

# Bridging the Divide: The Effect of Individuating Information on Attitudes Toward Political Outgroup Members

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



## Abstract

Liberals and conservatives in the United States exhibit intergroup bias toward those on the other side. In three preregistered experiments ( $N = 1,389$ ), we examined the bias-reducing benefits of individuating members of the political outgroup by providing people with individuating information—information that provides knowledge about them beyond their group membership, such as their social roles, emotions, and personality. Studies 1 and 2 extended work on individuating information into this domain by testing its impact on a novel political outgroup member. Study 3 broke new ground by testing whether the benefits of learning individuating information can extend to additional members of the outgroup. Each methodology revealed that, compared to those who read non-individuating controls, participants who learned individuating information about a political outgroup member were less hostile and more empathic toward that outgroup member. The current studies thus identify a promising avenue for reducing interparty hostility.

## Keywords

individuating information, political intergroup bias, empathy, intergroup relations, affective polarization

Over recent years, Americans ascribing to different political ideologies have become increasingly hostile toward one another (Finkel et al., 2020). Because liberals and conservatives see members of the other political group as outgroup members, they view them as a homogeneous group (e.g., Farwell & Weiner, 2000) and this lack of individuation harms interpersonal relationships and inhibits cross-party interactions. In this paper, we test the effect of individuating information on reducing bias toward political outgroup members. Across three preregistered experiments, we find that presenting participants with individuating information about a political outgroup member reduces hostility and promotes empathic effort toward them. This work offers insights into how we might begin to break down barriers to positive interparty relations.

## Political Bias in the United States

Perhaps more than ever before, the political climate in the United States is defined by hostility. Liberals and conservatives are biased toward the political outgroup (Iyengar & Westwood, 2015), experiencing less empathy toward them (Ditto & Koleva, 2011), seeing them as less moral (Chambers et al., 2013), and dehumanizing them (Martherus et al., 2021). Researchers also find an increase in affective polarization—negative emotions towards members of the ideological



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outgroup (Iyengar et al., 2019). Partisans dislike the other side even more than they love their own, and hostility toward the outgroup now drives political participation more than positivity toward one's ingroup (Finkel et al., 2020).

This intergroup bias undermines the initiation, health, and maintenance of cross-party interpersonal relationships. Liberals and conservatives in the United States avoid each other, limiting the number of friends who disagree with them politically (Motyl et al., 2014). American partisans also support breaking off friendships with those whose views are counter to their own (Buliga & MacInnis, 2020), and tend to marry within party lines (Rosenfeld et al., 2011).

These negative (or absent) interpersonal experiences feed into a cycle of intergroup bias. Negative contact experiences make group categories more salient (Paolini et al., 2010), and a lack of positive contact experiences reduces the chances of improving intergroup relations (Paluck et al., 2019). Moreover, people who are not satisfied with their interparty friendships and romantic relationships also have negative perceptions of the political outgroup (Buliga et al., 2021), suggesting that hostility that occurs at the level of our interpersonal relationships can breed hostility toward the broader group, consequently contributing to greater political division at the societal level.

One reason for this interparty hostility is the psychological bias that results from social categorization processes. According to Social Identity Theory (Tajfel & Billic, 1974), people derive part of their self-worth from their social groups and identities and are therefore motivated to uphold positive group identities. To do so, they quickly categorize dissimilar others as outgroup members (Fiske et al., 2018), exaggerate differences between ingroup and outgroup members (Hornsey, 2008), and view outgroup members as a homogeneous group (Rubin & Badea, 2012). As a result, they generalize (typically negative) stereotypical judgments to all members of the group (e.g., Park & Hastie, 1987).

This social categorization and resulting intergroup bias is evident in the American political context. Partisans strongly identify with their political group, leading to an "us" vs. "them" worldview (West & Iyengar, 2022). They assume that political outgroup members all share similar values (e.g., conservatives stereotype liberals as overly emotional while liberals stereotype conservatives as heartless; Crawford et al., 2013), and exaggerate how much the outgroup has stereotype-consistent demographic characteristics (e.g., how many liberals identify as LGBT; Ahler & Sood, 2018) and ideological perspectives (e.g., conservative support for defense spending; Westfall et al., 2015). Exacerbating the problem is the information they are exposed to: because people seek out and trust sources of information that support their preexisting views, they most frequently encounter news (Jurkowitz et al., 2020) and social media (Bail et al., 2018) that confirm their stereotypes of the outgroup and perpetuate hostility.

## The Role of Individuating Information

The intergroup bias that results from social categorization suggests that political bias in the United States can be attenuated by reducing people's tendency to see outgroup members solely as representatives of a homogenous group. One way to do so would be to encourage individuation—seeing someone as an individual rather than solely as a group member (Fiske et al., 2018). This would mean that when someone encounters a new outgroup member, they would not see them simply as a liberal or conservative group member, but as a unique human being with the potential to hold non-stereotypical characteristics.

Individuation of outgroup members can occur with exposure to individuating information—information about an individual person's life or personality that may result in downplaying the initial categorization and seeing that person as more than just a stereotypical representative of their group (Fiske et al., 2018). Individuating information provides new knowledge about a person beyond their group membership. The perceiver integrates new information into their impression, even if it does not override their initial impression completely. In so doing, they rely less on that person's group category when forming attitudes toward them, thereby opening them up to more positive attitudes toward the individuated target. In other words, if social categorization provides the basis for "us" vs. "them" differentiation and the bias that follows this differentiation, reducing the reliance on group membership information should reduce this bias. Indeed, in various intergroup contexts, individuation has been shown to promote prosocial behavior (Lee et al., 2021) and humanization (Prati et al., 2016) and decrease reliance on stereotypes (Kunda & Sherman-Williams, 1993) and discrimination (Singletary & Hebl, 2009).

Given these benefits, might individuating information improve attitudes toward a novel member of the political outgroup? To our knowledge, two papers examined the effectiveness of individuating information in a political context.

In one, individuating information reduced people's tendency to rate an ingroup candidate as more electable than an outgroup candidate (Price-Blackshear et al., 2019). In a second, researchers examined when people will rely on individuating information (a politician's position on specific issue) vs. stereotypes (their party membership) when making assumptions about a politician's stance on other political issues (Crawford et al., 2011). However, this prior work cannot speak to how we can promote more positive attitudes and interactions between *average* conservatives and liberals—people who make up the social fabric of the United States and whose relationships with each other have the capacity to guide the political landscape. We therefore extend research on individuating information by examining this question in Studies 1 and 2. We predict that learning individuating information about an outgroup member will lessen the tendency to view someone as *only* an outgroup member and consequently subject them to category-based negative assumptions.

Other research has demonstrated that an emphasis on the individual rather than the group can have benefits. One example is research on the "person-positivity bias," which finds that people have more positive perceptions of individuals from an outgroup than the outgroup as a whole (Sears, 1983). Interestingly, this effect reverses to a person-*negativity* bias when the target is a representative of a political outgroup (Bolsen & Thornton, 2021), likely because the outgroup politician was perceived as a prototypical (and possibly stereotypical) representative of their group. Another body of research suggests that a reduced focus on group categories might put people in a mindset that can reduce their tendency to show intergroup bias. For example, Americans report less internalization of their political social identity when their political group identities are less salient (e.g., when an election is not taking place; West & Iyengar, 2022). Together, the extant literature suggests that shifting attention from group categories to the individual might be an effective way to attenuate political bias. We test that idea directly in Studies 1-3.

