

CONTRIBUTED PAPER

Effects of political identity activation and inaccurate metaperceptions on attitudes toward wolves

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Article impact statement: Activated social identities can unnecessarily polarize attitudes toward wildlife, undermining cooperation and exacerbating conflict.

Abstract

Polarization between groups can undermine durable conservation outcomes. Activating group identities (i.e., an individual's sense of self derived from membership in a group) can exacerbate differences, especially when people hold inaccurate perceptions of their peers and rivals. In conservation contexts, the dynamism of identity and its varying influence on attitudes and outcomes is underexplored. We conducted 2 randomly controlled experiments among residents of U.S. states with wolves ($n = 2296$) to investigate these dynamics in a conservation context. Results from Study 1 showed group identity activation (political identity, specifically) and inaccurate metaperceptions distorted attitudes toward gray wolves (*Canis lupus*) and deepened differences between people. Results from Study 2 showed a simple in-group metaperception correction attenuated this effect by reducing assumptions of polarization and limiting the effects of identity fusion. These results demonstrate the opportunity for conservation policy makers and practitioners to avoid activating identities assumed to be associated with conflict and instead counter false narratives that exaggerate division. Correcting inaccurate metaperceptions and designing identity-informed communication strategies may help bolster support for conservation goals and reduce avoidable conflict.

KEYWORDS

babirusa, *Canis lupus*, cognitions, gray wolves, in-group, out-group, politics, randomized controlled trials, social identity

INTRODUCTION

Political polarization is increasing in some countries worldwide, challenging collaborative efforts to achieve lasting conservation outcomes (Casola et al., 2022). Polarization can be exacerbated when group identities (including political identities) are activated, biasing information processing, influencing preferences, and distorting interpretation of objective facts (Van Bavel & Pereira, 2018). However, there is growing evidence that people on each side of identity divides often overestimate the extremity of people's attitudes on the other side (Ruggeri et al., 2021). These inaccurate metaperceptions—perceptions of others' perceptions—may unnecessarily deepen disagreement and impede progress in conservation contexts.

Some conservation issues seem hopelessly entangled with polarized partisan conflict, such as the management of gray wolves (*Canis lupus*) in the United States. Following near extirpation from the lower 48 states, wolf recovery over the past half century has been embroiled with politics and partisanship (Nie, 2003; Wilson, 1997). The common assumption, oft echoed in popular press, seems to be that wolves are hated by Republicans, most vehemently by hunters and agricultural producers, and loved by Democrats, most passionately by animal rights activists and environmentalists (Jones, 2012). Although attitudes toward wolves have been related to political partisanship (van Eeden et al., 2021), there is evidence that the differences between Republicans and Democrats may not be as extreme as commonly assumed. For example, representative surveys of residents of several western U.S. states have

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reported positive attitudes toward wolves despite those states having more registered Republicans than Democrats (Bruskotter et al., 2007; Carlson et al., 2020). Recent work from the increasingly conservative state of Montana showed attitudes toward wolves and tolerance of them on the landscape are both high and on the rise (Metcalf et al., 2025). Despite these findings, media and elected officials commonly portray wolves as especially divisive (Houston et al., 2010), quite likely contributing to an inflated notion of partisan difference. Evidence from social-psychological research on polarization suggests such inaccurate metaperceptions can be self-fulfilling prophecies, causing the very division they erroneously assume (reviewed by Fernbach & Van Boven [2022]).

People join groups aligned with their identities, but such influence can also work in the reverse (Van Bavel & Pereira, 2018). Humans are evolutionarily predisposed toward in-group cohesion (Cosmides et al., 2003), but this is not a fixed disposition. The salience of different group identities can vary across contexts, and when a particular group identity is activated, people will act in accordance with their perceptions of that identity groups' norms (Van Bavel & Pereira, 2018). But perceptions do not always align with reality. Activated identities can distort perceptions of objective facts (Xiao & Van Bavel, 2012) and increase conflict between groups whose members see the world differently (Ross & Ward, 1996). Political identity, a specific case of identity that we focused on here, operates in this way. For example, in addition to belonging to political parties because they agree with the policies supported by that party, people often support policies only when they are endorsed by their party (Cohen, 2003).

Inaccurate metaperceptions are an especially pernicious mechanism of group-based division. Group identity can distort metaperceptions, causing people to overestimate the extremity of out-group members' beliefs, moralize in-group positions, and even justify inhumane treatment of out-group members (Blatz & Mercier, 2018; D'Amore et al., 2024; Hull et al., 2024). Inaccurate metaperceptions can have profoundly negative consequences—for example, support for political violence is higher among Americans who overestimate the extremism of their partisan rivals (Mernyk et al., 2022). Promisingly, there is also evidence that correcting metaperceptions can reduce this polarization (Lees & Cikara, 2020; Mernyk et al., 2022; Ruggeri et al., 2021). Conservation efforts could benefit from a better understanding of how identity forces like these may be complicating conservation issues and which interventions might reduce identity-related conservation conflict.

