

# Belief in the Utility of Cross-Partisan Empathy Reduces Partisan Animosity and Facilitates Political Persuasion



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## Abstract

In polarized political environments, partisans tend to deploy empathy parochially, furthering division. We propose that belief in the usefulness of cross-partisan empathy—striving to understand other people with whom one disagrees politically—promotes out-group empathy and has powerful ramifications for both intra- and interpersonal processes. Across four studies (total  $N = 4,748$ ), we examined these predictions in online and college samples using surveys, social-network analysis, preregistered experiments, and natural-language processing. Believing that cross-partisan empathy is useful is associated with less partisan division and politically diverse friendship networks (Studies 1 and 2). When prompted to believe that empathy is a political resource—versus a political weakness—people become less affectively polarized (Study 3) and communicate in ways that decrease out-partisans' animosity and attitudinal polarization (Study 4). These findings demonstrate that belief in cross-partisan empathy impacts not only individuals' own attitudes and behaviors but also the attitudes of those they communicate with.

## Keywords

empathy, emotions, intergroup dynamics, political psychology, persuasion, open data, open materials, preregistered

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Over the last several decades, political divisions in the United States have become personal. Republicans and Democrats increasingly fear and loathe one another (Iyengar et al., 2019) and are less willing than in the past to have out-party romantic partners, in-laws, or friends (Huber & Malhotra, 2017; Iyengar et al., 2012). These bitter divisions hinder responses to pressing issues—such as the COVID-19 pandemic and climate change (Druckman et al., 2021; Hetherington & Rudolph, 2015)—and may undermine bipartisan governance (Abramowitz & Webster, 2016; Hetherington, 2015).

Despite rising animosity, most Americans want less political division. In a 2018 poll, the majority of respondents reported that recent divisions between Republicans and Democrats were a very serious problem (NBC News/Wall Street Journal Survey, 2018). Additionally, we surveyed 523 Americans (52% Democrat, 48% Republican) in October 2020 and found that over 85% of respondents viewed positive cross-party relations,

such as having out-party members as friends, building consensus, and supporting bipartisan cooperation, as valuable (see Fig. S1 in the Supplemental Material available online).

What role does empathy play in helping people achieve these valuable outcomes? Evidence is mixed. In polarized environments, people often feel empathy only for members of their own group, stoking parochialism and out-group animosity (Bloom, 2017; Simas et al., 2020). However, people can also purposefully focus their empathy on out-group members, which can mitigate their animus toward these individuals (Todd & Galinsky, 2014). Here, we refer to such efforts to

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understand the views of political out-group members as *cross-partisan empathy*. When people engage in cross-partisan empathy—for instance, taking the perspective of, or nonjudgmentally exchanging narratives with, an out-party member—they are often able to discover common ground and make arguments that are more persuasive to out-partisans (e.g., Kalla & Brookman, 2020).

In other words, empathy can both amplify and reduce partisan division—depending on whom an individual focuses it on. What might shape people's decisions for whom to feel empathy? We focus on a novel factor: people's belief in the utility of empathizing with out-group members. Decades of work demonstrate that people's beliefs affect their motivations and actions (e.g., Dweck, 1986; Weiner, 1985). People's beliefs also impact their emotional lives: Individuals control their emotions, including empathy, on the basis of their beliefs about which emotions are useful in a given context (e.g., Tamir, 2009; Zaki, 2014). For instance, when people believe that a particular emotion will help them attain a goal—for example, anger in a negotiation—they upregulate that emotion (Tamir et al., 2013). However, work has not yet established the causal effects of empathy beliefs in intergroup political contexts.

Here, we leveraged the partisan context in the United States to test the causal force of empathy beliefs on intergroup emotions, attitudes, and behaviors. We predicted that *belief in the utility of cross-partisan empathy* (BCPE) would causally impact people's out-party evaluations, their support for bipartisan governance, and their behavior toward out-partisans. For example, a person who learns that out-group empathy could be a political resource (e.g., could allow them to be more persuasive with political rivals)—versus a weakness—should be more open to empathizing with out-partisans, taking part in intergroup interactions, and supporting bipartisanship and perspective taking when communicating across party lines. Thus, although initially tactical, positive BCPE may lead to actual improvements in interparty relations by encouraging empathic engagement across divides.

This prediction that belief in the utility of cross-partisan empathy will mitigate intrapersonal markers of political division is not trivial. In the U.S. political climate, positive beliefs about cross-partisan empathy may conflict with group norms that encourage partisans to openly disapprove of the political out-group (Iyengar & Westwood, 2015). Such group norms have been shown to increase individuals' tolerance to out-group animus and to decrease the positive effects of intergroup contact (Ata et al., 2009; Crandall et al., 2002). Thus, even if a person saw value in trying to understand

### Statement of Relevance

Partisan animosity has risen dramatically in the United States in recent decades. Cross-partisan empathy—people's efforts to understand the perspectives of out-party members—can reduce partisan animosity and help build political consensus, but individuals are often reluctant to empathize with their perceived rivals. Across four studies, people who believed that cross-partisan empathy is useful (vs. harmful) reported greater interest in bipartisan cooperation and were more likely to befriend individuals with differing political views. When we experimentally increased people's beliefs in the usefulness of cross-partisan empathy, they produced messages that were viewed as more empathic and persuasive by individuals with whom they disagreed. These results highlight that belief in empathy not only can increase people's interest in engaging across political divides but also makes them more convincing advocates for their own beliefs.

the views of out-partisans, it is possible that this belief may be ineffective in reducing their partisan animosity and increasing empathic behaviors across group divides. In our experiments, we attempted to help people overcome these psychological barriers by offering an instrumental reason to empathize with out-partisans (i.e., that it would lead them to become more persuasive advocates of their group's beliefs).

A fundamentally novel question surrounds whether an individual's belief in the utility of empathy could impact the experiences and attitudes of other people. Virtually every study on emotion beliefs and motives stops at the border of the individual (e.g., Porat et al., 2016; Schumann et al., 2014). Researchers manipulate one's beliefs or motives and then examine their affect or their behavior. However, people's expectations can shape their social realities (Merton, 1948). A powerful and intriguing feature of emotion beliefs is that—through one's behavior—they can impact others. For instance, might individuals who believe cross-partisan empathy to be useful actually be more able to persuade and connect with people on the other side of political issues? This would provide powerful evidence for emotion beliefs as self-fulfilling prophecies, crucially expanding knowledge about the extent to which emotion beliefs can affect not just intrapersonal but also interpersonal outcomes.

To examine these questions, we first validated the BCPE scale on a national sample of Americans—representative across age, gender, region, and ethnicity—and demonstrated that BCPE uniquely predicts measures of partisan division (Study 1). Then, via network analysis, we corroborated insights from Study 1 on an ecologically valid measure—networks in a real-world college community—and found that individuals high in positive BCPE had more politically diverse friendships (Study 2). In Study 3, as hypothesized in our preregistration, manipulating BCPE altered interest in bipartisan collaboration and partisan animus. Finally, in Study 4, a manipulation of positive (vs. negative) BCPE drove individuals to empathically advocate for their political views on a contentious topic. This, in turn, led out-partisans—who were unaware of any experimental manipulation—to be less affectively polarized and more persuaded by positive BCPE writers. Together, this work highlights a novel factor that shapes emotions, attitudes, and behaviors in intergroup conflicts and empirically demonstrates how these empathy beliefs can have reverberating effects on the emotions and attitudes of out-group members.

## Ethics Statement and Reproducibility

All studies were approved by the institutional review board at Stanford University. All participants provided informed consent prior to the beginning of all four studies and were paid for their participation. Given that our manipulation involved deception, participants in Studies 3 and 4 were debriefed at the end of the study.

## Study 1

In Study 1, we assessed the validity of the BCPE scale in a national sample benchmarked to demographic quotas that are representative of the U.S. population on gender, age, region, and ethnicity. To test the scale's convergent and discriminant validity, we examined its correlations with theoretically related measures that have been posited to either exacerbate (e.g., partisan strength; Huddy et al., 2015) or decrease (e.g., dispositional empathy, open cognitive style; Sibley & Duckitt, 2008; Todd & Galinsky, 2014) intergroup division. To evaluate the BCPE scale's unique predictive validity, we tested whether the scale predicted measures of partisan division even after we controlled for these other predictors.