The process that occurs through individuating information is similar to the process of *multiple categorization* (Prati et al., 2016). Individuating information results in deprioritizing the categorization of a target's group identity (e.g., conservatives) for a more individual identity (e.g., a person with conservative beliefs and various other characteristics). Multiple categorization seeks to decategorize by providing additional social category memberships (e.g., a conservative and a salesperson). Because multiple ways to categorize the person are available, categorizing offers a less efficient and useful way to make judgments about the person. This decategorization process leads to more individuated perceptions of the person and reduced bias (Prati et al., 2016). In the current work, our manipulations include details that may also function as cues for multiple categorization. For instance, learning that someone is a parent provides individuating information about them beyond their group membership and categorical information that they belong to the social category of parents. Thus, aspects of our manipulation may provide both individuating and multiple category information, both of which result in more individuated perceptions and less reliance on the original outgroup categorization.

## Predicted Outcomes of Individuating Information

In this research, we focus primarily on improving attitudes toward individual members of the political outgroup. Because individuating information functions by helping people perceive someone as an individual rather than simply as a member of their social category, the benefits of individuating information often do not generalize to the broader group as a whole (see Scarberry et al., 1997). However, as with the prejudice-reduction benefits gained from intergroup contact (Paluck et al., 2021), we believe that reducing bias toward even a single member of the political outgroup has the potential to create a ripple effect, opening the door for more positive relationships with additional political outgroup members. We extend research on individuation processes by being the first to test this idea in Study 3.

Although we anticipate that individuating information can reduce bias in many different forms, we focus on four core attitudinal outcomes in the current research: (1) dehumanization, (2), negative affect, (3) empathic effort, and (4) perceived morality. We selected these outcomes because they cover a range of affective, cognitive, and motivated reactions to the target and are all associated with meaningful behaviors. For each of these outcomes, we predicted that individuating information would improve attitudes (i.e., decrease dehumanization and negative affect; increase empathic effort and perceived morality) by shifting the basis of evaluation from the target's group membership to their individuated characteristics. In so doing, we expected participants to focus less on intergroup differentiation and

therefore to be less likely to exhibit negative biases toward the target simply because of their outgroup membership. Below we describe the importance of each outcome in more detail.

### Dehumanization

Dehumanization is the tendency for people to consider outgroup members as less than fully human (Haslam, 2006). Dehumanization predicts hostility, aggression, and unwillingness to compromise (Bruneau & Kteily, 2017), and is commonly observed between political outgroup members (e.g., Martherus et al., 2021). We expected individuating information to reduce dehumanization of the outgroup target by reducing people's tendency to see them simply as a stereotypical liberal or conservative group member. Past research supports that shifting to an individuated focus can reduce dehumanization (Prati et al., 2016). We measured dehumanization using a blatant pictorial measure in Studies 1 and 2, then switched to self-report humanization scales in Study 3 due to measurement issues.

### Negative Affect

Affective responses are a common and meaningful measure of political bias (e.g., Iyengar et al., 2019). Prior work finds that individuating information reduces bias towards outgroup members (e.g., Rubinstein et al., 2018). We predicted that this effect would replicate in the political context in the form of improved affect toward the individuated target, again by deemphasizing the target's group membership. Because we were focused on attitudes toward individual outgroup members rather than on general perceptions of the outgroup, we measured affective responses toward an individual in place of the common feeling thermometer (Iyengar et al., 2019).

### Empathic Effort

While recent research finds that empathy is motivated and malleable, people are often not motivated to empathize with political outgroup members and disengage from empathic opportunities (Schumann et al., 2014). This is unfortunate because empathy tends to reduce hostility and promote constructive conflict resolution processes (Schumann & Dragotta, 2021). Prior work finds that individuating information reduces the intergroup empathy gap in the context of novel competitive groups (Bruneau et al., 2015). We therefore predicted that individuating information would increase a willingness to empathize with political outgroup members.

### Perceived Morality

Perceptions of morality are closely tied to biases (De Freitas & Cikara, 2018) and affective polarization (Garrett & Bankert, 2020). When people frame conflicts in moral convictions, it limits compromise (Ryan, 2017) and leads to outrage (Crockett, 2017). Improving perceived morality of outgroup members is therefore a critical step in improving relations. Because people stereotype political outgroup members as extreme and immoral (Iyengar et al., 2012), we predicted that individuating information would reduce reliance on these group stereotypes and increase perceptions of morality.

In addition to these four primary attitudinal measures, in Study 3 we also included a behavioral outcome to assess whether the benefits of the individuating information might impact how people actually respond to an outgroup member. Specifically, we asked participants to respond to a politicized tweet written by the target, and then coded these responses for degree of understanding and antagonism.

## Research Overview

In the present research, we tested the impact of individuating information on attitudes toward a political outgroup member across three preregistered experiments. The first two studies were designed to conceptually replicate the benefits of individuating information in the context of political conflict between average conservatives and liberals (rather than toward elected political officials). In Study 1, we tested the effect of individuating information against a control containing only political information and compared the effects of this manipulation for an outgroup vs. ingroup target. In Study 2, we tested the effect of individuating information against an equal length narrative control condition

and compared the effects of this manipulation for an outgroup vs. unspecified political target. Although we anticipated that individuating information might also show some benefits for ingroup (Study 1) or politically unspecified (Study 2) targets, we included these comparison conditions to test whether the benefits of individuating information would be *at least as* beneficial for attitudes toward political outgroup members, because this is the context where bias reduction is necessary.

After first establishing the benefits of individuating information in this context in Studies 1 and 2, we then break new ground in Study 3 by testing whether the benefits of individuating information can extend past one individuated target. Although improving attitudes toward a single outgroup member is still meaningful, the potential impact of an individuating information intervention grows considerably if the benefits ripple out from the individuated outgroup member to other members of the outgroup. We therefore assessed whether being exposed to individuating information about an outgroup member leads to more positive attitudes toward members of the individuated target's social network.

For all studies we report all measures, manipulations, and exclusions. All studies were preregistered (see [Supplementary Materials \[SM\]](#)). Sample sizes were also preregistered, aiming to recruit 100 (or more) participants per condition in every study ([Simmons et al., 2013](#)). To see all preregistered analyses not reported in the paper, please see [SM](#). The results of two additional studies conducted in this line of work are also presented in the [SM](#).

## Studies 1 and 2

In Studies 1 and 2, we sought to conceptually replicate the impact of individuating information in a new domain: among lay members of political groups in the United States.

In Study 1, liberal and conservative participants read about a target who ostensibly belonged to either their political outgroup or ingroup. We examined whether individuating information would be helpful when encountering an outgroup member and included an ingroup member condition to determine how the benefits for an outgroup member compared to the benefits for an ingroup member. We anticipated that individuating information would be at least as beneficial for the outgroup target as the ingroup target, because it is in the outgroup context where there is bias to reduce.