Past work investigating identity forces in conservation contexts, including wildlife, has primarily described differences between identity groups but left unexplored the dynamic influence of identity on attitude formation that might help conservationists reduce intergroup conflict (Birdsong et al., 2024; Fritzsche et al., 2018). We examined how political identity activation and inaccurate metaperceptions of identity group attitudes can exacerbate polarization of human attitudes toward wildlife, specifically wolves, in 2 randomly controlled studies. We were curious whether people's attitudes toward wolves were naively polarized or if activating political identity induced unnecessary polarization.

In Study 1, we compared people's attitudes toward wolves in a politically activated treatment group with those in an inactivated control group. We hypothesized (H_1) political identity activation deepens polarization of attitudes toward wolves because attitudes among activated Democrats are more positive and attitudes among activated Republicans are more negative than their inactivated party peers. We suspected this phenomenon, if observed, would apply to species familiar in a particular context—here the wolf in the United States—but not to unfamiliar ones, despite some similar physical characteristics and interactions with humans. To test this in Study 1, we also measured attitudes toward the relatively unknown (in the United States) babirusa (*Babirusa* sp.) among politically activated and inactivated participants. We hypothesized (H_2) political activation deepens polarization of attitudes toward the familiar wolf because attitudes are polarized along partisan lines following political activation, but attitudes toward the unfamiliar babirusa are not.

We also wondered whether attitudes toward wolves were related to metaperceptions of the political in-group (i.e., what people assume are the attitudes of their fellow party members) or out-group (i.e., what people assume are the attitudes of rival party members), both, or neither. There is enormous evidence that people's attitudes are socially constructed as they seek belonging to various social groups and distance themselves from rival groups (Hogg & Smith, 2007; Tajfel & Turner, 1979). If both dynamics are influencing attitudes toward wildlife, one would expect people to adopt attitudes that increase psychological distance between themselves and their out-group and more closely match the assumed normative attitudes of their in-group. We explored these possibilities in Study 2 by measuring and comparing politically activated people's attitudes toward wolves with their metaperceptions of political in-group and out-group members. We predicted consistently inaccurate metaperceptions of attitudes toward wolves within political parties, such that (P_1) people of both parties would estimate Democrats' attitudes as more positive and (P_2) Republicans' attitudes as more negative than we observed in Study 1. Further, we hypothesized politically activated people's attitudes toward wolves are a function of their inaccurate political in-group (H_3) and out-group (H_4) metaperceptions because both metaperceptions explain significant variance in activated people's attitudes while controlling for the other.

Also in Study 2, we investigated whether people's attitudes toward wolves could be influenced by 2 simple metaperception correction interventions. After asking participants to guess their fellow and rival party members' average attitudes toward wolves, we presented the average in-group attitudes or out-group attitudes measured in Study 1 and compared participants' own attitudes toward wolves in these treatment groups with the attitudes of participants in control groups with whom we did not share the results from Study 1. We hypothesized that politically activated people's attitudes toward wolves are a function of their political in-group metaperceptions (H_5) and out-group metaperceptions (H_6) because attitudes toward wolves among people in the control group differ from those of people who received the in-group and out-group metaperception correction, respectively.

Our logic behind these hypotheses is relatively simple. When political identity is not activated, people are more likely to report something approximating their true attitude toward an object—here a wildlife species. However, when a social identity like political identity is activated, people's attitudes change via 2 possible mechanisms: they conform to their metaperceptions of their in-group or they distance themselves from their metaperceptions of their out-group, or both. We suspect that with respect to wolves in the United States (especially in states where wolves exist), metaperceptions of political in-group and out-group normative attitudes are held with some level of certainty. Thus, attitudes will differ meaningfully between identity activated and inactivated conditions—not so for species like babirusa for which metaperceptions are unknown or uncertain. When metaperceptions are inaccurate, as we predicted they would be for partisan groups' attitudes toward wolves, correcting them should reduce polarization between groups.

If supported, these hypotheses could highlight an important instance when conservation attitudes are susceptible to group identity influence. This insight could help conservationists avoid identity group dynamics that might inadvertently exacerbate disagreement and, instead, leverage social processes to reduce it. We explored attitudes as intraperson cognitive constructions (Hogg & Smith, 2007) and examined their variation based on political identity activation and metaperceptions. Both are tools conservationists can employ in their efforts to find common ground and achieve shared conservation objectives.

METHODS

Study 1 was an online experiment administered on Qualtrics and distributed through Prolific. We recruited participants from Colorado (CO), Idaho (ID), Michigan (MI), Minnesota (MN), Montana (MT), Oregon (OR), Washington (WA), Wisconsin (WI), and Wyoming (WY). We chose these states because of their significant wolf populations and likelihood that participants residing in these states would have greater familiarity with wolves versus people from states without wolves. Compensation was \$2.00 for a complete survey.

We randomly assigned participants to conditions within a 2 (political identity: activated vs. not activated) by 2 (focal species: wolf vs. babirusa) between-subjects design. Following the statement of informed consent, participants encountered the political identity activation manipulation. Next, participants encountered a vignette about wolves or babirusa (Appendix S1), followed by the focal dependent measures and a set of demographic items. The study took approximately 5 min to complete.

