scale — The omnibus *F*-test only approached significance in this analysis. There were no significant differences among the difference scores in any of the conditions, $ps > .075$. This supported *H1C*, which predicted that similarity information would have no effect on affective polarization.

Worldview Conflict

Overall Worldview Conflict — Tukey's HSD revealed that perceived worldview conflict with the Republican (vs. the Democratic) target was greater in the social category information condition than in the social ideology similarity information condition, $p = .005$. Worldview conflict difference scores did not differ between the social category information and economic ideology similarity information conditions, $p = .224$, nor between the two ideology similarity information conditions, $p = .313$.

The pattern of results fit most closely with *H2b*, which predicted equal effects of the two types of similarity information on overall worldview conflict, in that the difference in worldview conflict difference scores in these two conditions was nonsignificant. Yet, it is worth noting that social ideology similarity information significantly reduced worldview conflict difference scores, while economic ideology similarity information did not.

Social and Economic Worldview Conflict — Social ideology similarity information reduced social worldview conflict difference scores both compared to the social category information condition, $p = .001$, and to the economic ideology similarity information condition, $p = .002$. There was no significant difference between these difference scores in the social category information condition and the economic ideology similarity information condition, $p = .082$.

Economic worldview conflict difference scores were reduced by economic ideology similarity information compared to the social category information condition, $p = .010$. Economic worldview conflict difference scores were not significantly different in the social category information and in the social ideology similarity information conditions, $p = .729$, nor in the two ideology similarity information conditions, $p = .106$.

The results of the social worldview conflict analyses provided direct support for *H6a*, which was an exploratory hypothesis predicting that each type of domain-specific perceived worldview conflict (i.e., social vs. economic) would be more affected by the corresponding type of domain-specific similarity information. Social ideology similarity information reduced differences in perceived social worldview conflict with the Republican vs. the Democratic target relative to the social category information condition while economic ideology similarity information did not, and the difference between the two targets in perceived social worldview conflict was significantly greater in the economic ideology information condition than in the social ideology information condition. In contrast, the economic worldview conflict data mostly supported *H6b*; there was no significant difference in the amount of economic worldview conflict reduction between the two similarity information conditions. However, it is worth noting that economic ideology similarity information significantly reduced differences in perceived economic worldview conflict with the Republican vs. the Democratic target relative to the social category information condition while social category information did not significantly reduce such differences.

Support for Moderation Hypotheses

Moderation results are reported in [Supplementary Materials](#) to maintain focus on the most informative results from the present research because moderation results were inconsistent and, in some cases, counter to theoretical expectations. The hypotheses mostly were not supported.

Results and Discussion: Study 1b

All difference scores showed significant anti-Democrat bias (see [Supplementary Materials](#)). Analyses and reporting structure are identical to those in Study 1a.

Affective Polarization

Feeling Thermometer — Tukey's HSD revealed that anti-Democrat bias was stronger in the social category information condition than in the social ideology similarity information condition, $p = .007$ (see [Table 3](#) for descriptive statistics). This bias was equally strong in the social category information and the economic ideology similarity information conditions, $p = .081$, and in the social and economic ideology similarity information conditions, $p = .640$. This pattern of findings fit most closely with *H1b*, which predicted that affective polarization would be reduced equally by social and economic ideology similarity information. However, it is worth noting that social ideology similarity information significantly reduced worldview conflict difference scores, while economic ideology similarity information did not.