Participants were randomly assigned to read one of three profiles. For those in the political cue control condition, they read only about the target's political orientation. This condition was compared to one of two individuating conditions that differed only by when the target's political orientation was presented (either before or after learning individuating information about the target). We hypothesized that when participants read the target's political orientation earlier in the narrative, the manipulation would be less effective. This prediction was based on work on first impressions, wherein earlier information is given more weight over later information ([Asch, 1946](#)). If political orientation was disclosed earlier, we expected it would render the individuating information less effective. However, the two individuating conditions did not differ from each other on any outcome, suggesting that the order of presentation did not influence the effectiveness of the individuating information. We therefore present these two conditions collapsed in all analyses for simplicity and consistency of design across studies. Results using the full design are presented in the [SM](#).

### Study 1: Method

#### Participants

We collected 602 participants<sup>1</sup> from Prolific Academic ([Palan & Schitter, 2018](#)). In all studies we only recruited participants from the United States. As was preregistered, we excluded those who failed the attention check ( $n = 5$ ), leaving a final sample of 597 (292 female, 298 male, 5 non-binary/third gender; 509 White, 40 Latinx, 36 Black or African American, 25 Asian, 11 Native American, 1 Middle Eastern or North African, and 2 Other;  $M_{age} = 38.36$ ,  $SD_{age} = 13.53$ ).

1) Two participants reported identical ID numbers and similar answers on the survey, indicating that one participant might have taken the survey twice. Removing both these cases does not change any of the results reported in the paper.

Using selection criteria in Prolific, we screened to include roughly equal numbers of liberals ( $n = 299$ ) and conservatives ( $n = 298$ ). A sensitivity analysis at 80% power revealed that we were powered to detect a small interaction effect ( $f = .11$ ; Faul et al., 2007).

## Materials and Procedure

**Manipulations** — Study 1 was a 2 (political ingroup vs outgroup)  $\times$  2 (individuating information vs. non-individuating political cue control) experimental study. Participants first encountered one of four vignettes about a fictional character named Alex, all of which took the form of describing a day in the life of Alex. These vignettes differed on two dimensions. First, Alex was described as a member of either the participant's political ingroup (e.g., a conservative participant read that Alex was conservative) or outgroup (e.g., a conservative participant read that Alex was liberal). Second, the vignettes contained either individuating information or no individuating information about Alex in the control condition. Because individuating information provides new knowledge about a person beyond their group membership, we included information that would allow participants to feel like they know the target (social roles, personality, and general life narrative; McAdams, 1995; Singletary & Hebl, 2009). See SM for full manipulation text and Supplementary Study 2 for effects of smaller amounts of individuating information.

**Outcomes — Dehumanization.** Participants completed an ascent dehumanization measure (Kteily et al., 2015), which assesses blatant dehumanization reserved for outgroups that people are most prejudiced against. Using a slider 0 (*Very animalistic*) to 100 (*Very human*), participants rated Alex on a pictorial representation of dehumanization that contained five silhouettes, ranging from ancestors reminiscent of modern apes, to more upright ancestors, to full humans.

**Negative Affect.** Participants then completed a measure of negative affect (adapted from Husnu & Crisp, 2010). This measured how participants felt toward Alex on six different affective pairs (e.g., Warm/Cold; Admiration/Disgust) assessed on a nine-point scale ( $\alpha = .92$ ).

**Empathic Effort.** Participants completed a six-item measure of empathic effort towards Alex (adapted from Schumann et al., 2014), which assessed how willing participants would be to invest effort to empathize with Alex (e.g., "When talking to Alex, to what extent would you try to put yourself in her shoes?") on a scale of 1 (*Not at all*) to 7 (*Very much*) ( $\alpha = .95$ ).

**Perceived Morality.** Participants completed a measure of perceived morality (adapted from Brambilla et al., 2013), answering four items (e.g., honest, trustworthy) about Alex's morality on a scale of 1 (*Not at all*) to 7 (*Extremely*) ( $\alpha = .94$ ).<sup>2</sup>

## Study 1: Results

Because controlling for demographic variables did not affect results, below we report models without these controls for ease of interpretation (see SM for preregistered models that control for demographics).

We conducted a 2 (group condition: ingroup vs. outgroup)  $\times$  2 (individuating condition: individuating information vs. non-individuating control) MANOVA on the four outcomes<sup>3</sup>. Significant effects emerged for group condition,  $F(4, 588) = 34.93$ ,  $p < .001$ ,  $\eta_p^2 = .19$ , individuating condition,  $F(4, 588) = 44.87$ ,  $p < .001$ ,  $\eta_p^2 = .23$ , and their interaction,  $F(4, 588) = 6.75$ ,  $p < .001$ ,  $\eta_p^2 = .04$ . To decompose these effects, we conducted  $2 \times 2$  ANOVAs on each outcome (see Table 1 for condition means and Table 2 for test statistics).

2) In both Studies 1 and 2, participants also completed measures of implicit theories of empathy (Schumann et al., 2014), implicit theories of groups (Halperin et al., 2011), symbolic threat (Stephan et al., 1999), and network heterogeneity (Scheufele et al., 2006). Preregistered analyses that used these measures are reported in the SM. In all studies participants reported political orientation, political interest, strength of their political affiliation, and demographics.

3) MANOVAs were not preregistered.

**Table 1***Descriptive Statistics by Condition, Study 1*

Outcome	Ingroup		Outgroup	
	Control <i>M (SD)</i>	Individuating <i>M (SD)</i>	Control <i>M (SD)</i>	Individuating <i>M (SD)</i>
Ascent Dehumanization	96.77 <sub>a</sub> (5.78)	95.90 <sub>a</sub> (7.84)	88.82 <sub>b</sub> (18.20)	93.34 <sub>a</sub> (12.92)
Negative Affect	3.18 <sub>a</sub> (1.32)	2.31 <sub>b</sub> (1.05)	5.19 <sub>c</sub> (1.62)	3.16 <sub>a</sub> (1.66)
Empathic Effort	5.51 <sub>a</sub> (1.02)	5.45 <sub>a</sub> (1.15)	4.61 <sub>b</sub> (1.31)	5.20 <sub>a</sub> (1.24)
Morality	5.49 <sub>a</sub> (1.02)	6.14 <sub>b</sub> (0.76)	4.58 <sub>c</sub> (1.33)	5.74 <sub>a</sub> (1.09)

*Note.* Means that share subscripts do not differ significantly (*p*'s < .05 using a Bonferroni correction).