Political identity activation

To activate political identity, we adapted the procedures developed by Unsworth and Fielding (2014). In the activated conditions, we told participants the purpose of the study was

to compare the attitudes of Democrats and Republicans on various topics. We then asked participants to list 3 words they thought described Democrats and 3 words they thought described Republicans. We randomized the order of the political party presented. Next, we asked participants “If you had to choose, which party would you say you support most?” from the choices of Democratic Party or Republican Party. In the not activated condition, we asked participants the same questions about the soft drink brands Coca-Cola and Pepsi.

Wildlife vignette

Following the political identity activation manipulation, participants viewed a short description of one of 2 species. In the wolf condition, participants viewed a brief vignette focused on the gray wolves in the United States. The information in this vignette included details about wolves' size, history in the United States, and a balanced description of the tension between conservation, agricultural, and hunting interests. The babirusa condition presented participants with ostensibly identical text focused on the Sulawesi babirusa, a similarly sized species presumably unfamiliar to participants. We displayed the vignettes for 30 s before allowing participants to advance.

Attitude measures

Following these manipulations, participants moved to the dependent measures. Using a 5-point Likert-type scale (1 = *strongly agree*; 5 = *strongly disagree*), participants indicated the extent to which they agreed with following 2 statements: wolves or babirusa should be hunted and, separately, wolves or babirusa should be protected. Next, they indicated their general attitudes toward wolves or babirusa on a 100-point slider (0, *strongly dislike*; 100, *strongly like*). The focal species presented in these items corresponded with the species featured in the wildlife vignette.

Finally, participants completed a set of demographic items, including a thermometer measure of political ideology with a 0- to 100-point sliding scale (0, *strongly liberal*; 100, *strongly conservative*). They were then thanked for completing the survey.

Study 1 analyses

To test H_1 and H_2 in Study 1, we used linear regression to evaluate whether significant variation in people's attitudes toward wildlife was explained by variation among species (i.e., babirusa vs. wolves), political ideology, treatment (i.e., politically activated vs. control), and all interactions among these independent variables. We used the Johnson–Neyman technique to identify the values of political ideology for which the relationships among species, treatment, and attitudes toward wildlife were significant (D'Alonzo, 2004). We tested regression assumptions of linearity, normality, homoscedasticity, and independence (diagnostic figures in Appendix S2).

Study 2

Study 2 was an online experiment administered on Qualtrics and distributed through Prolific. We recruited participants from the same set of U.S. wolf states as Study 1 with a recruitment screen to ensure the sample was balanced between Democrats and Republicans. Further, we excluded Study 1 participants from participation in Study 2. Compensation was \$1.50 for a complete survey.

We randomly assigned participants to conditions within a 2 (focal group: in-group vs. out-group) by 2 (correction: yes vs. no) between-subjects design with self-reported political party (Democrat or Republican) as a third, binary factor. Following the statement of informed consent, all participants encountered the same political identity activation manipulation used in Study 1 to ensure political identity was activated for all Study 2 participants. Next, all participants viewed the same vignette about North American Gray Wolves used in Study 1.

In-group and out-group estimates

We asked participants to estimate the attitudes of the average Democrat and the average Republican on the same 3 focal questions used in Study 1: level of agreement with wolf hunting, level of agreement with wolf protection, and overall attitudes toward wolves. We randomized the order of the focal political party presented. However, participants were randomly assigned to estimate the views of either Democrats and Republicans. When informed by their self-reported political party preference collected in the political identity activation manipulation, this procedure determined whether a participant estimated the views of the political in-group or out-group.

Metaperception correction

Adapted from procedures developed by Mernyk et al. (2022), we presented participants with a table containing their estimates on the 3 focal attitude measures. In the in-group conditions, participants saw their in-group estimates. In the out-group conditions, they saw their out-group estimates. For participants in the correction conditions, the table also included a column displaying the average Democrat's or Republican's response to the 3 items, sourced from Study 1 participants' self-reported views, depending on whether the participant was in the in-group or out-group condition. In the control conditions, these tables did not include the Study 1 averages. For examples of the tables used in the experiment, see Appendix S3.

Attitude measures

Following the manipulations outlined above, we asked participants to report their own attitudes toward wolves with the same slider used in Study 1. Finally, participants completed the same

set of demographic items and were thanked for completing the survey.

Study 2 analyses

To test P_1 and P_2 , we used independent samples t tests to evaluate whether in-group and out-group metaperceptions of attitudes toward wolves within political parties measured in Study 2 differed significantly from the attitudes measured in the control condition of Study 1. To test H_3 and H_4 , we used linear regression to evaluate whether significant variation in attitudes toward wolves was explained by variation among in-group metaperceptions, out-group metaperceptions, political party, and all the interactions among these independent variables. We used linear regression to test H_5 to evaluate whether significant variation in attitudes toward wolves was explained by variation between the in-group metaperception correction treatment versus the control group while controlling for in-group and out-group metaperceptions. To test H_6 , we evaluated whether significant variation in attitudes toward wolves was explained by variation between the out-group metaperception correction treatment versus the control group while controlling for in-group and out-group metaperceptions. We tested assumptions of linearity, normality, homoscedasticity, and independence (diagnostic figures for each regression in Appendix S2).