Table 3

Descriptive Statistics for Study 1b Difference Scores

Dependent variable	Information Condition		
	Social Category Information ^a	Social Ideology Similarity Information ^b	Economic Ideology Similarity Information ^c
	<i>M</i> (<i>SD</i>) 95% CI	<i>M</i> (<i>SD</i>) 95% CI	<i>M</i> (<i>SD</i>) 95% CI
Feeling thermometer	28.65 (36.82) [20.29, 37.01]	11.96 (20.40) [6.16, 17.76]	17.23 (26.73) [10.07, 24.39]
Liking scale	0.92 (1.38) [0.60, 1.24]	0.88 (1.19) [0.55, 1.22]	0.55 (1.29) [0.21, 0.90]
Overall WC	2.03 (2.51) [1.46, 2.59]	0.81 (1.61) [0.37, 1.25]	1.12 (1.71) [0.64, 1.59]
Social WC	2.84 (2.43) [2.29, 3.38]	0.74 (1.76) [0.26, 1.22]	1.91 (2.14) [1.34, 2.48]
Economic WC	1.80 (2.86) [1.09, 2.51]	1.47 (2.31) [0.82, 2.12]	0.55 (1.49) [0.16, 0.95]

Note. WC = worldview conflict. All means are difference scores where higher scores show more anti-Republican sentiment or beliefs (see [Supplementary Materials](#) for raw score descriptive statistics).

^a $n = 67$. ^b $n = 53$. ^c $n = 57$.

Liking Scale — The omnibus *F*-test was nonsignificant, $p = .249$, suggesting that anti-Democrat bias was inferentially equal in all three information conditions. These results provided full support for *H1c*, which predicted no effects of similarity information on affective polarization.

Worldview Conflict

Overall Worldview Conflict — Tukey's HSD revealed that worldview conflict difference scores were higher in the social category information condition than in the social ideology similarity information condition, $p = .003$. Worldview conflict difference scores were inferentially equal in the economic ideology similarity information condition and in the social category information condition, $p = .039$, and in the two ideology similarity information conditions, $p = .732$.

This pattern of results fit most closely with *H2b*, which predicted that the two types of similarity information would have equal effects on differences in perceived overall worldview conflict with the Republican vs. the Democratic target. Although social ideology similarity information significantly reduced overall worldview conflict relative to the social category information condition while economic ideology information did not, there was no statistical difference between the two types of information in the extent to which they did reduce these difference scores. The 95% CI for these two differences overlapped (Table 3), providing further evidence for the similarity of these effects.

Social and Economic Worldview Conflict — Tukey's HSD revealed that social worldview conflict difference scores were higher in the social category information condition than in the social ideology similarity information condition, $p < .001$. Difference scores were also higher in the economic ideology similarity information than in the social ideology similarity information condition, $p = .014$. Difference scores were inferentially equal in the social category and economic ideology similarity information conditions, $p = .041$.

For economic worldview conflict difference scores, Tukey's HSD revealed that these difference scores were higher in the social category information condition than in the economic ideology similarity information condition, $p < .001$, and than in the social ideology similarity information condition, $p < .001$. However, the economic worldview conflict scores in the two ideology similarity information conditions were inferentially equal, $p = .058$.

Thus, as in Study 1a, the results of the social worldview conflict difference score analysis supported *H6a*, whereas the results of the economic worldview conflict difference score analysis supported *H6b*. In the former analysis, social ideology similarity reduced social worldview conflict difference scores more than did economic ideology similarity information. In contrast, in the latter analysis, both types of similarity information reduced economic worldview conflict difference scores, but the difference between these reductions was nonsignificant.

Support for Moderation Hypotheses

For the same reasons as in Study 1a, moderation results are reported in [Supplementary Materials](#).

Results and Discussion: Comparing Democrats (1a) and Republicans (1b)

We performed 3 (information: social category information vs. social ideology similarity information vs. economic ideology similarity information) \times 2 (perceiver political party: Democrat vs. Republican) mixed-model ANOVAs on the affective polarization and worldview conflict measures to directly assess whether there were partisan differences in the extent to which similarity information influenced affective polarization and differences between the two targets in perceived worldview conflict. The critical tests of the effects of interest were the interactions. Most of these were nonsignificant (see [Supplementary Materials](#)), which indicated no differences between Democratic and Republican perceivers. However, this interaction was significant for liking scale difference scores, $F(2, 343) = 3.20$, $p = .042$, $\eta_p^2 = .02$, and for economic worldview conflict, $F(2, 355) = 3.48$, $p = .032$, $\eta_p^2 = .02$.