**Table 2***Test Statistics for ANOVAs, Study 1*

Predictor	<i>F</i>	<i>p</i>	$\eta_p^2$
<b>Ascent Dehumanization</b>			
Group condition	26.70	< .001	.04
Individuating condition	3.21	.074	.01
Interaction	7.00	.008	.01
Within control: outgroup vs. ingroup	23.04	< .001	.04
Within individuating: outgroup vs. ingroup	4.71	.030	.01
Within outgroup: individuating vs. control	9.91	.002	.02
Within ingroup: individuating vs. control	.36	.548	.00
<b>Negative Affect</b>			
Group condition	136.33	< .001	.19
Individuating condition	138.58	< .001	.19
Interaction	22.12	< .001	.04
Within control: outgroup vs. ingroup	101.11	< .001	.15
Within individuating: outgroup vs. ingroup	36.10	< .001	.06
Within outgroup: individuating vs. control	136.63	< .001	.19
Within ingroup: individuating vs. control	24.82	< .001	.04
<b>Empathic Effort</b>			
Group condition	31.66	< .001	.05
Individuating condition	6.71	.010	.01
Interaction	9.80	.002	.02
Within control: outgroup vs. ingroup	28.90	< .001	.05
Within individuating: outgroup vs. ingroup	4.63	.032	.01
Within outgroup: individuating vs. control	16.47	< .001	.03
Within ingroup: individuating vs. control	.14	.704	.00
<b>Morality</b>			
Group condition	54.00	< .001	.08
Individuating condition	102.52	< .001	.15
Interaction	8.08	.005	.01
Within control: outgroup vs. ingroup	39.15	< .001	.06
Within individuating: outgroup vs. ingroup	15.07	< .001	.03
Within outgroup: individuating vs. control	84.66	< .001	.13
Within ingroup: individuating vs. control	26.34	< .001	.04

A significant main effect of group condition emerged on all outcomes. Participants who read that Alex was an outgroup (vs. ingroup) member saw her as less human<sup>4</sup> and less moral, reported more negative affect toward her, and indicated less willingness to invest empathetic effort.

On most outcomes, there was also a significant main effect of individuating condition. People in the individuating (vs. control) condition saw Alex as more human and moral, reported less negative affect toward her, and indicated greater willingness to invest empathetic effort. Additionally, there were significant interactions on all outcomes. As can be seen in Table 2, the individuating condition typically improved outgroup perceptions more so than ingroup perceptions and consequently helped close the gap between the ingroup and outgroup—though in no case did it entirely eliminate it.

Although encouraging, this first study failed to address potential effects of the length of the information participants received about the target. It is possible that the individuating information used in Study 1 improved perceptions because it required participants to think about the outgroup for a longer period of time. Study 2 therefore used a modified design that compared the individuating information condition to a control condition that was matched for the amount of information but described mundane events and did not offer much personal information. Further, the ingroup condition was replaced with a non-political control condition to test the effects of individuating information in the absence of political information. Because the non-political control is not automatically afforded the same positive perceptions as an ingroup target, we tested whether individuating information would be at least as beneficial towards the outgroup target as this ambiguous target.

## Study 2: Method

### Participants

In Study 2, we recruited 400 participants from Prolific. As was preregistered, we excluded those who failed the attention check ( $n = 5$ ), leaving a final sample of 395 (207 female, 177 male, 9 non-binary/third gender, 1 prefer not to say; 328 White, 19 Latinx, 28 Black or African American, 33 Asian, 5 Native American, 2 Middle Eastern or North African, 2 Pacific Islander, and 4 Other;  $M_{age} = 37.08$ ,  $SD_{age} = 13.34$ ). As in Study 1, we screened in Prolific to include roughly equal numbers of liberals ( $n = 198$ ) and conservatives ( $n = 197$ ). A sensitivity analysis at 80% power revealed that we were again powered to detect a small interaction effect ( $f = .14$ ).

**Manipulations** — Study 2 was a 2 (group condition: nonpolitical vs. Outgroup)  $\times$  2 (individuating condition: individuating information vs. similar length control) experimental design. Participants again read one of four vignettes about a day in the life of Alex. The individuating vignette was identical to Study 1. The control vignette was of similar length but contained mundane information about Alex while minimizing details that provided insight about Alex's life story, social roles, personality, cognitions, or emotions (see SM). To ensure that the difference between the individuating and control conditions would not be driven simply by Alex appearing less social in the control condition, we described the control narrative as “a typical day... when she is on her own and doesn't have any work or family responsibilities to take care of.” Participants either read that Alex was a political outgroup member (outgroup condition) or did not read any information about her political orientation (nonpolitical control condition). The outgroup condition was conservative for liberal participants and liberal for conservative participants, as determined by the Prolific prescreen.

**Outcomes** — Participants completed the same measures of ascent dehumanization, negative affect ( $\alpha = .95$ ), empathetic effort ( $\alpha = .94$ ), and perceived morality ( $\alpha = .95$ ) as in Study 1.

4) The ascent dehumanization measure had a non-normal distribution. We therefore re-ran this analysis on only participants who did not attribute full humanity to Alex (i.e., gave her a score  $< 100$ ). Doing so revealed a similar pattern of results with a significant interaction, where participants in the individuating condition perceived Alex as more human when she was an outgroup member. Study 2's results also replicated using scores  $< 100$  on this measure (see SM for full results in both studies).

## Study 2: Results

We conducted a 2 (group condition: nonpolitical vs. outgroup)  $\times$  2 (individuating condition: individuating information vs. similar length control) MANOVA on the four outcomes. A significant main effect emerged for group condition,  $F(4, 381) = 9.48, p < .001, \eta_p^2 = .09$ , and individuating condition,  $F(4, 381) = 25.32, p < .001, \eta_p^2 = .21$ . The interaction was not significant,  $F(4, 381) = 0.85, p = .496, \eta_p^2 = .01$ . To decompose these effects, we ran  $2 \times 2$  ANOVAs on each Alex outcome (see Table 3 for condition means and Table 4 for test statistics). On all outcomes, there was a significant main effect of group condition. Relative to those who were not told Alex's political identity, those who read that Alex was an outgroup member saw her as less human and less moral, reported more negative affect toward her, and indicated less willingness to invest empathic effort toward her.

**Table 3**

*Descriptive Statistics by Condition, Study 2*

Outcome	Nonpolitical		Outgroup	
	Control <i>M (SD)</i>	Individuating <i>M (SD)</i>	Control <i>M (SD)</i>	Individuating <i>M (SD)</i>
Ascent Dehumanization	92.93 <sub>ab</sub> (13.52)	97.32 <sub>a</sub> (6.94)	89.28 <sub>b</sub> (16.45)	93.93 <sub>a</sub> (10.29)
Negative Affect	3.29 <sub>a</sub> (1.20)	2.15 <sub>b</sub> (1.27)	4.35 <sub>c</sub> (1.57)	2.80 <sub>a</sub> (1.42)
Empathic Effort	5.18 <sub>a</sub> (1.00)	5.45 <sub>a</sub> (1.12)	4.61 <sub>b</sub> (1.21)	5.30 <sub>a</sub> (1.10)
Morality	5.26 <sub>b</sub> (1.00)	6.03 <sub>a</sub> (0.85)	4.64 <sub>c</sub> (1.21)	5.68 <sub>a</sub> (1.10)

*Note.* Means that share subscripts do not differ significantly ( $p$ 's  $< .05$  using a Bonferroni correction).

**Table 4**

*Test Statistics for ANOVAs, Study 2*

Predictor	<i>F</i>	<i>p</i>	$\eta_p^2$
<b>Ascent Dehumanization</b>			
Group condition	7.92	.005	.02
Individuating condition	13.08	< .001	.03
Interaction	.01	.918	.00
<b>Negative Affect</b>			
Group condition	38.70	< .001	.09
Individuating condition	94.30	< .001	.19
Interaction	2.14	.144	.01
<b>Empathic Effort</b>			
Group condition	10.38	.001	.03
Individuating condition	18.60	< .001	.05
Interaction	3.50	.062	.01
<b>Morality</b>			
Group condition	21.24	< .001	.05
Individuating condition	73.94	< .001	.16
Interaction	1.59	.208	.00

There was also a significant main effect of individuating condition on all outcomes, where people in the individuating (vs. control) condition saw Alex as more human and more moral, reported less negative affect toward her, and more willingness to invest empathic effort. There were no significant interactions.