## Method

**Participants.** A priori power analyses with G\*Power (Faul et al., 2007) suggested that 400 participants would give us the recommended 80% power (Cohen, 1988) to

detect a small effect ( $r \geq .15$ ) or 95% power to detect the average effect size in social psychology ( $r \geq .21$ , based on meta-analyses by Richard et al., 2003).

We recruited a representative sample of 435 Democrats and Republicans (including independents who leaned Democrat or Republican) from ForthRight, a panel managed by Bovitz.<sup>1</sup> Participants were excluded from analyses for having duplicate Internet protocol (IP) addresses ( $n = 3$ ), using a foreign IP address ( $n = 4$ ), using a virtual private network (VPN;  $n = 7$ ),<sup>2</sup> or failing a simple attention check ( $n = 10$ ), resulting in a final sample size of 411 participants (46% Republican). Our final sample was nationally representative in terms of age, gender, race, and U.S. region (see Table S1 in the Supplemental Material).

**Procedure and measures.** After consenting to take the survey, participants completed a series of measures presented in randomized order (see the Supplemental Material for all measures and sources).

To assess BCPE, we asked participants to complete the BCPE scale ( $\alpha = .76$ ), an eight-item scale that captures people's views about the utility of cross-partisan empathy (e.g., that it would make them better able to understand the other side) as well as its disutility (e.g., that it could threaten their own political views). The items in the scale were designed to reflect the two sources of empathic motives outlined by Zaki (2014): the desire to identify positively with the in-group and negatively with the out-group. Thus, some items relate to the concern that empathizing with the out-group could be detrimental to one's standing in one's own group (e.g., "empathizing with [out-party members] would constitute a betrayal of my own party") or that it would make it harder to differentiate their own thoughts from those of the out-group (e.g., "empathizing with [out-party members] would lead me to compromise too much on political issues I care about"). The scale is coded so that greater values reflect more positive beliefs about cross-partisan empathy (see the Supplemental Material for all items).

We compared the BCPE scale with other established measures (e.g., dispositional empathy, partisan social identity, open cognitive styles) that have been shown to predict shifts in intergroup conflict. Our goal was twofold. First, we hoped to situate BCPE as a new construct by assessing its relationship to the broader intergroup-conflict literature. Second, we wanted to test whether BCPE tracked measures of partisan division even after controlling for these other relevant factors.

**Potential predictors of partisan division.** Dispositional empathy was measured using the Interpersonal Reactivity Index (Davis, 1983). Given that empathy is a multifaceted

construct involving affective (e.g., empathic concern) and cognitive (e.g., perspective taking) components (Davis, 1983), we separately measured participants' empathic concern (e.g., "I would describe myself as a pretty soft-hearted person";  $\alpha = .81$ ) and perspective taking (e.g., "I try to look at everybody's side of a disagreement before I make a decision";  $\alpha = .76$ ). Perspective taking involves explicitly considering a social target's viewpoints and experiences (Zaki, 2017) and has reliably been associated with reductions in prejudice and stereotyping of out-group members (Todd & Galinsky, 2014). Consequently, we predicted that positive BCPE would be more strongly associated with perspective taking than with empathic concern.

We also collected information on people's mindsets about the controllability of empathy (Schumann et al., 2014), their endorsement of tradition and hierarchies (system justification: Kay & Jost, 2003; social dominance orientation: Ho et al., 2015), their partisan social identity (Huddy et al., 2015), and their openness to experience (e.g., Soto & John, 2017), tolerance of ambiguity (Budner, 1962), and need for cognition (Cacioppo & Petty, 1982). All these measures have been associated with either increases or decreases in intergroup prejudice and division (see the Supplemental Material for more details) and thus have provided useful benchmarks to test the BCPE scale's convergent and discriminant validity.

*Measures of partisan division.* To test the predictive validity of the BCPE scale, we examined four key outcomes related to political division: two items of partisan animosity (e.g., "Please indicate how favorably or unfavorably you feel towards the average [out-party] voter";  $\alpha = .91$ ), two items on their desired out-party social distance (e.g., "How willing would you be to accept someone who votes for the [out-party] as a close friend?";  $\alpha = .78$ ), four items on their partisan moral disengagement (e.g., "[In-party members] are not just better for politics—they are morally right";  $\alpha = .82$ ), and three items on their support of bipartisan cooperation (e.g., "To what extent would you like to see more bipartisan collaboration?";  $\alpha = .75$ ).

Measures of partisan animosity and social distance have been widely used in political science to assess people's evaluations of the out-party and their comfort in interacting with out-party members (see Iyengar et al., 2019, for a review). Partisan moral disengagement reflects people's tendency to vilify out-party supporters while seeing the in-party as morally righteous (Kalmoe & Mason, 2019). Lastly, although the first three measures of partisan division were related to interpersonal relations, support for bipartisan cooperation is a political measure meant to assess BCPE's connection to views regarding the merits of bipartisan governance.

## Results

There was considerable variability on Americans' reported BCPE ( $M = 55.31$ ,  $SD = 18.46$ ; range = 0–100; see Figs. S2 and S3 in the Supplemental Material). BCPE also tracked a number of other relevant measures. People with positive BCPE tended to also report higher levels of perspective taking ( $r = .28$ ) and empathic concern ( $r = .16$ ), need for cognition ( $r = .27$ ), tolerance of ambiguity ( $r = .28$ ), openness to experiences ( $r = .22$ ), and desire for bipartisan cooperation ( $r = .29$ ). BCPE was negatively correlated with partisan social identity ( $r = -.22$ ), social dominance orientation, ( $r = -.19$ ), partisan animosity ( $r = -.25$ ), social distance ( $r = -.35$ ), and moral disengagement ( $r = -.45$ ). For information on phenomena with which BCPE was weakly correlated or uncorrelated, as well as a full correlation matrix of measures, see Figure S4 in the Supplemental Material.

To assess the unique predictive validity of the BCPE scale, we ran separate multiple linear regression models predicting partisan animosity, desire for bipartisan cooperation, social distance, and moral disengagement, while controlling for 16 other covariates. These covariates included demographics (i.e., age, gender, income, and education), political identification (i.e., political ideology, partisan strength, party identification, and partisan social identity), empathic concern, perspective taking, openness to experiences, tolerance of ambiguity, need for cognition, mindsets about the controllability of empathy, social dominance orientation, and system justification. Given the number of predictors, we probed multicollinearity using variance inflation factors (VIFs). All VIF values were below 2.5, which is below the customary cutoff (10) for high multicollinearity (Vittinghoff, 2012).

Importantly, model comparisons indicated that BCPE explained unique variance when predicting all collected measures of partisan division—partisan animosity:  $F(1, 371) = 9.04$ ,  $p = .003$ ; social distance:  $F(1, 371) = 17.12$ ,  $p < .001$ ; moral disengagement:  $F(1, 371) = 40.68$ ,  $p < .001$ ; and desire for bipartisan cooperation:  $F(1, 371) = 6.72$ ,  $p = .01$  (Table 1).

## Discussion

Study 1 provides evidence that BCPE is related, but not reducible to, other constructs relevant to empathy and partisan animosity. Importantly, even when controlling for a range of established constructs, we found that positive BCPE uniquely predicted measures of partisan division (Table 1),<sup>3</sup> further demonstrating the relevance of BCPE as a new construct.



**Table 1.** Study 1: Results for Each Criterion

| Criterion                         | M (SD)    | BCPE $\beta$<br>[95% CI] | BCPE<br>$r$ | Model fit                               |
|-----------------------------------|-----------|--------------------------|-------------|---|
| Desire for bipartisan cooperation | .66 (.24) | 0.13** [1.03, 1.25]      | .29         | $R^2 = .31^{***}$<br>$\Delta R^2 = .01$ |
| Partisan animosity                | .60 (.24) | -0.16** [0.77, 0.95]     | -.25        | $R^2 = .21^{***}$<br>$\Delta R^2 = .02$ |
| Social distance                   | .39 (.25) | -0.21*** [0.73, 0.90]    | -.35        | $R^2 = .29^{***}$<br>$\Delta R^2 = .03$ |
| Moral disengagement               | .51 (.24) | -0.30*** [0.68, 0.81]    | -.45        | $R^2 = .39^{***}$<br>$\Delta R^2 = .07$ |

Note: Mean and standard deviations are on a normalized scale ranging from 0 to 1;  $r$  coefficients represent zero-order correlations with belief in the utility of cross-partisan empathy (BCPE).  $\Delta R^2$  reflects the improvement in  $R^2$  after adding BCPE as a predictor to models that adjusted for openness to experiences, empathic concern, perspective taking, mindsets about the controllability of empathy, tolerance of ambiguity, need for cognition, partisan social identity, partisan strength, political ideology, party identification, system justification, social dominance orientation, income, gender, education, and age. CI = confidence interval.