The pattern of the discrepancy for the liking scale difference scores indicated that although all differences in liking among all conditions were nonsignificant with adjustments to alpha to correct for familywise comparisons error with Bonferroni's correction applied (as was also true with Tukey's HSD, reported above), some differences in bias reductions between conditions approached significance for Democrats (two $ps < .041$), but not for Republicans (all $ps > .157$; see [Supplementary Materials](#)). However, given that all differences were nonsignificant when corrections for familywise comparisons were made, the results were not actually discrepant. For economic worldview conflict, the source of the discrepancy was that social ideology similarity information significantly reduced economic worldview conflict for Republicans, $p < .001$, but not for Democrats, $p = .425$ (see [Supplementary Materials](#)).

Studies 2a and 2b

Studies 1a and 1b addressed the effects of individuating information on affective polarization using *explicit* measures of affective polarization. Studies 2a and 2b addressed this question using an *implicit* measure in Democratic (Study 2a) and Republican (Study 2b) samples.

Research Questions and Hypotheses

Studies 2a and 2b addressed the question of: What are the relative effects of economic and social ideology similarity information on partisan affective polarization in implicit person perception?

Hypothesis

Study 2a was entirely exploratory given the current debate over the fast- vs. slow-learning nature of implicit evaluations (for a review, see [Ferguson et al., 2014](#)). However, for Study 2b, the results of Study 2a along with slow-learning perspectives on implicit evaluations (e.g., [McConnell & Rydell, 2014](#)) led us to predict that:

H7: Neither social nor economic similarity information will impact affective polarization in implicit person perception.

Support for *H7* also would be consistent with aforementioned literature on controllable vs. uncontrollable stigmas (e.g., [Weiner et al., 1988](#)).

Method

Study 2a was exploratory. Study 2b was preregistered. The preregistration is available in ([Rubinstein & Bock, 2021b](#)).

Experimental Design

Both studies employed a one-way (information: social category information vs. social ideology similarity information vs. economic ideology similarity information) between-subjects design. Although participants did review information about one Democratic and one Republican target, as they did in Studies 1a and 1b, scores on the implicit measure that was used—the Implicit Association Test (IAT; [Greenwald et al., 1998](#))—are difference scores, so they inherently incorporate the within-subjects target factor.

Participants

The power analysis for Studies 2a and 2b was identical to that for Studies 1a and 1b because both studies employed one-way between-subjects analyses with three levels performed on difference scores. Thus, 111 participants were needed to detect an effect size of $f = .15$. We over-collected data by approximately two-fold in this study (our stop point); we anticipated discarding a large amount of data, but not as much as in Studies 1a and 1b. We again recruited participants via Prime Panels. Sample characteristics can be seen in [Table 1](#).

Studies 2a and 2b initially consisted of 269 self-categorized Democrats and 254 self-categorized Republicans, respectively. After performing the same preregistered data exclusions as before, Studies 2a and 2b consisted of 124 Democrats and 155 Republicans, respectively. Outliers did not affect the results of either study, so they were retained to maximize sample size.

Stimuli and Measures

Stimuli for Studies 2a and 2b were identical to those used in Studies 1a and 1b, respectively. The dependent measure was scores on an IAT that measured affective polarization in implicit political person perception. The categories used in the IAT were the two individual targets' names (Justin and Gary), *Good*, and *Bad*. Stimuli for the *Justin* and *Gary* categories were the same pictures of Justin and Gary that had been presented along with their descriptions (or cropped

or greyscale versions thereof), and stimuli for the *Good* and *Bad* categories were words relevant to these two attributes (see [Supplementary Materials](#)). Participants also completed demographic items and, in Study 2b, suspicion probes³.

Procedure

The procedure for learning the ideology similarity information or social category information was identical to that employed in Studies 1a and 1b. The only procedural difference was that, instead of completing explicit measures, participants completed the IAT, which was administered using the IATGen app for Qualtrics (Carpenter et al., 2019).