## Studies 1 and 2: Discussion

Study 1 revealed that including individuating information when describing an outgroup member significantly improves perceptions of this member on a number of different measures. We found the expected interaction on all outcomes, demonstrating that individuating information works to reduce bias towards the outgroup while having smaller or no effects on the ingroup. However, this study included a length confound because of the length differences between the control and individuating manipulations (the control was 43 words, while the individuating information was 753 or 761). It is therefore impossible to rule out the possibility that the benefits of reading individuating information were simply due to participants spending more time reading and thinking about this target.

Study 2 showed benefits of individuating information for perceptions of both political outgroup members and a target whose political orientation was unknown. Unlike in Study 1, there were no significant interaction effects, suggesting that the manipulation worked equally well for both outgroup members and unspecified targets. This is likely because the unspecified character was not treated with the same default positive perceptions as a political ingroup member, leaving room for the individuating information to improve perceptions of this ambiguous target. It is possible that the manipulation might be acting through a different psychological mechanism in this condition. Rather than improving perceptions by drawing attention away from a group identity, it is likely that people prefer less ambiguous targets. Consistent with this possibility, “ambiguous” people tend to elicit negative attitudes and behavior (Gaither et al., 2018). Finally, because Alex was female in both studies, it is possible that people’s impressions of Alex were subject to gender stereotypes activated by the day-in-the-life narratives. Future work should therefore seek to replicate this effect while also examining potential effects of target gender.

Study 2 also replicated the results of Study 1 using a different, similar-length control condition. It therefore demonstrated benefits when being compared to a condition that allowed participants to spend a similar amount of time thinking about a political outgroup member. In Study 3, we tested whether the benefits of individuating information would extend beyond a single outgroup target.

## Study 3

Studies 1 and 2 found consistent effects of individuating information on improving perceptions of a single political outgroup member. Study 3 extended these studies in three ways. First, given the skew issues on the ascent dehumanization measure, we replaced this measure with different humanization and mind perception measures.

Second, we examined whether the benefits of learning individuating information about a single political outgroup member might extend to proximal group members. To our knowledge, all prior work on individuating information focuses on how it affects a single group member. While it is not feasible for individuating information to impact whole group perceptions because it specifically pulls attention away from group identities (see SM for null effects on group outcomes), we theorized that the benefits might extend to additional individual (but not explicitly individuated) outgroup members. In particular, we tested a proximal form of extension, where the benefits might spread to others in that person’s social network. Because close others tend to share many important values (Youyou et al., 2017), people might assume that positive qualities of the individuated target extend to the target’s social network. This extended positivity is also supported by work on extended contact, which finds that when people see an ingroup member who is friends with an outgroup member, they transfer positive perceptions onto the outgroup member (Wright et al., 1997). We therefore theorized that there would be similar positive transfer to members of the individuated target’s social network.

Third, we embedded individuating information in the ecologically valid and timely context of social media feeds, where people may encounter this kind of information naturally. Within this context, we developed a novel behavioral outcome by giving participants an opportunity to comment on the target’s politicized social media post. For individuating information to make a tangible difference during an interaction with an outgroup member, it is important to see effects on behavioral outcomes, as outgroup attitudes may or may not correspond with actual behavior. We

therefore examined whether individuating information embedded in a social media context could promote more civil and open-minded dialogue with a political outgroup member.

## Method

### Participants

We recruited 401 participants from Prolific Academic. As was preregistered, we excluded those who failed the attention check ( $n = 4$ ) leaving a final sample of 397 (188 female, 205 male, 2 non-binary/third gender, 2 prefer not to say; 301 White, 33 Latinx, 27 Black or African American, 47 Asian, 8 Native American, 3 Middle Eastern or North African, 1 Pacific Islander, and 1 Other;  $M_{age} = 35.70$ ,  $SD_{age} = 14.26$ ). We screened to include roughly equal numbers of liberals ( $n = 201$ ) and conservatives ( $n = 196$ ). A sensitivity analysis at 80% power revealed that we were again powered to detect a small interaction effect ( $f = .14$ ).

### Materials and Procedure

**Manipulations** — Study 3 was a 2 (ingroup vs. outgroup)  $\times$  2 (individuating information vs. control) online experiment using a simulated Twitter feed. Participants were informed that the study was about how people perceive others based on social media profiles. They were asked to imagine the profile belonged to someone they met recently but did not yet know very well. Participants encountered a simulated Twitter feed. All Tweets were created using tweetgen.com to ensure that they appeared authentic. The Tweets were ostensibly written by either a political ingroup or outgroup member named Alex. For the control condition, there was only one Tweet containing political cue information (e.g., “Just watched the Republican National Convention! Great Speakers! #Republican #RNC2020”). In the experimental condition, participants saw the same political cue message, as well as five additional Tweets that included individuating information (e.g., “Just took a personality quiz online. It says that I am thoughtful, introverted, and trusting. I think these are pretty accurate!; see [SM](#)).

**Tweet Response Measures** — Participants first completed a measure of humanization of the Tweet author (adapted from [Bastian & Haslam, 2010](#)). This included six human uniqueness traits (e.g., “refined and cultured”) and six human nature traits (e.g., “emotional, responsive, and warm”), each measured on a scale of 1 (*Strongly Disagree*) to 7 (*Strongly Agree*) ( $\alpha = .91$ ).

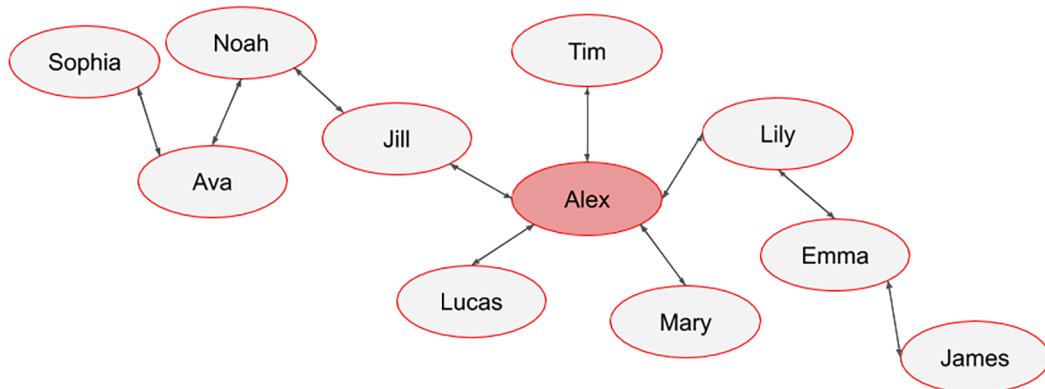
Second, participants completed a measure of mind perception of the Tweet author (adapted from [Gray et al., 2007](#)). For the sake of reducing the length of the survey, we used a subset of items that have been used in previous research ([Schroeder et al., 2017](#)), which included two items that measure experience/emotion (e.g., “feeling pleasure”), and four items that measure agency (e.g., “planning”), each measured on a scale of 1 (*Not at all*) to 7 (*Very much*) ( $\alpha = .91$ ).