\*\* $p < .01$ . \*\*\* $p < .001$ .

## Study 2

In our next study, we examined whether BCPE is associated with a real-world behavior: people's tendency to have positive relationships with out-party members. We hypothesized that participants with greater positive BCPE would be more likely to have more ideologically diverse friend groups.

## Method

**Participants.** In the spring of 2020,<sup>4</sup> we sent an online survey invitation to all first-year students at a western U.S. university and to students who live in dorms that include freshmen. We successfully recruited 46% of all students contacted for a total of 1,038 participants. All participants received monetary compensation for completing the survey.

To calculate the ideological homophily of their networks, we asked both participants and their friends to provide information on their ideology. To this end, participants were excluded from data analysis if they nominated only friends who did not participate in the study—precluding us from quantifying those friends' political ideology—or if they self-identified as “moderate” on the political-ideology scale ( $n = 350$ ). This exclusion criteria left us with a total sample of 688 participants—age:  $M = 19$  years old ( $SD = 2.16$ ); gender: 35% male; race/ethnicity: 23% White, 9% Black/African-American, 10% Latino/Hispanic, 19% Asian and 39% other or multiracial; political ideology: 16% extremely liberal, 50% liberal, 25% slightly liberal, 5% slightly conservative, 3% conservative, 1% extremely conservative.

**Procedure.** Participants completed an online Qualtrics survey that included demographic questions and social-network nominations as well as the perspective-taking and empathic-concern measures from Study 1.

Because of completion-time constraints, we measured beliefs about cross-partisan empathy using two BCPE scale items that had reliable internal validity (i.e., “empathizing with [out-group members] would be threatening to my beliefs as [an in-group member]” and “empathizing with [out-group members] would lead me to compromise too much on political issues I care about”; 1 = *a great deal*, 5 = *not at all*;  $\alpha = .65$ ;  $r_{\text{Spearman-Brown}} = .71$ ). To quantify participants' friend groups, we asked each person to nominate others in the university with whom they had positive relationships by answering four prompts (e.g., “Who makes you feel supported and cared for?” “Who are your closest friends?”). Each prompt allowed participants to nominate a maximum of six to 10 friends (see the Supplemental Material). There was significant overlap between friends nominated across prompts, resulting in an average of eight unique nominations per participant.

**Analysis strategy.** We calculated the ideological strength by collapsing the typical political-ideology measure (1 = *extremely liberal*, to 7, *extremely conservative*) into a 3-point scale (1 = *slightly liberal/conservative*, 2 = *liberal/conservative*, 3 = *extremely liberal/conservative*).

To calculate political homophily, we used the Coleman Index (Coleman, 1958), which is derived by:

$$C_i = \frac{H_i - w_i}{1 - w_i}.$$

The Coleman Index quantified the degree to which students preferentially nominated peers who shared their political ideology, while accounting for the fact that the sample skewed liberal. It is calculated by subtracting the share of in-group members in the whole sample from the share of nominated friends who were in-group members and then dividing this result by the share of out-group members in the whole sample.

For example, suppose participant A is part of a sample size of 100 people. Ten people in this sample share participant A's ideology, and 90 people in this sample do not. If participant A nominated 10 friends and seven of them shared participant A's ideology, this would mean that their homophily index would be  $(7/10 - 10/100)$  divided by  $(90/100) = .77$ . Given that the maximum homophily score is 1 (i.e., all friends are in-group members), this means that participant A has a fairly homophilous friend group even though participant A's group is the minority in the sample. As evidenced by this example, the Coleman Index also adjusts for the number of friends each person has. For example, a person who nominates 20 friends will have the same Coleman Index as a person who nominated 10 friends if their proportion of in-group-to-out-group nominations is the same.

## Results

Aligned with our hypothesis, students who had more positive BCPE were more likely to have ideologically diverse friend networks,  $\beta = 0.12$ ,  $SE = 0.04$ ,  $t(685) = 3.08$ ,  $p = .002$ , 95% confidence interval (CI) for  $\beta = [0.83, 0.96]$  (Fig. 1). BCPE remained a significant negative predictor of political homophily even when adjusted for empathic concern, perspective taking, political ideology, ideological strength, and gender,  $\beta = -0.10$ ,  $SE = 0.04$ ,  $t(661) = -2.44$ ,  $p = .01$ . Moreover, there was also no significant interaction between participants' BCPE and political ideology when predicting political homophily,  $F(1, 683) = 0.94$ ,  $p = .33$ , indicating that political ideology did not moderate the effects of BCPE.

## Discussion

Study 2 allowed us to assess BCPE predictive validity in a new sample with an ecologically valid dependent variable. These results highlight BCPE's relation to real-world social ties: Individuals who hold positive beliefs about cross-partisan empathy are less likely to have politically homophilous friend networks. We note that correlational findings cannot establish a clear causal relationship between BCPE and ideological homophily. Those who hold positive BCPE may be more open to connecting across political divides; alternatively, having ideologically diverse friend groups could lead people

to develop positive beliefs about cross-party empathy. To provide more direct evidence about the effects of BCPE on relevant outcomes, we moved to an experimental approach in Studies 3 and 4.

## Study 3

Studies 1 and 2 demonstrated that BCPE is associated with measures of partisan division. In Study 3, we used a preregistered experiment to examine the causal effects of a BCPE manipulation on downstream out-group evaluations and support for bipartisan governance.