All study procedures were approved by the University of Montana Institutional Review Board (IRB-FY2024-130).

RESULTS

We recruited 999 participants for Study 1 and 1297 participants for Study 2. Demographic profiles of both samples were similar to the weighted median of adult residents from our sample frame states where median age was 40 in Study 1, 41 in Study 2, and 39 in the population. Respondent sex was 42% male in Study 1, 46% male in Study 2, and 49% male in the population. The majority of respondents were White (79% White in Study 1, 76% in Study 2, and 71% in the population). The sample for Study 1, for which we did not screen for party membership, was 30% Republicans and 70% Democrats. The sample for Study 2 was 49% Republican and 51% Democrats. Demographics did not differ between any control and treatment groups.

In Study 1, when political identity was not activated, the relationship between political ideology and attitudes toward species was negative, such that attitudes toward both wolves and babirusa were less positive among more conservative participants (Figure 1). In the politically activated treatment group of Study 1, this relationship was more pronounced but only for attitudes toward wolves (not toward babirusa). Politically activated liberals had significantly more positive attitudes toward wolves and politically activated conservatives had significantly more negative attitudes toward wolves than their inactivated

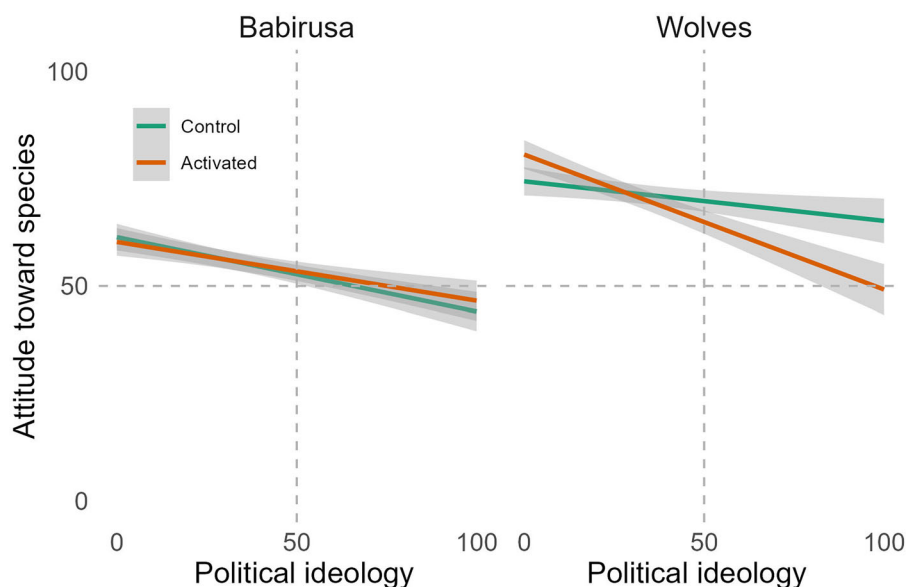


FIGURE 1 Attitudes of survey respondents from U.S. states with wolf populations (0, *most negative*; 100, *most positive*) toward babirusa and wolves by political ideology score (0, *liberal*; 100, *conservative*) in the politically inactivated control (i.e., political identities not made salient [green lines]) and politically activated (orange lines) treatment groups (gray shading, 95% confidence intervals).

ideological counterparts (Figure 1). The Johnson–Neyman interval was 6.7–44.7, demonstrating that attitudes differed between politically activated treatment and control conditions but only outside these points on the political ideology scale (Appendix S4). In the politically inactivated control groups from Study 1, attitudes toward wolves were positive across the political ideology scale, whereas attitudes toward babirusa were neutral (Figure 1). Attitudes toward these species in Study 1 were significantly related to political ideology, species (i.e., wolves vs. babirusa), political activation treatment group (i.e., control vs. activated), and the interactions among these variables (Table 1), thus confirming H_1 and H_2 .

In Study 2, we compared participants' estimates of party-based in-group and out-group attitudes to the attitudes we observed in Study 1. Because we did not collect political party for all Study 1 participants, we used self-reported political ideology to categorize Study 1 participants as either Democrat (i.e., political ideology score <50) or Republican (i.e., political ideology score >50). Though political ideology does not equate with party affiliation, the 2 constructs were strongly related in Study 1 (i.e., 95.74% of self-reported Republicans had ideology scores above 50, and 95.68% of self-reported Democrats had ideology scores below 50) and estimated consequences of this on mean wolf attitude estimates were negligible (Appendix S5). In Study 2, Republicans underestimated the self-reported attitudes of both in-group Republicans and out-group Democrats, whereas Democrats underestimated the self-reported attitudes of out-group Republicans but accurately predicted the self-reported attitudes of in-group Democrats (Figure 2). Lower estimates meant that respondents thought the group they were responding about had a more negative attitude toward wolves than the group actually reported in Study 1. In Study 1, the mean of self-reported attitudes toward wolves among Republicans was

TABLE 1 Regression results of attitudes among survey respondents from U.S. states with wolf populations toward 2 species (babirusa vs. wolves) relative to political ideology (ID), treatment^a, and the 2- and 3-way interactions among these independent variables^b.