Next, participants completed the same negative affect ( $\alpha = .95$ ), empathic effort ( $\alpha = .93$ ), and perceived morality ( $\alpha = .95$ ) scales from the previous studies.

**Commenting on Political Tweet** — Participants then read an additional Tweet by Alex that was either for or against raising taxes, crafted to be aligned with either conservative or liberal beliefs depending on whether Alex was an ingroup or outgroup member. As a behavioral measure, participants were asked to write a comment responding to the target’s Tweet. These responses were later coded for analysis (see [Results](#)).

**Extension to Social Network** — To assess degree of extension beyond the individuated target, participants completed a novel assessment inspired by social network analysis, which uses visual representations of social networks to understand connections between people ([Borgatti et al., 2009](#)). In this framework, each person in the network is an actor, or “node,” that is connected to others. In Study 3, participants viewed a visual representation of the Tweeter’s social network (see [Figure 1](#)). We specified that all connections were bidirectional friendships. Some of these friends were directly connected to the Tweeter (e.g., Lucas). Other people in the network were indirectly connected to the Tweeter, with one or more people in between (e.g., Emma). Participants were asked to rate and assess four people in the network (Lucas, Emma, James, Sophia) using shortened versions of the negative affect ( $\alpha_{Lucas} = .86$ ;  $\alpha_{Emma} = .83$ ;  $\alpha_{James}$

$\alpha_{\text{Sophia}} = .83$ ), morality ( $r_{\text{Lucas}} = .85$ ;  $r_{\text{Emma}} = .86$ ;  $r_{\text{James}} = .87$ ;  $r_{\text{Sophia}} = .86$ ), and empathic effort scales ( $\alpha_{\text{Lucas}} = .92$ ;  $\alpha_{\text{Emma}} = .91$ ;  $\alpha_{\text{James}} = .92$ ;  $\alpha_{\text{Sophia}} = .94$ ). Participants also rated the perceived political orientation of the four targets on a scale of 1 (*Strong liberal*) to 7 (*Strong conservative*), and how similar they thought each person was to the Tweeter on a scale of 1 (*Not at all similar*) to 7 (*Very similar*).<sup>5</sup> Participants also completed an exploratory measure of perceived group heterogeneity.

**Figure 1***Social Network Map, Study 3*

## Results

### Tweeter Outcome Measures

We conducted a 2 (group condition: ingroup vs. outgroup)  $\times$  2 (individuating condition: individuating information vs. control) MANOVA on the five outcomes. Significant effects emerged for group condition,  $F(5, 389) = 23.66, p < .001, \eta_p^2 = .23$ , individuating condition,  $F(5, 389) = 10.44, p < .001, \eta_p^2 = .12$ , and their interaction,  $F(5, 389) = 3.39, p = .005, \eta_p^2 = .04$ . To decompose these effects, we ran  $2 \times 2$  ANOVAs on each outcome (see Table 5 for condition means and Table 6 for test statistics).

**Table 5***Descriptive Statistics by Condition, Study 3*

Outcome	Ingroup		Outgroup	
	Control <i>M (SD)</i>	Individuating <i>M (SD)</i>	Control <i>M (SD)</i>	Individuating <i>M (SD)</i>
Humanization	5.31 <sub>a</sub> (0.84)	5.69 <sub>b</sub> (0.85)	4.17 <sub>c</sub> (1.11)	5.03 <sub>a</sub> (0.99)
Mind Perception	5.88 <sub>a</sub> (1.11)	5.91 <sub>a</sub> (1.00)	5.08 <sub>b</sub> (1.31)	5.64 <sub>a</sub> (1.01)
Negative Affect	3.09 <sub>a</sub> (1.35)	2.80 <sub>a</sub> (1.40)	5.51 <sub>b</sub> (2.15)	3.87 <sub>c</sub> (1.77)
Empathic Effort	5.75 <sub>a</sub> (0.95)	5.58 <sub>ab</sub> (1.10)	4.77 <sub>c</sub> (1.29)	5.22 <sub>b</sub> (1.03)
Morality	5.35 <sub>ab</sub> (1.01)	5.56 <sub>a</sub> (1.06)	4.20 <sub>c</sub> (1.49)	5.01 <sub>b</sub> (1.11)

*Note.* Means that share subscripts do not differ significantly ( $p$ 's  $< .05$  using a Bonferroni correction).

5) To account for the possibility that participants in different conditions had differential familiarity with Twitter or that the conditions had differential effects on outcomes simply because they created different amounts of cognitive strain on participants (because the individuating condition included more tweets) or affected perceptions of the Tweeter's gender, participants completed a number of potential covariates including familiarity with Twitter, cognitive strain, and perceived gender of the Tweeter. Simultaneously controlling for these covariates did not reduce any of the Tweeter outcome measures to non-significant.

On all outcomes, there was a significant main effect of group condition. Participants who read about an outgroup (vs. ingroup) member saw them as less human and moral, perceived less mind, reported more negative affect toward them, and indicated less willingness to invest empathic effort.

**Table 6**

*Test Statistics for ANOVAs, Study 3*

Predictor	F	p	$\eta_p^2$
<b>Humanization</b>			
Group condition	87.53	< .001	.18
Individuating condition	42.10	< .001	.10
Interaction	6.17	.013	.02
Within control: outgroup vs. ingroup	69.92	< .001	.15
Within individuating: outgroup vs. ingroup	23.67	< .001	.06
Within outgroup: individuating vs. control	40.56	< .001	.09
Within ingroup: individuating vs. control	7.95	.005	.02
<b>Mind Perception</b>			
Group condition	22.62	< .001	.05
Individuating condition	7.13	.008	.02
Interaction	5.85	.016	.02
Within control: outgroup vs. ingroup	25.67	< .001	.06
Within individuating: outgroup vs. ingroup	2.74	.099	.01
Within outgroup: individuating vs. control	13.05	< .001	.03
Within ingroup: individuating vs. control	.03	.859	.00
<b>Negative Affect</b>			
Group condition	104.89	< .001	.21
Individuating condition	31.81	< .001	.08
Interaction	15.42	< .001	.04
Within control: outgroup vs. ingroup	100.12	< .001	.20
Within individuating: outgroup vs. ingroup	19.99	< .001	.05
Within outgroup: individuating vs. control	46.11	< .001	.11
Within ingroup: individuating vs. control	1.46	.228	.00
<b>Empathic Effort</b>			
Group condition	36.82	< .001	.09
Individuating condition	1.57	.211	.00
Interaction	7.76	.006	.02
Within control: outgroup vs. ingroup	39.09	< .001	.09
Within individuating: outgroup vs. ingroup	5.40	.021	.01
Within outgroup: individuating vs. control	8.21	.004	.02
Within ingroup: individuating vs. control	1.17	.281	.00
<b>Morality</b>			
Group condition	51.48	< .001	.12
Individuating condition	18.61	< .001	.05
Interaction	6.21	.013	.02
Within control: outgroup vs. ingroup	46.61	< .001	.11
Within individuating: outgroup vs. ingroup	10.99	< .001	.03
Within outgroup: individuating vs. control	23.34	< .001	.06
Within ingroup: individuating vs. control	1.65	.200	.00

For most outcomes, there was also a significant main effect of individuating condition. Participants in the individuating (vs. control) condition saw the Tweeter as more human and moral, perceived more mind, and reported less negative affect toward them. However, on all outcomes there were significant interactions showing the predicted pattern, such that the individuating condition worked to close the gap between ingroup and outgroup perceptions (see Table 6 for simple effects and for pattern of interactions).