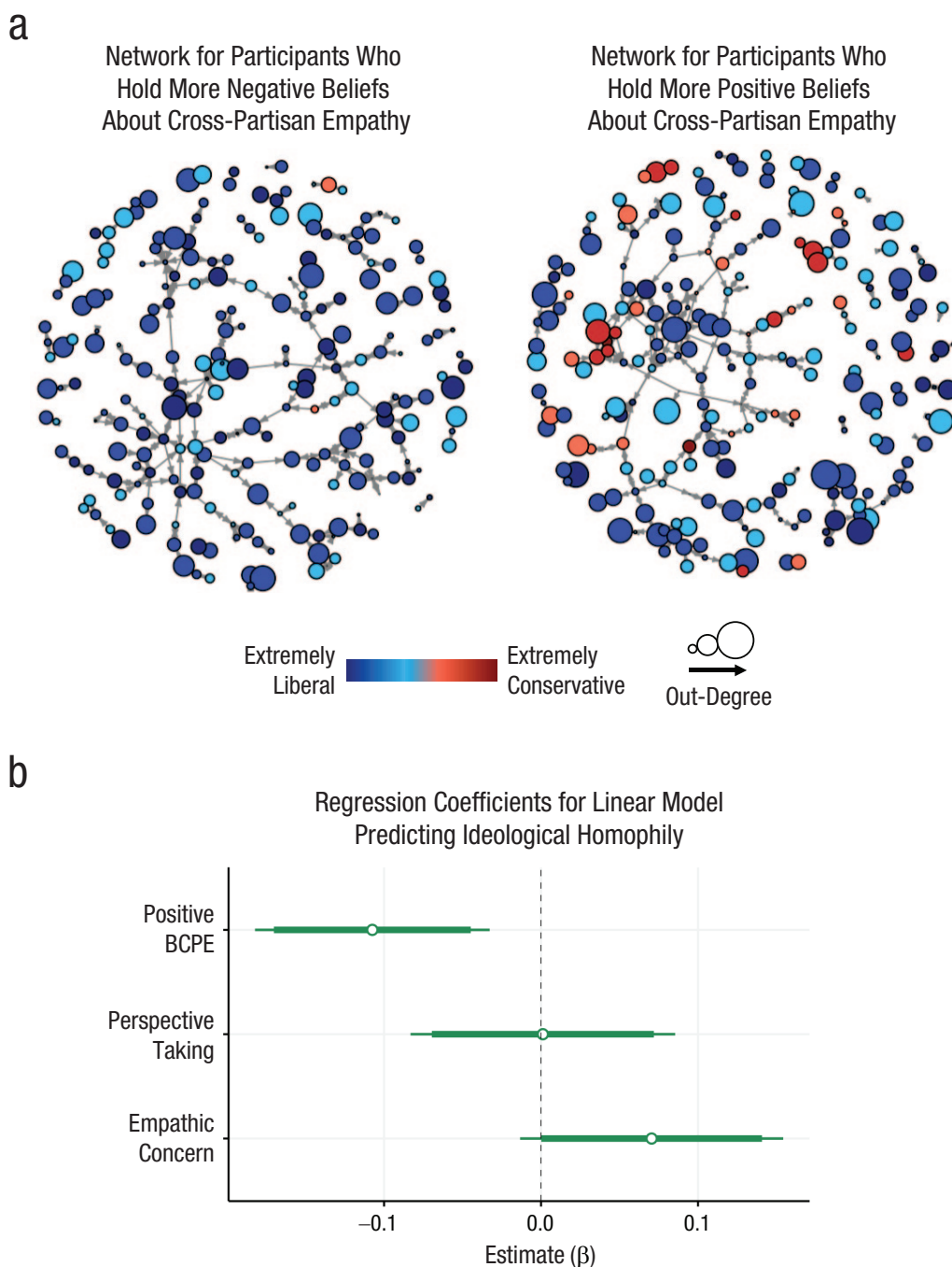
## Method

**Participants.** A priori power analyses suggested that 1,550 participants would give us approximately 80% power to detect a small effect ( $f \geq .08$ ) or 95% power to detect a medium effect ( $f \geq .2$ ). A recent review of anti-bias interventions suggests that it is reasonable to expect small effect sizes in experiments (Paluck et al., 2021).

To account for potential attrition, we recruited 1,615 U.S. adults from a large panel of prescreened Mechanical Turk (MTurk) workers that is maintained by the Laboratory for Social Research at Stanford University. This sample had previously passed a number of quality checks, including routine attention checks. To further maximize data quality, we invited only participants who had an approval rating of at least 90%. We also recruited only MTurk workers who had previously self-identified as either Democrat or Republican. Participants were paid \$2 for completing the study.

Following our preregistration, we excluded participants for using the same IP address ( $n = 3$ ) or for having missing values ( $n = 61$ ), leaving a final sample of 1,551 participants (51% Democrat, 49% Republican)—age:  $M = 41$  years old ( $SD = 12.90$ ); gender: 39% male; race/ethnicity: 78% White, 8% Black/African-American, 6% Latino/Hispanic, 7% Asian, 1% other. We did not preregister the exclusion of participants who failed attention checks because, in experimental designs, excluding participants from analyses after the manipulation can interfere with randomization and lead to selection bias and differential attrition (Fisher et al., 1990). However, to check whether our results were biased because of inattentive responding, we ran a robustness check (see the Supplemental Material) excluding all participants who failed attention checks ( $n = 60$ ) and found that removing these participants' data did not change our results (i.e., no findings went from being significant to nonsignificant).

**Procedure.** In this between-subjects experiment, participants either were given no information about cross-partisan empathy (control condition) or read a text arguing



**Fig. 1.** Belief in the utility of cross-partisan empathy (BCPE) in Study 1. BCPE was dichotomized (a) using a median split: Networks for participants who believe that cross-partisan empathy is disadvantageous (i.e., below the median) are shown on the left, and those for participants who believe that cross-partisan empathy is advantageous (i.e., above the median) are shown on the right. Each node represents a participant, and the connections between nodes represent participants' friend nominations. Isolated nodes were removed from the visualization. Note that if participants nominated only friends whose BCPE score was in the opposite category from their own, they would be displayed as isolated nodes. For example, if a person with a high BCPE score (person A) nominated a single friend whose BCPE score was below the median (person B), both people would be represented as isolated nodes. Person A would be an isolated node in the rightmost graph, and person B would be an isolated node in the leftmost graph. Because these isolated nodes were not interacting with their broader networks, we removed them from the visualization. The size of nodes is dictated by out-degree (i.e., the number of people nominated as friends), the color of the nodes reflects participants' political ideology, and the arrows indicate the directionality of the friendship. The plot (b) shows  $\beta$  estimates from a multiple regression model with BCPE as a predictor of political homophily adjusting for dispositional levels of empathic concern and perspective taking. Thick lines indicate 90% confidence intervals and thin lines indicate 95% confidence intervals. Coefficients with 95% confidence intervals that do not overlap zero are statistically significant ( $p < .05$ ).

that cross-partisan empathy generally increases (high-utility condition) or decreases (low-utility condition) an individual's political persuasiveness (see the Supplemental Material for full texts).

After reading the manipulation text, participants completed the BCPE scale, one measure of empathic motivation ("How much empathy do you **want** to feel toward Democratic/Republican voters?"; 1 = *no empathy at all*, to 5, *a great deal of empathy*) and one measure of empathic feelings ("How much empathy do you feel toward Democratic/Republican voters?"; 1 = *no empathy at all*, to 5, *a great deal of empathy*). Participants completed these measures for both the in-group and the out-group, followed by our Study 1 partisan-division measures in randomized order. We hypothesized that inducing people to hold more positive (vs. negative) BCPE would lead them to perceive cross-partisan empathy as more useful and to experience more out-group empathic motivation, increased out-group empathy, reduced animosity, and greater desire for bipartisan cooperation. We explored whether these treatment conditions would be significantly different from a neutral control and whether the manipulation would also produce changes in social distance and moral disengagement.

**Analysis strategy.** Following our preregistration, we analyzed data from this study using multiple regressions adjusted for gender, education, ethnicity, age, and political ideology.

## Results

**Manipulation check.** The treatments successfully manipulated beliefs in cross-partisan empathy. Our three conditions significantly impacted participants' BCPE. Compared with a no-treatment control condition ( $M = 3.46$ ,  $SD = 0.87$ ), the high-utility condition increased participants' positive BCPE ( $M = 3.65$ ,  $SD = 0.70$ ),  $\beta = 0.23$ ,  $SE = 0.06$ ,  $t(1536) = 3.98$ ,  $p < .001$ , 95% CI for  $\beta = [0.12, 0.35]$ , and the low-utility condition decreased positive BCPE ( $M = 3.05$ ,  $SD = 0.84$ ),  $\beta = -0.48$ ,  $SE = 0.06$ ,  $t(1536) = -8.14$ ,  $p < .001$ , 95% CI for  $\beta = [-0.60, -0.37]$ .

**BCPE manipulation drives out-group empathy.** We proposed that BCPE is an important factor in shaping people's decisions to empathize with out-group members. Results were aligned with this idea: Compared with the control condition ( $M = 2.38$ ,  $SD = 1.06$ ), the high-utility condition increased participants' out-group empathic motivation ( $M = 2.62$ ,  $SD = 1.00$ ),  $\beta = 0.24$ ,  $SE = 0.06$ ,  $t(1536) = 4.06$ ,  $p < .001$ , 95% CI for  $\beta = [0.12, 0.36]$ , and the low-utility condition decreased participants' out-group empathic motivation ( $M = 1.92$ ,  $SD = 0.84$ ),  $\beta = -0.46$ ,  $SE = 0.06$ ,  $t(1536) = -7.68$ ,  $p < .001$ , 95% CI for  $\beta = [-0.57,$

$-0.34]$ . Compared with the control condition ( $M = 2.04$ ,  $SD = 0.92$ ), the high-utility condition also increased participants' out-group empathy ( $M = 2.25$ ,  $SD = 0.92$ ),  $\beta = 0.22$ ,  $SE = 0.06$ ,  $t(1536) = 3.64$ ,  $p < .001$ , 95% CI for  $\beta = [0.10, 0.34]$ , and the low-utility condition decreased it ( $M = 1.80$ ,  $SD = 0.80$ ),  $\beta = -0.28$ ,  $SE = 0.06$ ,  $t(1536) = -4.57$ ,  $p < .001$ , 95% CI for  $\beta = [-0.40, -0.16]$ . These treatments did not significantly change people's in-group empathic motivation or in-group empathy (see the Supplemental Material for details), suggesting that BCPE increases out-group empathy without lowering the empathy individuals feel for in-group members.

