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Can Unexpected Support Promote Environmental Policy Acceptability? An Experimental Investigation of Norm Source and Strength

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Supplementary Materials: Materials [see Index of Supplementary Materials]

Abstract

Two experiments tested how environmental policy acceptability of US conservatives and liberals was influenced by manipulating the level (minority vs. majority) and source (in-group vs. outgroup) of normative support for policy. Results from 928 MechanicalTurk users (Study 1: N = 268, Study 2: N = 660) indicated that when evaluating an in-group policy (that participants expect their own political group to support), communicating outgroup support increases acceptability compared with communicating in-group support. The outgroup norm has a positive indirect effect via the inference that the in-group is even more supportive of the policy than the outgroup is. In contrast, when evaluating an outgroup policy, communicating in-group support indirectly yields higher acceptability than communicating outgroup support, via the inference that the outgroup is more supportive than the in-group is. This effect mainly occurred for individuals with strong ideological identification and was independent of level of support (minority vs. majority). Results indicate that bipartisan support for environmental policies can be achieved by strategic communication of normative information about political groups.

Keywords

social norms, norm groups, environmental policy, social identity theory, political ideology

Implementing environmental policies for limiting global warming to the global mean temperature set at the 2015 United Nations Climate Change Conference in Paris presents difficulties for politicians, as many such policy measures are unpopular with the public (Drews & Van den Bergh, 2016). Unless policy measures achieve broad public support, they are unlikely to be supported in the political sphere (Jacobs et al., 1999). To date, support for environmental policies has been highly polarized in the American political climate, with liberals and Democrats being more supportive than conservatives and Republicans (Van Boven et al., 2018). This polarization is presumed to have occurred due to party activists driving a process of conflict extension in political elites, which is then transferred to the public as they use party cues to form political opinions (Fiorina & Abrams, 2008; Krosnick et al., 2000). Instead of in-depth processing of all available information on a policy issue, voters often make political decisions using these types of heuristic cues to save cognitive effort (Lupia & McCubbins, 1998). Typically, people tend to support policies more when their political in-group expresses support for it and devalue policies proposed by political outgroups, regardless of policy content (Cohen, 2003; Bolsen et al., 2014; Van Boven et al., 2018).

However, research on how normative cues affect policy support has confounded the influence of in- and outgroups, for example by stating that a majority of liberals *and* a minority of conservatives are supportive of the policy, or that

Democrats are supportive *and* Republicans are opposed. While this type of polarization framing may represent the current political climate in the US, it does not allow for the investigation of how this polarization may be decreased. Specifically, it does not tell us what the separate influence of in-group and outgroup norms are, or how varying the relative strength of these norms (in terms of how many of each group is supportive) affect policy support. This research aims to discern how environmental policy acceptability is influenced by information that either a minority or majority of the participants' political in- or outgroup supports polarized, here environmental, policies. In this study, the terms 'acceptability' and 'support' are both used to refer to people's attitudinal (dis)favor of a policy (Perlaviciute & Steg, 2014).

Normative Influence of In- and Outgroups

The general tendency to align one's political attitudes with political in-groups can be understood from the perspective of social identity theory (SIT: Tajfel & Turner, 1986). SIT states that when people claim membership in groups, they learn what attitudes and behaviors are (dis)approved of in those groups and adjust their behavior accordingly. Such conformity typically increases with the number of people supporting the norm (hereafter referred to as level of support) (de Groot & Schuitema, 2012; Von Borgstede et al., 1999). Increased conformity to in-groups can be due both to the personal relevance of in-group norms (Tajfel & Turner, 1986; Versluis & Papies, 2016), and to an increased perception of attitude validity. Opinions are typically regarded as more valid when there is consensus about the opinion and when the group holding the opinion is perceived as heterogeneous (e.g., Harkins & Petty, 1987; Lopes et al., 2007). As in-groups are typically perceived as more heterogeneous than outgroups (Linville et al., 1989), their opinions may therefore be perceived as more valid.

However, research from both the SIT and persuasion field also suggest that outgroup norms can produce greater conformity than in-groups in certain contexts. Specifically, conformity to outgroups may occur when they are seen as taking an unexpected but positive position (Bohner et al., 2010). This effect is referred to as positive distinctiveness, whereby adopting an attitudinal position that is more extreme than the outgroup but still to the in-groups' favor, makes the in-group appear in a more positive light and provides the individual with greater self-esteem. The validity of an opinion can similarly increase when a group is seen to take an unexpected position, in turn producing greater attitude change (e.g. Eagly et al., 1978; Petty et al., 2001; Priester & Petty, 1995). For the remainder of the article, we will use the term "norm group" to encompass both in- and outgroups that exert normative influence.

In summation, while in-group norms typically produce greater conformity to an opinion, outgroups may produce greater conformity when they are seen as taking an unexpected position. Majority support on the other hand tends to lead to greater conformity than minority support. Thus, which effects we might expect in the context of environmental policies in the US depends on whether the polarized nature of the policies has an influence on expected support.