Predictor	β	SE	t	p
Intercept	57.67	9.713	5.94	<0.001
Species	5.38	6.108	0.88	0.379
Treatment	−9.06	6.188	−1.46	0.143
Political ID	−0.52	0.203	−2.57	0.010
Species × Treatment	7.61	3.871	1.97	0.050
Species × Political ID	0.33	0.130	2.53	0.012
Treatment × Political ID	0.27	0.130	2.10	0.036
Three-way interaction	−0.25	0.083	−2.96	0.003

^aTreatments were control and politically activated (i.e., political identities made salient).

^bDependent variable is attitude toward species. Residual standard error is 19.33 (df 992), multiple $R^2 = 0.2042$ (df 7), adjusted $R^2 = 0.1986$ (df 992), $F = 36.37$.

67 (SD 20). However, in Study 2, Republicans' estimates of Republicans' attitudes toward wolves were significantly lower (mean [SD] = 58 [22], $t = 3.486$, $p < 0.001$), as were Democrats' estimates of Republicans' attitudes toward wolves (mean = 39 [22], $t = 10.465$, $p < 0.001$). In Study 1, the mean of self-reported attitudes toward wolves among Democrats was 73 (20). However, in Study 2, Republicans' estimates of Democrats' attitudes toward wolves were significantly lower (mean = 66 [24], $t = 3.876$, $p < 0.001$). In Study 2, Democrats' estimates of Democrats' attitudes toward wolves were not significantly different than what was self-reported in Study 1 (mean = 70 [16], $t = 1.881$, $p = 0.061$). These results partially disconfirmed P_1 and confirmed P_2 .

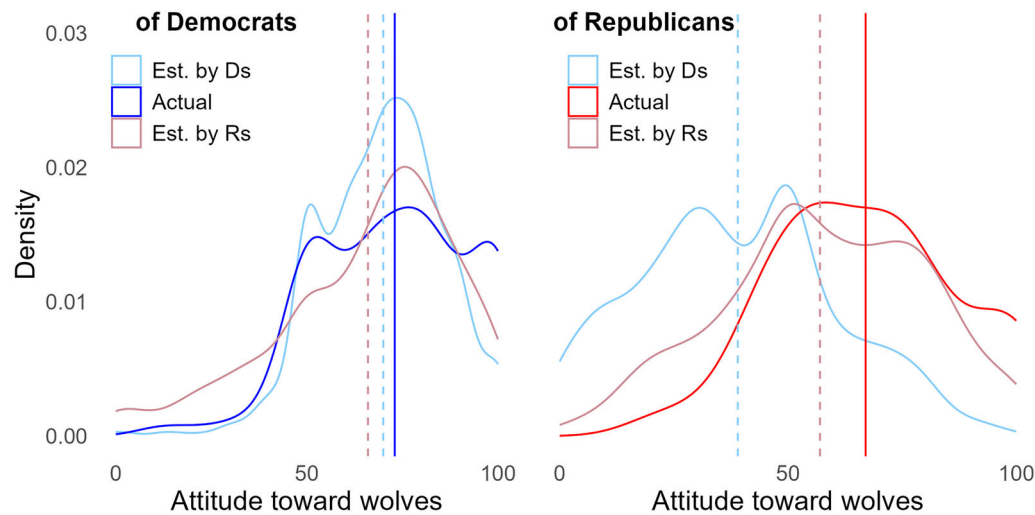


FIGURE 2 Density estimate (est.) of mean attitude toward wolves (0, *most negative*; 100, *most positive*) from Study 2 (a comparison of politically activated people's attitudes toward wolves with their metaperceptions of political in-group and out-group members) for Democrats (D; solid light blue lines, density; dashed light blue lines, mean estimated attitudes) and Republicans (R; solid light red lines, density; dashed light red lines, mean estimated attitudes) relative to self-reported attitudes toward wolves from Study 1 (comparison of people's attitudes toward wolves in a politically activated treatment group and in an inactivated control group) among Democrats (left panel) and Republicans (right panel) (solid vertical lines, measured mean attitude scores for Democrats [blue] and Republicans [red] from Study 1).

TABLE 2 Regression results of attitudes among survey respondents from U.S. states with wolf populations toward wolves relative to in-group metaperception (i.e., in-group guess), out-group metaperception (i.e., out-group guess), political party (with Republican [Rep.] party as the reference), and the 2- and 3-way interactions among these independent variables^a.

Predictor	β	SE	t	p
In-group guess	1.14	0.373	3.05	0.002
Out-group guess	0.36	0.574	0.63	0.526
Party (Rep.)	21.77	17.745	1.23	0.220
In-group $\times$ Out-group	-0.01	0.008	-0.67	0.506
In-group $\times$ Party	-0.34	0.236	-1.46	0.145
Out-group $\times$ Party	-0.23	0.320	-0.72	0.471
Three-way interaction	0.00	0.004	0.79	0.431

^aDependent variable is attitude toward wolves. Residual standard error is 20.853 (df 627), multiple $R^2 = 0.262$ (df 1), adjusted $R^2 = 0.253$ (df 627), $F = 31.726$.