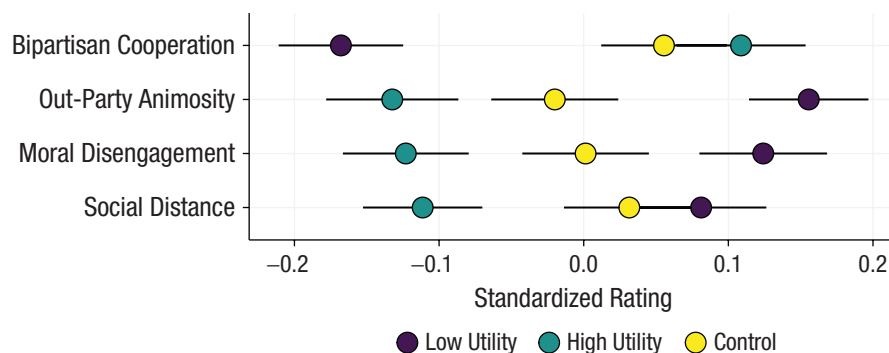
### **Positive BCPE's role in lessening political division.**

Compared with participants in the low-utility condition, participants in the high-utility condition reported decreased desire for party-based social distance, less partisan animosity, decreased moral disengagement, and increased desire for bipartisan cooperation (Fig. 2 and Table 2). On average, the high-utility (vs. low-utility) condition led to a 0.26 decrease (out of a 7-point scale) in desire for social distance, a 6.40 decrease (out of a 100-point scale) in animosity, a 0.34 decrease (out of a 7-point scale) in moral disengagement, and a 0.28 increase (out of a 5-point scale) in desire for bipartisan cooperation.

### **The effect of BCPE on strong versus weak partisans.**

Our manipulation shifted all four measures of partisan division, but it is possible that our effect is driven by partisans who are not strongly associated with their party and thus are more open to the idea that cross-partisan empathy can be useful. If so, this would be an important limitation of our results, as it would indicate that those who are particularly prone to view the out-group negatively—that is, strong partisans—are not moved by our manipulation. To test this, we checked whether our results were moderated by partisan strength. Although interactions between condition and partisan strength were not significant for social distance,  $F(2, 1545) = 1.54$ ,  $p = .22$ , or desire for bipartisan cooperation,  $F(2, 1545) = 2.19$ ,  $p = .11$ , we did find a significant interaction for moral disengagement,  $F(2, 1545) = 5.86$ ,  $p = .003$ , and a marginally significant interaction for partisan animosity,  $F(2, 1545) = 2.71$ ,  $p = .07$ . We ran follow-up analyses to examine whether these marginal and significant interaction effects were driven by stronger partisans being more resistant to our experimental manipulations. According to Tukey's honestly significant difference (HSD) comparisons, weak partisans in the high-utility (vs. low-utility) condition were not significantly different in their levels of partisan animosity or moral disengagement (see the Supplemental Material for all group comparisons). However, for strong partisans, the high-utility condition led to an 8.30-point decrease in animosity (out of a 100-point scale;  $p < .001$ ) and a 0.51-point





**Fig. 2.** Average z-scored rating on measures of support for bipartisan cooperation, out-party animosity, moral disengagement, and social distance, separately for the high-utility, low-utility, and control conditions in Study 3. Error bars represent standard errors.

decrease in moral disengagement (out of a 5-point scale;  $p < .001$ ) relative to the low-utility condition. Additionally, across all our dependent variables, the treatment effects were similar for Democratic and Republican participants (i.e., there was no significant interaction between condition and party affiliation).<sup>5</sup>

## Discussion

These results suggest that belief in cross-partisan empathy has important causal effects on people's feelings and attitudes toward out-partisans as well as on their level of support for bipartisan governance (see Table 2). Moreover, these findings indicate that strong partisans can be moved by beliefs about cross-partisan empathy. If anything, our manipulations had, in some cases, stronger effects on more partisan individuals.

## Study 4

Study 3 highlighted the importance of belief in cross-partisan empathy in shaping out-group evaluations. In a fourth study, we tested the powerful idea that, through changes in behavior, an individual's belief in the utility of cross-partisan empathy can impact the emotions and attitudes of the rival partisans they communicate with.

## Method

In a yoked-dyadic preregistered online experiment, we examined persuasion in the context of gun laws, a particularly polarizing issue in the United States. In 2020, representative polling findings indicated that about 85% of Democrats and 22% of Republicans supported stricter gun laws (Brenan, 2020).

**Table 2.** Effects of the Experimental Conditions on Dependent Variables in Study 3

| Dependent variable                | High-utility condition | Low-utility condition  | Control condition      | Low utility vs. control |                       | High utility vs. control |                       | High utility vs. low utility |                       |
|-----------------------------------|------------------------|------------------------|------------------------|-------------------------|-----------------------|--------------------------|-----------------------|------------------------------|-----------------------|
|                                   | <i>M</i> ( <i>SD</i> ) | <i>M</i> ( <i>SD</i> ) | <i>M</i> ( <i>SD</i> ) | $\beta$ ( <i>SE</i> )   | <i>t</i> ( <i>p</i> ) | $\beta$ ( <i>SE</i> )    | <i>t</i> ( <i>p</i> ) | $\beta$ ( <i>SE</i> )        | <i>t</i> ( <i>p</i> ) |
| Social distance                   | -0.11<br>(0.94)        | 0.08<br>(1.02)         | 0.03<br>(1.03)         | 0.05<br>(0.06)          | 0.85<br>(.39)         | -0.14<br>(0.06)          | -2.31<br>(.02)        | -0.19<br>(0.06)              | -3.15<br>(.002)       |
| Partisan animosity                | -0.13<br>(1.04)        | 0.15<br>(0.93)         | -0.02<br>(1.00)        | 0.19<br>(0.06)          | 3.03<br>(.002)        | -0.10<br>(0.06)          | -1.73<br>(.08)        | -0.29<br>(0.06)              | -4.74<br>( $< .001$ ) |
| Moral disengagement               | -0.12<br>(0.99)        | 0.12<br>(1.00)         | 0.001<br>(1.00)        | 0.12<br>(0.06)          | 1.99<br>(.05)         | -0.13<br>(0.06)          | -2.07<br>(.04)        | -0.25<br>(0.06)              | -4.05<br>( $< .001$ ) |
| Desire for bipartisan cooperation | 0.11<br>(1.02)         | -0.16<br>(0.97)        | 0.05<br>(0.99)         | -0.22<br>(0.06)         | -3.55<br>( $< .001$ ) | 0.06<br>(0.06)           | 0.98<br>(.32)         | 0.28<br>(0.06)               | 4.52<br>( $< .001$ )  |

Note:  $df = 1,536$ . Mean and standard deviations are z-scored. Regression coefficients are based on preregistered linear regression analyses adjusting for age, gender, political ideology, educational attainment, and ethnicity. Comparisons between the high- and low-utility condition revealed significant effects of the manipulation across all four measures of partisan division (rightmost column).

In the first part of this study (part A), we experimentally manipulated participants' belief in the utility of cross-partisan empathy by presenting them with high- or low-utility texts from Study 3. Participants were then asked to write a message to convince an out-party member about their views on gun laws. This data-collection procedure gave rise to a corpus of more than 1,000 participant-generated political messages. These naturalistic stimuli allowed us to study downstream effects of BCPE in a setting that more closely resembles real-life political exchanges than most laboratory experiments do (see Table S2 in the Supplemental Material for sample messages).

In the second part of this study (part B), a new set of participants was randomly assigned to read one of the out-party messages from the first part written by someone they disagreed with about gun control and preferred political party. After reading, participants rated how empathic and persuasive they perceived the message to be, how much they liked the message writer, and how favorably they felt toward the writer's whole group (i.e., Democrat or Republican voters in general).