### Written Tweet Responses

Participants' responses to Alex's Tweet about taxes were coded by two raters (blind to condition and hypotheses) on 1-7 scales of openness, empathy, hostility, moral outrage, and civility (interrater correlations  $M = .65$ , range = .50-.70). Based on the pattern of correlations between these categories, they were aggregated into two factors. Openness and empathy were aggregated to represent understanding toward the Tweeter ( $\alpha = .92$ ). Hostility, moral outrage, and civility (reversed) were aggregated to represent antagonism ( $\alpha = .89$ ). There were main effects of group condition on both variables, such that people commenting on an outgroup (vs. ingroup) post were less understanding,  $F(1, 390) = 143.10$ ,  $p < .001$ ,  $\eta_p^2 = .27$  ( $M_{Outgroup} = 3.78$ ,  $SD_{Outgroup} = 1.60$ ;  $M_{Ingroup} = 5.49$ ,  $SD_{Ingroup} = 1.21$ ) and more antagonistic,  $F(1, 390) = 51.54$ ,  $p < .001$ ,  $\eta_p^2 = .12$  ( $M_{Outgroup} = 1.64$ ,  $SD_{Outgroup} = .88$ ;  $M_{Ingroup} = 1.17$ ,  $SD_{Ingroup} = .29$ ). There was also a significant effect of individuating condition on antagonism,  $F(1, 390) = 4.29$ ,  $p = .039$ ,  $\eta_p^2 = .01$ , such that people commenting in the individuating condition were less antagonistic in their messages ( $M_{Individuating} = 1.34$ ,  $SD_{Individuating} = .55$ ;  $M_{Control} = 1.48$ ,  $SD_{Control} = .82$ ). However, antagonism scores were heavily positively skewed (skew = 3.27, kurtosis = 14.05), with most participants responding to the target with low antagonism. This distribution created seven statistical outliers ( $Z \geq 3.5$ ), with six in the outgroup control condition and 1 in the outgroup individuating condition. Whereas square root and log10 transformations did not reduce the effect of individuating condition ( $ps < .05$ ), and winsorizing the data to the nearest non-extreme value resulted in a marginal effect ( $p = .089$ ), removing these outliers completely reduced the effect to non-significance ( $p = .344$ ). However, we believe these outliers are meaningful data and suggest that the individuating manipulation functioned to reduce the more extreme antagonistic responses, like those observed in the control condition.

### Extension Effects

Finally, we tested whether the effects extended beyond the target using the social network map. First, we examined how participants perceived the political orientation of each of the four friends, and found that participants perceived only the two closest friends (Lucas, who was directly connected to Alex, and Emma, who was separated from Alex by one person) as political outgroup members in the outgroup condition and as ingroup members in the ingroup condition (see SM for full analyses). Consequently, participants in the outgroup condition only judged Lucas and Emma more negatively than those in the ingroup condition (see SM), suggesting that there was only bias for the individuating condition to reduce for these two targets.

To explore the impact of individuating information on these two network members, we ran  $2 \times 2$  ANOVAs on perceptions of Lucas and Emma (see Table 7 for condition means and Table 8 for test statistics). For both targets, the individuating condition helped to reduce negative affect and promote empathic effort when participants were in the outgroup condition. Although in the predicted direction, there were no significant benefits of individuating condition on the perceived morality of the targets.

**Table 7***Descriptive Statistics on Extension Effects by Condition, Study 3*

Outcome	Ingroup		Outgroup	
	Control <i>M (SD)</i>	Individuating <i>M (SD)</i>	Control <i>M (SD)</i>	Individuating <i>M (SD)</i>
Lucas Negative Affect	3.72 <sub>a</sub> (1.45)	3.41 <sub>a</sub> (1.53)	4.97 <sub>b</sub> (1.78)	4.45 <sub>b</sub> (1.40)
Emma Negative Affect	3.94 <sub>ab</sub> (1.32)	3.77 <sub>b</sub> (1.34)	4.41 <sub>ac</sub> (1.33)	4.03 <sub>bc</sub> (1.31)
Lucas Empathic Effort	5.60 <sub>a</sub> (1.03)	5.37 <sub>ac</sub> (1.14)	4.63 <sub>b</sub> (1.47)	5.02 <sub>bc</sub> (1.16)
Emma Empathic Effort	5.41 <sub>a</sub> (1.06)	5.18 <sub>ab</sub> (1.16)	4.85 <sub>b</sub> (1.34)	5.17 <sub>ab</sub> (1.05)
Lucas Morality	4.97 <sub>a</sub> (1.01)	4.97 <sub>a</sub> (1.12)	4.24 <sub>b</sub> (1.25)	4.48 <sub>b</sub> (1.00)
Emma Morality	4.78 <sub>a</sub> (0.98)	4.81 <sub>a</sub> (1.02)	4.51 <sub>a</sub> (1.04)	4.69 <sub>a</sub> (0.90)

*Note.* Means not sharing subscripts differ significantly (*p*'s < .05 using a Bonferroni correction).

**Table 8***Test Statistics for ANOVAs on Extension Effects, Study 3*

Predictor	<i>F</i>	<i>p</i>	$\eta_p^2$
<b>Lucas Negative Affect</b>			
Group condition	53.82	< .001	.12
Individuating condition	7.25	.007	.02
Interaction	.45	.501	.00
<b>Emma Negative Affect</b>			
Group condition	7.49	.006	.02
Individuating condition	4.21	.041	.01
Interaction	.55	.459	.00
<b>Lucas Empathic Effort</b>			
Group condition	29.04	< .001	.07
Individuating condition	.41	.525	.00
Interaction	6.31	.012	.02
Within control: outgroup vs. ingroup	31.13	< .001	.07
Within individuating: outgroup vs. ingroup	4.15	.042	.01
Within outgroup: individuating vs. control	4.99	.026	.01
Within ingroup: individuating vs. control	1.74	.187	.00
<b>Emma Empathic Effort</b>			
Group condition	5.99	.015	.02
Individuating condition	.14	.709	.00
Interaction	5.50	.019	.01
Within control: outgroup vs. ingroup	11.46	< .001	.03
Within individuating: outgroup vs. ingroup	.01	.943	.00
Within outgroup: individuating vs. control	3.73	.054	.01
Within ingroup: individuating vs. control	1.93	.165	.01
<b>Lucas Morality</b>			
Group condition	30.93	< .001	.07
Individuating condition	1.18	.278	.00
Interaction	1.28	.259	.00
<b>Emma Morality</b>			
Group condition	3.96	.047	.01
Individuating condition	1.27	.261	.00
Interaction	.56	.457	.00

*Note.* Lucas is directly connected to Alex and Emma is connected to Alex through 1 person.