In Study 2, attitudes toward wolves were significantly related to participants' in-group metaperceptions (i.e., people's estimates of their fellow party members' attitudes toward wolves) but not to out-group metaperceptions (i.e., people's estimates of their rival party members' attitudes toward wolves), party (i.e., Democrat or Republican), or any interactions among these independent variables; thus, H_3 was confirmed but H_4 was not (Table 2). The higher participants estimated their fellow party members' attitudes toward wolves, the higher they reported their own attitudes toward wolves. Estimates of out-group members' attitudes toward wolves were not significantly related to self-reported attitudes toward wolves (Table 2; Figure 3).

Both Democrats' and Republicans' attitudes toward wolves were significantly more positive when we corrected in-group metaperceptions but did not significantly differ from the control when we corrected out-group metaperceptions, offering support for H_5 but not H_6 (Table 3). Across both parties, attitudes toward wolves were more positive when participants

were shown the actual value of their fellow party members' attitudes, which was on average significantly higher than their estimates (see P_1 and P_2 results above). However, people's attitudes toward wolves did not differ whether or not we showed them the actual value of their rival party members' attitudes (Table 3; Figure 4; Appendix S6).

DISCUSSION

Conservation is a social endeavor, requiring cooperation to reach acceptable and durable decisions that protect biodiversity (Cumming, 2018). When people interact in such social settings, identity forces can play a strong role, serving to unite or divide people and thus promote or undermine cooperation (Van Bavel & Pereira, 2018). Social identities are not simply static accounts of which groups people do or do not belong to; they are also dynamic influences on cognition and behavior

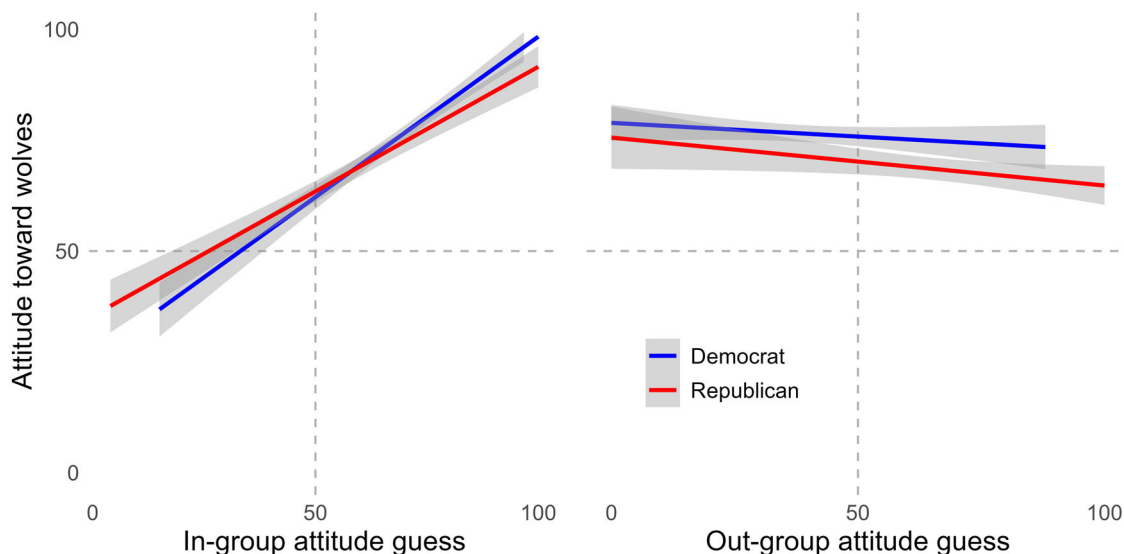


FIGURE 3 Attitudes toward wolves (0, *most negative*; 100, *most positive*) of Democrats (blue lines) and Republicans (red lines) by respondent metaperceptions of attitudes toward wolves among in-group members (left panel) and out-group members (right panel).

TABLE 3 Results of 2 regressions of attitudes toward wolves (dependent variable) among survey respondents from U.S. states with wolf populations relative to an in-group correction treatment^a or an out-group correction treatment^b.

Treatment model ^c	Predictor	β	SE	<i>t</i>	<i>p</i>
In-group	In-group correction	4.38	1.689	2.59	0.010
	In-group guess	0.60	0.044	13.82	<0.001
	Out-group guess	0.02	0.038	0.52	0.602
	Republican party affiliation	−0.63	2.025	−0.31	0.756
Out-group	Out-group correction	2.00	1.606	1.24	0.214
	In-group guess	0.57	0.042	13.53	<0.001
	Out-group guess	0.00	0.036	0.10	0.917
	Republican party affiliation	−2.46	1.891	−1.30	0.194

^aWith respect to political party in-group members. Residual standard error is 21.12 (df 630); multiple $R^2 = 0.258$ (df 4), adjusted $R^2 = 0.253$ (df 632), $F = 54.79$.

^bWith respect to political party out-group members. Residual standard error is 20.62 (df 656), multiple $R^2 = 0.244$ (df 4), adjusted $R^2 = 0.240$ (df 656), $F = 52.97$.