We preregistered the hypothesis that readers of high-utility (vs. low-utility) writers would feel warmer toward them and find their messages more empathic. We explored whether these readers would also find these messages more persuasive and whether they would feel more positively toward the writer's whole group (i.e., Democrat or Republican voters in general).

**Participants.** A priori power analyses indicated that 1,050 participants in each part of Study 4 would give us approximately 80% power to detect a small effect ( $d \geq 0.18$ ). We recruited 2,138 U.S. adults from MTurk (through Cloud Research, previously known as TurkPrime) and paid participants \$2 for completing the study. Cloud Research manages a large panel of MTurk workers, and we recruited only those who had identified as Democrats or Republicans in previous Cloud Research surveys, were part of a high-data-quality subsample (which is curated via routine attention and fraud checks; see Litman et al., 2017), were 18 years and older, and were based in the United States. To further maximize data quality, we set an MTurk approval-rating threshold of at least 98%. To ensure that we had a different group of participants for each part of Study 4, we prevented participants who had completed part A from being recruited for part B. Participants were paid \$2 for completing part A and \$1 for completing part B.

Six participants were excluded in part A and 32 participants were excluded in part B because of missing values. Two participants were excluded in part B because they had identical IP addresses. After these exclusions, we had a final sample of 2,098 participants

(50% Republican, 50% Democrat). In part A ( $n = 1,049$ ), participants' mean age was 42 years old ( $SD = 13.60$ )—gender: 40% male; race/ethnicity: 81% White, 8% Black/African-American, 4% Latino/Hispanic, 5% Asian, and 2% other. In part B ( $n = 1,049$ ), participants' mean age was 40 years old ( $SD = 12.94$ )—gender: 46% male; race/ethnicity: 79% White, 8% Black/African-American, 6% Latino/Hispanic, 5% Asian, and 2% other.

Similar to Study 3, we did not preregister the exclusion of participants who failed attention checks. However, to check whether our results were biased by inattentive responding, we ran a robustness check excluding all participants who failed attention checks ( $n = 34$ ) and found that removing these participants' data did not significantly change our results (see the Supplemental Material).

**Procedure.** Participants were asked prescreening questions before starting the study. These questions included their self-identification with the two major political parties in the United States and their views on gun laws (i.e., "In general, do you feel that the laws covering the sale of firearms should be made more strict, less strict or kept as they are now?"). Participants were filtered into the study only if they endorsed views on gun laws that were congruent with the typical view of their political party (i.e., Democrats who supported stricter gun laws and Republicans who opposed stricter gun laws) and if they answered "yes" to a question asking, "Do you plan to complete the full study and follow all instructions?" These filtering criteria were made a priori and are documented in our preregistration documents on OSF (<https://osf.io/pqhvn>).

**Part A.** Participants were randomly assigned to read either the high- or low-utility texts from Study 3. After reading the manipulation text, participants were asked to write a two- to three-paragraph message intended to convince an out-party member to change their views on gun laws. Subjects were told that their messages would be shared with future out-party participants.

**Part B.** For each participant who completed part A, we assigned one participant in part B. Participants in part B were randomly assigned to read one message written by an out-party participant in part A.

After reading the message, participants were asked two items on how empathic the message was (e.g., "In your view, how empathic toward [in-party members] was the message you just read?";  $\alpha = .89$ ), three items on how persuasive the message was (e.g., "To what extent do you feel that you are more likely to oppose [support] stricter gun laws after reading the message from the Republican [Democrat] participant?";  $\alpha = .74$ ),

two items on how they felt toward the writer (e.g., “Please indicate how positively or negatively you feel towards the person who wrote the gun control message”;  $\alpha = .95$ ), and one item on how they felt toward the writer’s whole group (“Please indicate how favorably or unfavorably you feel towards the average [out-party] voter”).

### Analysis strategy.

**Language analysis.** To assess linguistic differences between the high-utility and the low-utility conditions, we employed data-driven and theoretically derived approaches. First, we determined the relative frequency with which participants used words and two- to three-word phrases using Differential Language Analysis Toolkit (DLATK), an open-source Python language-analysis package (Schwartz et al., 2017). To prune very infrequent terms, we selected words that had been used in at least three messages and two- to three-word phrases that were more likely than chance to co-occur (Kern et al., 2016). These yielded a final set of 12,507 words and phrases. To detect whether there were systematic differences in language use across conditions, we correlated these word and phrases with conditions while adjusting for writers’ party identification and correcting for multiple comparisons.

Moreover, to explore the broader semantic framings that emerged from each condition, we used latent Dirichlet allocation to extract the 20 principal topics found in our message corpus (Blei et al., 2003). After modeling the topics, we extracted the relative frequency with which participants in each condition used each of the 20 topics, thus summarizing condition language use over these semantic clusters (see Table S3 in the Supplemental Material for a description of all 20 topics).

Lastly, we asked two coders, blind to condition, to rate the messages across three different dimensions: extremity of position (1, *extremely less strict gun laws*, to 7, *extremely stricter gun laws*, intraclass correlation coefficient [ICC] = .77), conciliatory tone (1, *not conciliatory at all*, to 5, *extremely conciliatory*; ICC = .61), and number of arguments (i.e., “How many arguments did the writer make to support their position?”; ICC = .76).

**Out-party ratings.** To assess the effect of writers’ messages on readers’ attitudes, we ran preregistered multiple linear regression models predicting each dependent variable while adjusting for the readers’ age, gender, political ideology, educational attainment, and ethnicity.

## Results

We first explored the effects of our manipulation on the language participants used when communicating with out-partisans. While the low-utility condition was

not significantly correlated with any specific words or phrases, the high-utility condition was significantly associated with the use of perspective-taking language (e.g., “I understand that”) and the acknowledgment of common ground (e.g., “We all want,” “I agree”). In fact, compared with writers in the low-utility condition, writers in the high-utility condition were almost twice as likely to use these linguistic markers of cross-partisan empathy, odds ratio ( $OR$ ) = 1.82, 95% CI = [1.57, 2.10].

Further, topic analyses showed that although writers in the high-utility condition made arguments that appealed to superordinate groups (e.g., “Americans,” “citizens”) and common goals (e.g., “safety,” “security”), writers in the low-utility condition focused on crime (e.g., “police,” “armed”), violence (e.g., “deaths,” “violence”), and partisan divides (e.g., “Democrats,” “Republicans”; Fig. 3). Although research has shown that appeals to broader group identities and shared goals can decrease intergroup conflict (e.g., Levendusky, 2018), our work is the first to show that positive beliefs about empathy can lead people to spontaneously generate these conciliatory frames.

We then examined the effects of these notes on readers (Fig. 4 and Table 3). High-utility writers wrote messages that were seen as more empathic ( $M = 39.52$ ,  $SD = 26.94$ ) than low-utility writers ( $M = 27.99$ ,  $SD = 25.28$ ),  $\beta = 0.44$ ,  $SE = 0.06$ ,  $t(1035) = 7.37$ ,  $p < .001$ , 95% CI for  $\beta = [0.57, 0.72]$ . Messages from high-utility writers were also perceived to be more persuasive ( $M = 24.00$ ,  $SD = 19.96$ ) than messages from low-utility writers ( $M = 19.35$ ,  $SD = 18.71$ ),  $\beta = 0.24$ ,  $SE = 0.06$ ,  $t(1035) = 4.10$ ,  $p < .001$ , 95% CI for  $\beta = [0.70, 0.88]$ . High-utility writers were also better liked by out-partisans ( $M = 45.74$ ,  $SD = 25.38$ ) than low-utility writers ( $M = 37.95$ ,  $SD = 25.77$ ),  $\beta = 0.30$ ,  $SE = 0.06$ ,  $t(1035) = 5.00$ ,  $p < .001$ , 95% CI for  $\beta = [0.66, 0.83]$  and reduced out-partisans’ animosity toward their whole group ( $M = 2.34$ ,  $SD = 1.52$ ) compared with low-utility writers ( $M = 2.14$ ,  $SD = 1.40$ ),  $\beta = -0.14$ ,  $SE = 0.06$ ,  $t(1035) = -2.44$ ,  $p = .01$ , 95% CI for  $\beta = [0.77, 0.97]$ .