Results and Discussion: Study 2a

Preliminary Scoring

IAT scores (D) were computed by IATGen, which uses the scoring algorithm suggested by Greenwald et al. (2003). In this study, positive D scores indicated stronger implicit associations between the Democratic target and *good* words and the Republican target and *bad* words relative to the reverse pairing of these concepts.

Implicit Affective Polarization

Single-sample t -tests revealed bias against the Republican target in all three information conditions, $M_{\text{SocialCategoryInformation}} = 0.20$, $SD = 0.49$, $t_{\text{SocialCategoryInformation}}(42) = 2.63$, $p = .012^4$, $M_{\text{SocialIdeologyInformation}} = 0.21$, $SD = 0.48$, $t_{\text{SocialIdeologyInformation}}(35) = 2.69$, $p = .011$, $M_{\text{EconomicIdeologyInformation}} = 0.25$, $SD = 0.39$, $t_{\text{EconomicIdeologyInformation}}(44) = 2.63$, $p < .001$. A one-way between-subjects ANOVA revealed that ideology similarity information did not shift this bias, $F(2, 123) = 0.16$, $p = .86$, $\eta_p^2 < .01$, $BF_{10} = 0.09^5$. Thus, information suggesting that the Republican target had a similar social or economic ideology as did participants likely had no effect on implicit affective polarization, and the Bayes Factor suggested that the evidence in favor of the null hypothesis was strong.

Results and Discussion: Study 2b

In Study 2b, positive D scores indicated stronger implicit associations between the Republican target and *good* words and the Democratic target and *bad* words relative to the reverse pairing of these concepts. Single-sample t -tests revealed anti-Democrat bias in all three information conditions, $M_{\text{SocialCategoryInformation}} = 0.31$, $SD = 0.43$, $t_{\text{SocialCategoryInformation}}(69) = 6.04$, $p < .001$, $M_{\text{SocialIdeologyInformation}} = 0.30$, $SD = 0.43$, $t_{\text{SocialIdeologyInformation}}(41) = 4.49$, $p < .001$, $M_{\text{EconomicIdeologyInformation}} = 0.22$, $SD = 0.37$, $t_{\text{EconomicIdeologyInformation}}(42) = 3.95$, $p < .001$. A one-way ANOVA with the same design as in Study 2a revealed that D scores did not statistically differ among the information conditions, $F(2, 154) = 0.61$, $p = .544$, $\eta_p^2 = .01$, $BF_{10} = 0.11$. Thus, as was the case with Democratic participants, information suggesting that the Democratic target had a similar social or economic ideology as participants likely had no effect on implicit affective polarization. The Bayes Factor suggested that the evidence in favor of the null hypothesis was moderate-to-strong.

Results and Discussion: Comparing Democrats (2a) and Republicans (2b)

To assess whether patterns of results for IAT scores differed between Democrats and Republicans, we performed a 3 (information: social category information vs. social ideology similarity vs. economic ideology similarity) \times 2 (perceiver political party: Democrat vs. Republican) between-subjects ANOVA on the pooled data from Studies 2a and 2b. The key test was the interaction effect, which was nonsignificant, $F(2, 273) = 0.67$, $p = .515$, $\eta_p^2 = .01$. This indicated that

3) Due to researcher oversight, suspicion probes were not administered to participants in Study 2a, nor to the first 13 participants from the final Study 2b sample.

4) Cohen's d is not reported for single-sample t -tests performed on D scores because the computation of D closely resembles the computation of d .

5) BF_{10} were interpreted according to the following guidelines (Jeffreys, 1961; Lee & Wagenmakers, 2014): $0.33 < BF_{10} < 1$ constitutes anecdotal evidence in favor of the null hypothesis, $0.10 < BF_{10} < 0.33$ is moderate evidence in favor of the null hypothesis, $0.03 < BF_{10} < 0.10$ is strong evidence in favor of the null hypothesis, $0.01 < BF_{10} < 0.03$ is very strong evidence in favor of the null hypothesis, and $BF_{10} < 0.01$ is extreme evidence in favor of the null hypothesis.

there were likely no significant differences between Republican and Democratic perceivers in the effects of similarity information on implicit affective polarization.