## Discussion

Study 3 successfully replicated the benefits of individuating information in the new context of a Twitter feed. Individuating information also reduced the amount of antagonism expressed toward the Tweeter; antagonism was extremely low in this paradigm, but the individuating condition seemed to reduce more extreme instances of antagonism. Although more research on behavioral outcomes is necessary, we believe these results offer preliminary evidence that individuating information might promote less antagonistic dialogue in real-world settings where antagonism is rampant.

Study 3 found encouraging extension effects on the individuated target's social network. When participants viewed members of the target's network as political outgroup members and were consequently biased against these members, learning individuating information about the target reduced this bias. These findings suggest that although individuating a single member of a political outgroup might not reduce bias toward the entire outgroup (see SM), doing so can serve to reduce bias against members of the outgroup that are connected to the individuated member. We see this as a step in the direction of reducing interparty hostility, several outgroup members at a time.

## General Discussion

In the United States, disputes over politics have entered people's homes, taking over their dinner conversations and straining their relationships. Rather than seek understanding across the aisle, Americans shut out, talk over, and even spew hatred at those who do not share their political values and perspectives. Political animus infects American democracy and stresses the economy. In the last few years alone, the U.S. Capitol was stormed during a violent attack against Congress, the results of the 2020 U.S. presidential election were disputed, the government shut down for the longest period of time in American history, and the response to the COVID-19 pandemic suffered as a result of politicized policies.

With the current political landscape looking as dire as it does, it is important to keep an eye toward change. Widespread change will require efforts by U.S. political leaders, the media, and the electorate. In this paper, we identified an avenue for intervention that targets perceptions of outgroup members. We leveraged one source of political hostility—social identity and group-based biases—to reveal a promising intervention. Specifically, we aimed to shift the basis of evaluation from the target's group membership to their individuated characteristics, thereby reducing their proclivity to exhibit biases toward the target simply because of their outgroup membership. Across three well-powered, preregistered studies, we demonstrated that presenting participants with individuating information about a political outgroup member consistently reduced negative perceptions and hostility toward that member. In all studies, we provide a conceptual replication for the impact of individuating information in this highly polarized context. We found benefits of individuating information delivered in different ways (a "day-in-the-life narrative;" Tweets ostensibly written by the outgroup member) and compared to both a political information-only control and similar length information control. We also found benefits of individuating information on diverse attitudinal measures that predict important behavioral outcomes, as well as on a behavioral measure of antagonism in response to an outgroup member's politicized social media post.

Critically, we also built on prior work by showing that individuating information can extend beyond the one targeted outgroup member. Individuating information is effective precisely because it shifts attention away from group membership and onto one individual. For this reason, it is not feasible that this intervention would improve attitudes toward *all* outgroup members. However, it might extend to some outgroup members, especially if they are seen as connected to the target. In Study 3 we found evidence for this possibility, suggesting that individuating information can create a ripple effect in outgroup perceptions.

Despite these encouraging findings, we found only preliminary support for behavioral change toward outgroup members, potentially suggesting that a stronger or repeated dose of individuating information might be required to inspire more effortful behavioral changes toward the outgroup. We also did not assess whether individuating information produces enduring benefits or leads to more productive in-person interactions. Future studies should assess how long,

and under what conditions, the benefits of individuated perceptions last, and whether increasing the strength or dose of the manipulation can produce robust behavioral benefits.

In addition, we did not examine how the effects of individuating information might depend on the amount of positive, neutral, and negative information provided about the target. In our studies, we included a mix of mildly positive and neutral information. We anticipate that the benefits of learning individuating information would diminish as the amount of negative information about the person increases. This is an important and intriguing direction for future research.

Finally, the current research focuses specifically on political conflict within the United States. As such, the current data cannot speak to polarization and divides between political groups in other countries and contexts (e.g., [Ward & Tavits, 2019](#)). Future research should attempt to replicate these findings and effects in these other contexts. Relatedly, the samples used in the current paper were not representative across demographic categories, and the findings should be interpreted in light of this limitation.

Despite these limitations, the current studies provide evidence that individuating information can be effective even in such a polarized environment as the United States. Notably, individuating information was effective despite participants having no explicit intention of learning about or being charitable toward the outgroup. These findings are encouraging in a context that is wrought with normative hostility and little motivation to build a bridge across the aisle. This work also demonstrated a novel form of extension to outgroup members. Using a social network map to represent friends of the individualized target, we discovered that individuating information can benefit outgroup members who are connected to the individualized member. This finding suggests that creating opportunities to change perceptions of even a single outgroup member can have benefits that extend beyond that person, even if not immediately to the entire group.

On a practical level, individuating information represents a minimal intervention with potentially large impacts. Like many of the established interventions in the domain of intergroup bias reduction, our method constitutes a “light touch” or “wise” intervention—a treatment that is inexpensive, brief in duration, and easy to implement, but precisely targeted ([Paluck et al., 2021](#); [Walton & Wilson, 2018](#)). In this way, this intervention may be scalable to places where political hostility is common. One such place is social media, where partisan interactions often lead to heightened polarization ([Bail et al., 2018](#)). With more than two thirds of Americans getting at least some of their news from social media ([Pew Research Center, 2018](#)), individuated messages about conservatives and liberals could spread readily on these platforms, potentially reducing hostility.

## Conclusion

Across three studies, we demonstrated that providing people with individuating information about a U.S. political outgroup member can improve perceptions of that member and even connected members of the outgroup. The current studies answer a recent call for research aimed at developing methods for mitigating political sectarianism ([Finkel et al., 2020](#)). While more work needs to be done on the effects of individuating information, we believe that any intervention that helps mitigate the pervasive and crippling American partisan hostility is an important first step towards building a more unified society.

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

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**Author Contributions:** All authors contributed to all aspects of the research. All authors have approved the final version for submission.

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**Data Availability:** For this article, all data sets are freely available ([Koetke et al., 2021](#)).

## Supplementary Materials

The Supplementary Materials contain the following items:

- the pre-registration protocols for all studies (Koetke et al., 2019a, 2019b, 2019c)
- full materials and de-identified data for each study (Koetke et al., 2021)
- full manipulations, additional analyses, and the results of two supplementary studies (Koetke et al., 2023)

### Index of Supplementary Materials

Koetke, J., Conrique, B. G., & Schumann, K. (2019a). *Contextual knowledge of political outgroup* [Pre-registration protocol for Study 1]. OSF Registries. <https://doi.org/10.17605/OSF.IO/ZYTKF>

Koetke, J., Conrique, B. G., & Schumann, K. (2019b). *Contextual knowledge of political outgroup* [Pre-registration protocol for Study 2]. OSF Registries. <https://doi.org/10.17605/OSF.IO/37B2C>

Koetke, J., Conrique, B. G., & Schumann, K. (2019c). *Contextual Knowledge of Political Outgroup 5* [Pre-registration protocol for Study 3]. OSF Registries. <https://doi.org/10.17605/OSF.IO/EB8XN>

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