The effects on message ratings are sizable: messages from the high-utility condition were 98% more likely to be seen as empathic and 64% more likely to be seen as persuasive by out-partisan readers than ones from the low-utility condition.<sup>6</sup> Across all our dependent variables, there were no significant interactions between condition and party affiliation or condition and partisan strength.

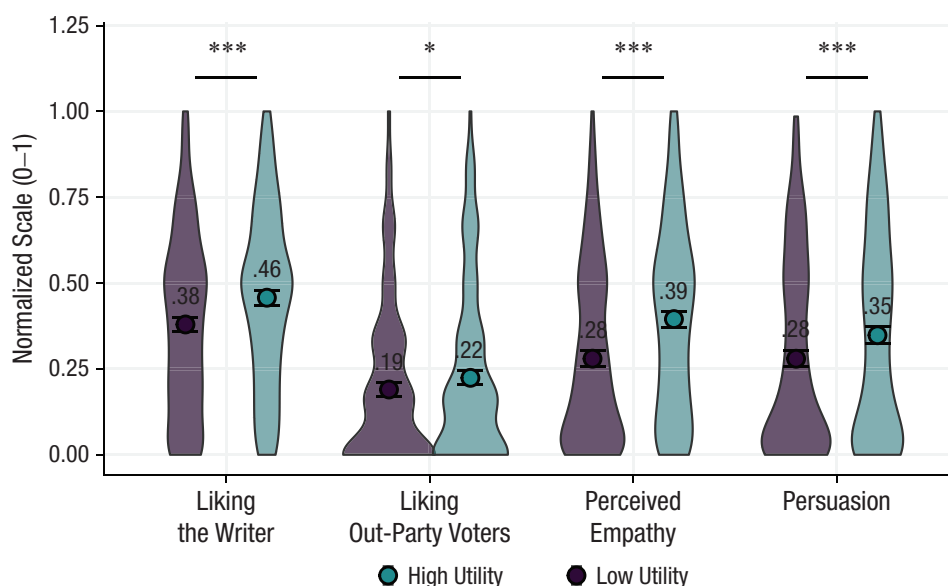
One potential explanation of these effects is that writers prompted to have high BCPE might be softening their arguments, making them more palatable to cross-party readers. To test this possibility, we analyzed coders’ data. First, we transformed our extremity-of-position measure to reflect the extremity of attitudes toward gun



**Fig. 3.** Topics significantly associated with the high- and low-utility conditions in analyses controlling for party identification in Study 4. Of the 20 topics modeled on this data set, we found three to be significantly associated with the high-utility condition (reducing mass shootings, increasing safety, American citizens and institutions) and three to be significantly associated with the low-utility condition (violence in the United States compared with other countries, crime, and partisan divides). The size of the words signifies their prevalence within the topic; colors have been shaded randomly for readability. Topics are ordered from least to most associated per row. Topics were labeled by the authors for central themes.

laws irrespective of political side. The midpoint of the scale (i.e., supporting neither less strict nor stricter gun laws) was coded as a 1, those supporting “slightly

stricter” or “slightly less strict” gun laws were coded as a 2, those supporting “stricter” or “less strict” gun laws were coded as a 3, and, lastly, those supporting



**Fig. 4.** Normalized rating on measures of liking the writer, liking out-party voters, perceived empathy, and persuasion, separately for the writer's condition in Study 4. Circles represent averages, error bars reflect bootstrapped 95% confidence intervals, and violin plots indicate the density of the data. Asterisks indicate significant differences between conditions (\* $p < .05$ , \*\*\* $p < .001$ ).



**Table 3.** Effects of the Writers' Condition on Readers' Responses in Study 4

| Dependent variable      | High-utility condition | Low-utility condition  | Low utility vs. high utility |                       |                           |
|-------------------------|------------------------|------------------------|------------------------------|-----------------------|---------------------------|
|                         | <i>M</i> ( <i>SD</i> ) | <i>M</i> ( <i>SD</i> ) | $\beta$ ( <i>SE</i> )        | <i>t</i> ( <i>p</i> ) | Cohen's <i>d</i> [95% CI] |
| Perceived empathy       | 0.39 (0.27)            | 0.28 (0.25)            | 0.44 (0.06)                  | 7.37 (< .001)         | 0.44 [0.32, 0.56]         |
| Persuasion              | 0.35 (0.29)            | 0.28 (0.27)            | 0.24 (0.06)                  | 4.10 (< .001)         | 0.24 [0.12, 0.36]         |
| Liking message writer   | 0.46 (0.25)            | 0.38 (0.26)            | 0.30 (0.06)                  | 5.00 (< .001)         | 0.30 [0.18, 0.43]         |
| Liking out-party voters | 0.22 (0.25)            | 0.19 (0.23)            | 0.14 (0.06)                  | 2.44 (0.01)           | 0.14 [0.02, 0.26]         |

Note:  $df = 1,035$ . Means and standard deviations are normalized (scale ranges from 0–1). Regression coefficients are based on linear regression analyses adjusting for age, gender, political ideology, educational attainment, and ethnicity. CI = confidence interval.

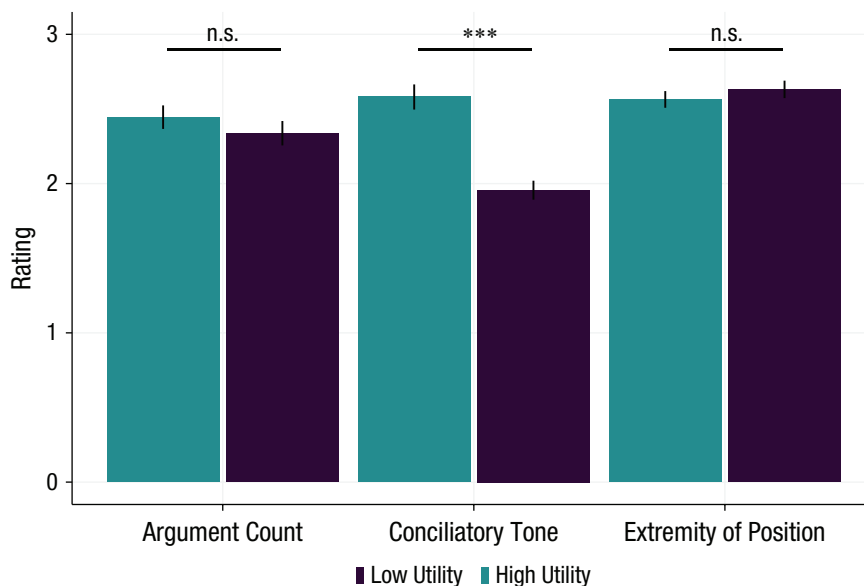
“extremely stricter” or “extremely less strict” gun laws were coded as a 4.

As shown in Figure 5, participants in the high-utility condition did not express significantly less extreme arguments around gun laws ( $M = 2.56$ ,  $SD = 0.63$ ) than those in the low-utility condition ( $M = 2.63$ ,  $SD = 0.67$ ),  $t(1017) = -1.62$ ,  $p = .10$ . There was also no significant difference in the number of arguments used by those in the high-utility condition ( $M = 2.44$ ,  $SD = 0.89$ ) compared with those in the low-utility condition ( $M = 2.33$ ,  $SD = 0.92$ ),  $t(1017) = 1.88$ ,  $p = .06$ . Aligned with our natural-language-processing analyses and readers' ratings, high-utility writers used a more conciliatory tone in their messages ( $M = 2.58$ ,  $SD = 1.02$ ) than low-utility writers ( $M = 1.96$ ,  $SD = 0.75$ ),  $t(1017) = 11.13$ ,  $p < .001$ . In brief, our conditions had no significant effect on the extremity of writers' arguments (negligible effect size,

$d = -0.10$ ) but did impact the conciliatory tone of their messages ( $d = 0.70$ ). Moreover, bias-corrected bootstrapping with 5,000 samples revealed that the indirect effect of extremity of position did not mediate the effect of condition on persuasion,  $\beta = -0.001$ ,  $SE = 0.004$ , 95% CI =  $[-0.012, 0.004]$ . The indirect effect of argument also did not mediate the effect of condition on persuasion,  $\beta = -0.003$ ,  $SE = 0.004$ , 95% CI =  $[-0.016, 0.003]$ , but the indirect effect of conciliatory tone is significant,  $\beta = -0.10$ ,  $SE = 0.02$ , 95% CI =  $[-0.155, -0.061]$ .