General Discussion

The present research tested hypotheses regarding the comparative effects of social versus economic ideology similarity information on explicit and implicit political person perception. Regarding explicit affective polarization, our two measures (feeling thermometer and liking scale) yielded different results. When using the feeling thermometer measure in Studies 1a and 1b, evidence from both samples supported *H1b*, which predicted that social and economic ideology similarity information would exert equal effects on explicit affective polarization. However, when using the liking scale, we found support for *H1c*, which predicted that neither type of ideological similarity information (social nor economic) would reduce explicit affective polarization. The implicit measure of affective polarization in person perception showed support for *H7*, which predicted that similarity information would not affect implicit affective polarization.

We also examined how our similarity information manipulation affected perceptions of worldview conflict. The overall worldview conflict measure showed support for *H2b* (which predicted equal effects of social and economic ideology information) in both samples. Regarding domain-specific worldview conflict, we found support on the social worldview conflict measure for *H6a*, which predicted that differences between the Democratic and Republican target in domain-specific worldview conflict would be most affected by similarity information relevant to that same domain (social or economic ideology). On the economic worldview conflict measure, we found support for *H6b*, which predicted that the two types of similarity information would have equal effects on domain-specific worldview conflict. Support for the moderation hypotheses (*H3*, *H4*, and *H5*) was mixed and inconsistent in both samples.

Explaining Discrepancies

Discrepancies Among Measures of Affective Polarization

Discrepancies emerged in the results obtained from the two measures of affective polarization (feeling thermometer and liking scale). Although we lack data that can directly explain this discrepancy, past literature suggests that there may be issues with the reliability and validity of Likert-type measures of attitudes in political prejudice research. For instance, [Price-Blackshear et al. \(2019\)](#) found that an electability Likert-type scale and a semantic differential (i.e., different Likert-type measures of similar constructs) yielded different results within the same sample. In addition, these authors also found that the same semantic differential measure resulted in different findings when administered in two different samples drawn from the same population despite highly similar research designs and identical stimulus materials.

Moreover, prior work has shown inconsistencies in results between different measures of attitudes and prejudice, such as Likert-type and feeling thermometer measures. Consistent with the results of the present research, [West and Iyengar \(2022\)](#) found more evidence that affective polarization was reduced when using a feeling thermometer measure compared to a Likert-type measure. In addition, [Crawford et al. \(2017\)](#) found different levels of support for the social primacy hypothesis when using different measures of explicit prejudice (e.g., feeling thermometer, social distance measure).

Because past results suggest reliability and validity issues with the Likert-type measure of affective polarization, in the context of the present research, we consider the evidence from our feeling thermometer (which showed that social and economic ideology similarity information reduced affective polarization to an equal extent) to warrant more confidence than those from the liking scale (which revealed that neither type of ideology information reduced affective polarization). The discrepancy is likely not attributable to sampling error given that it appeared in both samples and that it parallels results from the aforementioned previous research. Indeed, feeling thermometers have been demonstrated to be valid measures of affective polarization in multi-party systems (e.g., [Gidron et al., 2022](#)) and have been shown to be reliable measures of prejudice (for a review, see [Lolliot et al., 2015](#)).

While the IAT also showed no effects of counterstereotypic ideology information on affective polarization, the IAT should not be classified together with the two explicit measures in considering patterns of findings. This is because

multiple theoretical perspectives on implicit evaluations posit that separate cognitive processes govern implicit versus explicit evaluations (see, e.g., Gawronski & Bodenhausen, 2011; McConnell & Rydell, 2014). Instead of considering the IAT results in tandem with the results from the explicit affective polarization measures, we believe that the results from the implicit measure provide evidence that implicit political person perception is governed by slow-learning processes, which is consistent with strict dual-process models of social cognition (e.g., McConnell & Rydell, 2014), and inconsistent with other models of implicit social cognition (e.g., De Houwer, 2014; Gawronski & Bodenhausen, 2011).