^cNo interaction terms among any independent variables were significantly related to attitudes in either the in-group or out-group model.

that, upon activation, can bias information processing, preferences, and interpretation of facts (Hull et al., 2024). Activation of different identities can induce varied bias (Bogart & Lees, 2023). We found that the seeming contentiousness of wolf management in the United States could be, at least partially, a product of group identity activation—in this case political identity activation—and metaperceptions within identity groups. Specifically, politically activated people's attitudes toward wolves were significantly more polarized than inactivated people's attitudes—that is, activated Republicans held significantly more negative attitudes toward wolves and activated Democrats held significantly more positive attitudes toward wolves than their inactivated party peers. Although inaccurate metaperceptions like these have been linked to increased intergroup conflict in other contexts (Blatz & Mercier, 2018; Hull et al., 2024), our findings have the potential to inform conservation research and

practice. However, polarized attitudes do not guarantee “bad” policy outcomes, and “good” outcomes are not always the result of widespread attitude agreement.

Across our 2 studies, we observed positive attitudes toward wolves among a majority of people, but activating political identity induced polarization. Though inactivated conservatives were less fond of wolves than inactivated liberals, we observed, on average, positive attitudes across the political spectrum (Figure 1). Attitudes toward wolves were even more positive across the political spectrum than they were toward a similar yet unfamiliar species (i.e., babirusa). Although generally positive attitudes toward wolves have been found in repeated contexts (Barmoen et al., 2024; Schanning, 2009; Williams et al., 2002; Metcalf et al., 2025), this fact runs counter to the common narrative that wolves are both divisive and especially hated by conservatives (Houston et al., 2010). The

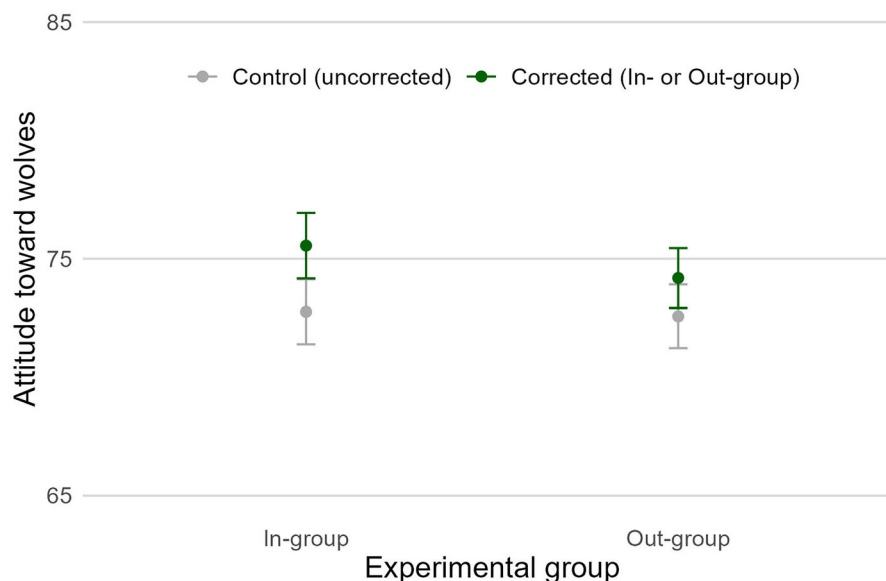


FIGURE 4 Mean (SE) attitudes toward wolves (0, *most negative*; 100, *most positive*) among activated partisans who received metaperception corrections (i.e., providing accurate information that adjusts beliefs about others' attitudes) (green) for their in-group (left) or out-group (right) compared with control groups (gray, left and right, respectively).

tragically ironic consequence of this false narrative was evident when we activated participants' political identity. Thinking through a partisan lens with assumed polarization induced unnecessary polarization. That a similar activation did not polarize attitudes toward babirusa suggests the mechanism of this effect is related not only to some familiarity with the species but also to assumptions about how identity groups evaluate it.

The polarization of attitudes toward wolves caused by political identity activation seemed to be a function of in-group identity dynamics, rather than out-group. In support of H₃, we found a strong and significant relationship between in-group metaperceptions and participants' attitudes toward wolves that affected Democrats and Republicans equally (Figure 3). The more positive participants believed their in-group's attitudes toward wolves to be, the more positive their own attitudes were. Contrary to H₄, the more positive participants believed rival out-group's attitudes toward wolves to be, the more negative their own attitudes were, although this relationship was not significant when controlling for in-group metaperceptions (Table 2). Most research on political identity activation has focused on inaccurate metaperceptions of out-groups rather than in-group (Bogart & Lees, 2023), and although there are likely conservation issues where out-group metaperceptions are more relevant than what we found here, conservation itself may be fundamentally unique from political domains where much of this research is conducted. For instance, in most political contexts, attitude objects are often the actions or policies that would directly affect partisan rivals or peers. However, wolves (and other species) represent a third-party object, so attitudes may be less entangled with out-group metaperceptions. Further research, likely experimental, is needed to tease out the differential effects of in-group and out-group metaperceptions and the

conditions under which either influence conservation-related attitudes.