## Discussion

We found evidence that people's belief in cross-partisan empathy alters their behavior and creates reverberating effects on the attitudes of out-party members. Writers who learned that empathy can be useful spontaneously



**Fig. 5.** Mean estimate of coders' ratings of argument count, conciliatory tone, and extremity of position as a function of writers' condition in Study 4. Error bars represent 95% confidence intervals. Asterisks indicate significant differences between conditions ( $***p < .001$ ).

produced messages that signaled perspective taking and appealed to shared goals and identities. This, in turn, led readers to report greater warmth toward the writer and their group and to be more persuaded by their message. Importantly, our results suggest that our persuasion effects do not arise merely because writers who believe in the utility of empathy moderate their opinions. Rather, they make arguments that are similar in the extremity of their positions but do so in a conciliatory manner (Fig. 5).

There are several ways in which these findings are nontrivial. First, individuals' attitudes do not always translate into congruous behaviors (e.g., Wicker, 1969), especially if those behaviors clash with existing group norms (e.g., White et al., 2002). Given the acrimonious partisan backdrop in the United States, it is possible that even participants convinced of empathy's utility would remain hesitant to engage empathically with out-party members, especially when discussing a contentious issue. Second, even if individuals acted empathically, there is no guarantee that this would shift attitudes and emotions of out-party members. In intergroup contexts, people are motivated to maintain preexisting, group-relevant beliefs (Kunda, 1990) and tend to disregard information that is belief incongruent (Taber & Lodge, 2006). However, despite these potential psychological barriers, we found that our manipulation significantly changed not only people's behaviors, but also the views of those they disagreed with.

## General Discussion

Across four studies, we demonstrated that empathy beliefs drive not only group-based emotions (e.g., increased empathy and reduced animosity) but attitudes (e.g., increased desire for cooperation, decreased moral disengagement, lower desire for social distance) and communication tactics (i.e., political rhetoric regarding a contentious topic). These beliefs further operate in self-fulfilling ways. In Study 4, when writers believed empathy could be useful, it became useful, leading them to produce more persuasive messages that reduced out-partisans' animosity and persuaded them more effectively.

From a theoretical perspective, our findings add significantly to the basic science of emotion and lay theories. Previous work has highlighted that empathy can either increase or mitigate intergroup conflict on the basis of how people deploy it (e.g., Bruneau et al., 2017; Zaki & Cikara, 2015). Our findings indicate that BCPE is an important driver of people's motivation to empathize with the political out-group. We have demonstrated that these emotion beliefs have significant intrapersonal consequences—improving individuals'

intergroup attitudes and eliciting empathic cross-partisan communications—even in active intergroup conflicts. Importantly, our findings also provide a clear example of the reverberating effects of one person's emotion theory on the experiences of others through a mechanistic interpersonal process centered on empathic engagement. Converging natural-language-processing and human-annotation analyses indicate that people in our high-utility (vs. low-utility) condition were able to change out-group members' views not by tempering their own beliefs, but by communicating them in a more empathic and conciliatory manner.

## Future research

We hope that this work provides a generative framework for future intergroup research. In the partisan environment of U.S. politics, empathy tends to be biased toward in-group members, furthering parochialism and division (Simas et al., 2020). However, we have demonstrated that this bias can be downshifted by altering people's emotional lay theories. When people believe in the utility of cross-party empathy, they intentionally divert their empathy to those who disagree with them. In the context of our work, this renders them more compelling advocates for their own political views. We hope that future work adapts this framework to different intergroup conflicts to test the robustness of these effects in other settings. Additionally, although the Study 1 sample was quota-matched to U.S. census data, Studies 2, 3, and 4 relied on convenience samples. Future work should examine whether our network and experimental results generalize in more diverse participant samples.

More work is also needed to establish all processes underlying our effects. In Study 3, changes in BCPE reduced participants' partisan animosity even absent any new interactions with an out-partisan. This raises questions regarding exactly how empathy beliefs can impact information selection and processing. For example, people feeling more positively toward the out-group participants may be employing emotion-regulation strategies, such as reappraising their out-group attitudes or suppressing their negative feelings. They could also be retrieving different prototypical group members from memory—for instance, thinking about a friendly acquaintance who supports the out-party, versus an extreme out-party talk-show host. Future researchers should aim to disentangle these strategies and test differences in effectiveness.

We did not measure the longevity of our effects. Meta-analyses on antibias interventions suggest that such effects tend to be short-lived (Paluck et al., 2020). However, it is possible that prompting positive BCPE can act as a "wise intervention" (Walton, 2014). For

instance, a person who learns about the utility of cross-partisan empathy may start communicating with out-partisans in more empathic ways, leading them to have better cross-party interactions, which could in turn further propel the belief that empathy is useful. Therefore, even though brief, an intervention that increases people's BCPE could cause long-lasting change by targeting a reiterative process that has cascading effects in their daily lives.

## Conclusion

Growing animosity can hinder support for efficient bipartisan coordination around vital national matters (e.g., Druckman et al., 2021; Hetherington & Rudolph, 2015), such as the COVID-19 pandemic, climate change, and electoral integrity, and affect nonpolitical social relationships, such as friendships, hiring decisions, and dating choices (see Iyengar et al., 2019, for a review). We propose that belief in the utility of empathizing across party lines can shape people's openness to potentially productive contact and dialogue. Believing in cross-partisan empathy's usefulness helps people attain shared goals of decreasing partisan animosity and building consensus around critical issues. In this light, cross-partisan empathy can be a valuable resource—an instrumental tool for not only connecting minds but also changing them.

## Transparency

*Action Editor:* Jamin Halberstadt

*Editor:* Patricia J. Bauer

### Author Contributions

L. A. Santos, J. G. Voelkel, R. Willer, and J. Zaki designed the studies and collected the data. L. A. Santos analyzed the data. L. A. Santos and J. Zaki wrote the manuscript. J. G. Voelkel and R. Willer provided comments on the manuscript. All the authors approved the final manuscript for submission.

### Declaration of Conflicting Interests

The author(s) declared that there were no conflicts of interest with respect to the authorship or the publication of this article.


### Open Practices

All data, analysis code, and materials have been made publicly available via OSF and can be accessed at <https://osf.io/r7bes/>. The design and analysis plans for the experiments were preregistered on OSF (Study 3: <https://osf.io/dt7vy>, Study 4: <https://osf.io/pqhvn>). This article has received the badges for Open Data, Open Materials, and Preregistration. More information about the Open Practices badges can be found at <http://www.psychologicalscience.org/publications/badges>.



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## Supplemental Material

Additional supporting information can be found at <http://journals.sagepub.com/doi/suppl/10.1177/09567976221098594>

## Notes

1. ForthRight asks participants in their panel to report their party affiliation on a scale ranging from 1, *strong Democrat*, to 7, *strong Republican* ("Generally speaking, do you think of yourself as a..."). Participants who identified as independents, chose "other," or did not report a party preference were not invited to participate in this study.
2. VPN use has been associated with an increase in fraudulent responses (Kennedy et al., 2020). We used the R package *rIP* and the IP Hub (<https://iphub.info/api>) application programming interface (API) license to detect VPN use on all studies conducted online (Studies 1, 3, and 4). In all studies, removing participants who used VPNs and foreign IP addresses did not significantly alter our findings (see the Supplemental Material for details).
3. We ran a smaller version of Study 1 using a Mechanical Turk (MTurk) sample and again found BCPE to be highly predictive of measures of partisan division (see the Supplemental Material for details).
4. We collected data for Study 2 during the onset of COVID-19 lockdowns. During this time, students were less likely to interact with each other in person, which may have led them to nominate only closer friends. We have no reason to believe that this potential reduction in network size impacted the relationship between BCPE and the degree of ideological homophily in people's friend groups.
5. We also did not find strong evidence for differential attrition across conditions (see the Supplemental Material for details).
6. These percentages reflect odds-ratio increases when predicting binarized versions of our measures on empathy and persuasion (see the Supplemental Material for details).

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