Discrepancies Between Social and Economic Worldview Conflict

We found that, in both samples, results from the social worldview conflict measure supported multi-dimensional perspectives on political ideology, whereas results from the economic worldview conflict measure supported single-dimensional perspectives on political ideology. While the results therefore do not provide clear support for either perspective, we interpret the findings as lending some tentative support for the social primacy hypothesis because this suggests that social ideology similarity information exerts particularly powerful effects on domain-specific worldview conflict. Specifically, the support for single-dimensional perspectives stems from the fact that social and economic ideology similarity information reduced economic worldview conflict to an equal extent. This suggests that social ideology similarity information may be so effective a means of reducing domain-specific worldview conflict that it reduces economic worldview conflict just as much as economic ideology similarity information does. The reverse was not true—economic ideology similarity information reduced social worldview conflict less than did social ideology similarity information, suggesting that social similarity information may have more powerful effects than economic ideology information on domain-specific worldview conflict. This is broadly consistent with the social primacy hypothesis.

Discrepant Results From Democratic vs. Republican Samples

While the results of the ANOVAs were consistent between Democratic and Republican samples, there were several inconsistencies between the two samples in the moderation results. Specifically, 20 moderation analyses were performed in each of these studies, and significance patterns for these analyses differed in seven of these pairs of analyses (see [Supplementary Materials](#)). The direction of these inconsistencies did not follow any particular pattern. It should be noted that providing similarity information like that in the present research is akin to providing individuating information in that it suggests that the individuals diverge from the social category stereotype, and it is not unprecedented in the political psychology literature to find discrepancies between how Democrats and Republicans are affected by individuation processes (see Price-Blackshear et al., 2019; West & Iyengar, 2022). It is possible that these differences between Democrats and Republicans in individuation processes (including the results of the moderation analyses in the present research) are attributable to differences between Democrats and Republicans in cognitive style such as rigidity (e.g., Jost et al., 2003; Jost, 2006). However, given the unexpected direction of some of the moderation results, we invite future work to replicate the present research in service of better understanding potential differences between Democrats and Republicans.

Implications

The Social Primacy Hypothesis

The present research tested predictions relevant to the social primacy hypothesis (Crawford et al., 2017), which posits that conflict in social ideology contributes more strongly to affective polarization than does conflict in economic ideology. Consistent with previous research (Czarnek et al., 2019), we found evidence that social and economic conflict equally contribute to affective polarization based on our results from our overall worldview conflict measure and the feeling thermometer (but not the liking scale); thus, our data did not support the social primacy hypothesis (though it provided only an indirect test of this hypothesis). Additional previous research has found only mixed support for the social primacy hypothesis (Crawford et al., 2017). Although the Likert-type measure of liking did not show evidence of shifts in affective polarization, due to the aforementioned potential psychometric issues with this measure, we believe that more credence should be lent to the results of the feeling thermometer measure.

Multi- vs. Unidimensional Accounts of Political Ideology

We found support for hypotheses predicting equal effects of social and economic ideology similarity information on affective polarization and overall worldview conflict. This lent some limited support for unidimensional accounts of political ideology (e.g., Jost, 2006; Jost et al., 2003)—though these accounts were not directly tested by those particular measures—in that dimensions conceptualized to be separate (social and economic ideology) by multi-dimensional accounts of ideology exerted mostly equal effects on affective polarization and overall worldview conflict, which shows that they may operate similarly in these domains. Evidence from the domain-specific worldview conflict measures did not provide a clear pattern of support for either perspective since the social worldview conflict measure showed support for multi-dimensional models and the economic worldview conflict measure showed support for single-dimensional perspectives.