Beyond that, it is critical to remember that attitudes and outcomes do not necessarily align. Though we have demonstrated a paradigm in which attitudes can be shifted at the group level, it remains unclear how these shifts map on to specific conservation policies. Furthermore, in contexts like this, individual actors are often influential based on the extremity of their views. Indeed, these people likely shape the metaperceptions we investigated, but they can also influence policy for better and worse.

We found preliminary, but promising, evidence that correcting inaccurate metaperceptions can help reduce differences in conservation-related attitudes. In Study 2, we documented how Democrats and Republicans both assumed Republicans' attitudes toward wolves were far more negative than measured in Study 1 and by others (Carlson et al., 2020). Similarly, but contrary to our predictions, participants from both parties in Study 2 also assumed Democrats' attitudes toward wolves were not as positive as they actually were in Study 1 (Figure 2). Among participants for whom we corrected these in-group metaperceptions, attitudes toward wolves increased. We found no such effect related to our out-group metaperception correction (Figure 4). Although this treatment did not reduce polarization (i.e., the overall separation between Democrats and Republicans), it did increase attitudes toward wolves across the political spectrum. We suspect that in other contexts where metaperceptions are driving polarization (rather than suppressing attitudes in both groups as they were in Study 2), corrections could reduce polarization. In whatever ways these identity dynamics play out in different contexts, conservation researchers and practitioners would benefit from considering their influence, measuring the magnitude and direction of their likely effects,

experimenting with corrections to reduce disparities between groups, and testing whether interventions like these can reduce conflict.

Our findings have clear implications for conservation-related policy, outreach, and communication. The generally positive attitudes toward wolves that we and others have observed suggest strong potential for progress on a seemingly intractable conservation challenge. However, the degree to which these attitudes correspond with endorsement of specific policies remains unclear. On the flip side, our results should serve as a warning that these generally positive sentiments are especially vulnerable to political identity activation. At least in an online sample of wolf-state residents, when political identity is activated, shared positivity can break down quickly. Though our study cannot speak to how these dynamics might play out in the context of in-person outreach or public meetings, policy makers and conservation organizations seeking common ground on this issue would be wise to think creatively about how to avoid unnecessarily activating political identities or other group identities that might exacerbate conflict. Of course, avoiding political activation may not be possible in many conservation settings (e.g., legislatures or Congress, ballot initiatives, wildlife commissions), but a growing literature on intergroup conflict reduction suggests ways to reduce this conflict even after political identities have been activated (Halperin et al., 2023).

The effects we document here suggest a feedback loop such that the division we think exists drives further division. Social scientists and practitioners would be wise to push against this cycle, avoid pitfalls that can reinforce it, and understand the media and political environment in which they operate. Journalists, politicians, and social media companies often have incentives to stoke division. As such, wolves are commonly, but incorrectly, portrayed as divisive—a beloved conservation success story on the left and a hated threat to livelihoods and liberty on the right (Houston et al., 2010). However, the wolf is simply not as divisive as this narrative suggests, and actively pushing back against these caricatures may help attenuate disagreement, whereas perpetuating them is likely to exacerbate differences.

This initial foray into the dynamic nature of political identity in a conservation context opens avenues for future research. Our study involved online participants with no known involvement in wolf conservation; the dynamics in the heat of debate are likely more powerful but harder to isolate and study. We activated political identity, but other group identities (e.g., hunters, agricultural producers, environmentalists) may have larger or smaller effects on attitudes in different conservation contexts. Questions also remain as to why identity dynamics might influence people's attitudes toward some species but not others. For example, we suspect that familiarity (e.g., with wolves, but not babirusa) is a necessary but insufficient condition for identity to distort conservation-related attitudes and that some measure, such as species' assumed political divisiveness, might better explain the degree to which identity activation will influence attitudes. Most social identity research in conservation seems to be limited to describing how identity groups differ in their attitudes or behaviors. Much work is needed to understand the

dynamism of social identity effect on attitudes, including under what conditions identity activation might lead to enduring versus ephemeral attitude change. The role of metaperceptions in these dynamics is also complex, and more work is needed to understand when and how in-group versus out-group dynamics distort people's assessments of conservation issues. We see an especially pressing need for experimentation in this space—seeking to understand when identity-informed interventions can promote cooperation, have no effect, or backfire—to best inform conservation practice. We believe metaperceptions provide an especially practical target for future investigations because they are potentially more malleable than other beliefs, values, or contextual factors.

In myriad contexts, identity dynamics shape people's relationships with each other, attitudes toward things in the world, and behaviors. Conservation issues are not immune to these powerful social forces. Our results demonstrate that one form of identity activation—political identity—can unnecessarily exacerbate differences between groups regarding wolf management in the United States. Attitudes toward wolves are positive across the political spectrum until political identities are activated, after which polarization increases significantly. These dynamics, at least with respect to wolves, appear to be driven by inaccurate metaperceptions of political in-groups, rather than out-groups, but mechanisms may differ across conservation contexts. Promisingly, our simple correction of inaccurate metaperceptions increased attitudes toward wolves across the political spectrum, revealing one practical path toward identity-informed conflict reduction. This work deepens our understanding of the role identity dynamics play in one conservation domain, but more research is needed in more contexts to deepen knowledge and more fully inform practice.

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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