Fast- vs. Slow-Learning Accounts of Implicit Evaluations

The finding that implicit evaluations did not shift in the presence of counterstereotypic individuating information lends support to slow-learning accounts of implicit evaluations (e.g., McConnell & Rydell, 2014). These results stand in contrast to other research that has examined the effects of individuating information on implicit judgments of individual members of social groups, which has found that implicit stereotypes in person perception are subject to fast-learning (e.g., Rubinstein & Jussim, 2019; Rubinstein et al., 2018) or at least are partially or circumstantially sensitive to valid social information (Cao & Banaji, 2016; Rubinstein et al., 2021) and thus supported fast-learning theories of implicit evaluations (e.g., De Houwer, 2014).

One potential reason for this discrepancy may be the perceived controllability of political party membership; when members of a group are perceived as having a choice in their group membership, stigma and prejudice against these groups tend to be stronger (e.g., Weiner et al., 1988). Thus, it may also be harder to shift prejudices that are based on group memberships that are perceived to be controllable. Previous research showing sensitivity of implicit judgments in person perception to valid social information used targets belonging to groups (race and gender groups) in which membership arguably may be seen as less controllable than in political groups.

Limitations and Future Directions

One limitation to the present research is the ecological validity of the similarity information. While some Republicans have liberal ideologies and some Democrats have conservative ideologies, they are in the minority (Barber & Pope, 2019). We encourage future researchers to test whether the effects of counterstereotypic targets found in the present research on worldview conflict and some measures of affective polarization are caused by more moderate targets, as well.

Another limitation is that we did not counterbalance the names and photos of the targets with their ideology. This was because we pilot tested the faces and names to ensure they were neutral in perceived party affiliation and that the faces were neutral in likeability (Supplementary Materials). Nonetheless, it is possible that the effects obtained were unique to the particular combinations of ideologies, names, and faces that we employed.

Additionally, while we excluded participants with dissimilar social, economic, or overall ideologies to the targets (in the social ideology similarity, economic ideology similarity, and social category information conditions, respectively), we did not measure participants' views on the specific issues included in the target descriptions. Thus, it is possible that if participants held untraditional views about particular issues, the intended similarity information did not achieve its goal. However, the observed reductions in affective polarization and worldview conflict generated by our similarity information manipulations suggest that this was not the case in our samples, as wholes.

Moreover, most relevant previous research has classified perceivers based on political ideology (e.g., Crawford et al., 2017; Czarnek et al., 2019), but the present research did so based on political party. However, according to Iyengar et al. (2012), "Ideology is a weaker basis for subjective political identity" (p. 414) than is party affiliation. Thus, we feel that our reliance on partisan identity is justifiable.

Additionally, interpretation of IAT scores is subject to debate (e.g., Blanton et al., 2015). Thus, future research should employ additional implicit measures.

Conclusion

While the results of the present research provided evidence that some forms of political prejudice were reduced by ideology similarity information, this was not universally true. Thus, although similarity information may be one way to potentially reduce political animus, there may be methods of reducing political prejudice that are still more effective. This would be a fruitful avenue for future research to explore.

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Competing Interests: The authors have declared that no competing interests exist.

Data Availability: The research data for all four studies are publicly available (Rubinstein & Bock, 2023).

Supplementary Materials

The Supplementary Materials contain the following items:

- Preregistration for Studies 1a and 1b (Rubinstein & Bock, 2021a)
- Preregistration for Study 2b (Rubinstein & Bock, 2021b)
- Research data, code for analyses, and materials for all four studies (Rubinstein & Bock, 2023)

Index of Supplementary Materials

Rubinstein, R. S., & Bock, J. E. (2021a). *The effects of economic vs. social ideology information on political person perception* [Preregistration for Studies 1a and 1b]. OSF Registries. <https://doi.org/10.17605/OSF.IO/34S78>

Rubinstein, R. S., & Bock, J. E. (2021b). *The effects of economic vs. social ideology information on implicit political person perception* [Preregistration for Study 2b]. OSF Registries. <https://doi.org/10.17605/OSF.IO/9FNJ3>

Rubinstein, R. S., & Bock, J. E. (2023). *The effects of economic vs. social ideology information on political person perception* [Research data, code for analyses, and materials for all four studies]. OSF. <https://osf.io/nqcu5>

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