If outgroups are not seen as taking an unexpected position, 1) we might observe the commonly found main effect of an in-group norm on conformity, in which case we might expect a majority in-group norm to yield highest acceptability for both liberals and conservatives.

If, however, the polarized nature of environmental policies in the US does affect whether support from liberals or conservatives is perceived as expected versus unexpected, conservative support for an environmental policy might presumably be more unexpected than liberal support. How level of support and norm group interact in this context depends on whether effects are driven by a process of opinion validity or positive distinctiveness.

In the case of opinion validity 2), we might observe that a majority of conservatives in support will increase conformity for both liberals and conservatives. Since people may expect or infer that liberals already support environmental policies, conservative support provides information that two heterogeneous groups are in consensus, thereby increasing the validity of the opinion.

In the case of positive distinctiveness 3), we might observe that a majority of conservatives in support will only increase conformity for liberals, given that they infer that their in-group is also supportive. We might not however observe a corresponding increase in conformity for conservatives, given that they infer that their outgroup is also supportive, as the latter would not allow for positive distinctiveness.

As we have found no previous research on this potential interaction between norm group, level of support and policy content, we base our hypothesis of main effects on the most commonly found effects in normative research and take an exploratory approach in investigating a potential three-way interaction.

Overview of the Studies

The aim of the present studies is to examine how environmental policy acceptability is affected when people learn that their own political in-group or outgroup (here, liberals and conservatives) either weakly (in the case of a minority) or strongly (in the case of a majority) support given environmental policies. We sample a range of policies to explore the extent of our hypothesized effects. In Study 1, we test whether the context of polarized environmental policies moderates the commonly found effect of in-group norms on conformity, and measure the acceptability of both environmental push and pull measures. Pull measures (e.g., subsidies or tax deductions) incentivize pro-environmental behavior, while push measures (e.g., taxes or regulation) make environmentally harmful behavior undesirable by putting a cost on the unwanted behavior (e.g., de Groot & Schuitema, 2012; Eriksson et al., 2006; Schuitema et al., 2011). While liberals tend to be more accepting of both types of measures, conservatives tend to prefer pull measures over push measures, presumably because push measures are more coercive and require greater state involvement than pull measures do (Harring et al., 2017). Any differential response to outgroup norms might therefore be more pronounced for push measures, given that they are more polarized.

In Study 2, we extend the scope of study to encompass our hypothesized effects across policies piloted to be perceived as either conservative, liberal, or politically neutral policy issues. In Study 2, we also provide a test for whether effects are driven by a process of positive distinctiveness or increased validity of opinion, by testing the indirect effect of inferring that one's in-group is more or less supportive of a policy than the outgroup and vice-versa.

Study 1

We hypothesize that:

H1: Majority support will increase policy acceptability more than will minority support.

H2: An in-group message will increase policy acceptability more than will an outgroup message.

H3: Liberals will be more accepting of both push and pull measures than will conservatives.

Research question: We will additionally explore potential interactions between norm group, level of support and political ideology.

Method

Participants

An a priori power analysis indicated that 256 participants was a sufficient sample to detect the effect size, f = .18, reflecting an interaction between type of policy (pull vs. push and) and level of support (minority vs. majority), by de Groot and Schuitema (2012) with greater than .80 power (α = .05). Accordingly, 300 American MechanicalTurk users participated in the study, of whom 68% identified as liberal and 32% as conservative. After excluding participants who failed to correctly answer both attention checks (see below), 268 people (M_{age} = 36.24, SD = 11.07, 50% male) remained. Of these, 69% identified as liberal and 31% as conservative (Table S:1, Supplementary Materials).

Procedure

The survey experiment employed a 2 (norm group: in-group vs. outgroup) × 2 (level of support: minority vs. majority) × 2 (political ideology: liberal vs. conservative) quasi-experimental design with a hanging control condition. The survey was created in Qualtrics and distributed via Amazon's MechanicalTurk. Each participant was paid USD 0.30 as compen-

sation. To make their respective in-group and outgroup salient, participants first indicated whether they belonged to the group of liberals or conservatives. Each participant was then randomly assigned to one of the four experimental conditions or the control condition (see Supplementary material, Table S:2 for means). The majority condition stated that 76–77.5% of conservatives/liberals found the policy acceptable, while the minority condition stated that 23–24.5% found it acceptable. We varied the percentages slightly within these intervals for the two policies to make the normative information more trustworthy (e.g., 23% in support of the pull policy and 24.5% in support of the push policy or vice versa). The in-group and outgroup were framed by simply referring to conservatives or liberals. Whether conservatives or liberals were perceived as the in-group or outgroup depended on which group the participant had chosen as their in-group at the start of the survey.

After the normative manipulation, participants stated how acceptable they found the two policy measures and how they would vote if there was a referendum (see Supplementary material for analyses on voting intention for Study 1 and 2). The order of the two policies was randomized. In the control condition, all normative information (level of support from in- or outgroup) was omitted and participants only read the policy descriptions and rated acceptability. The push policy read, "Imagine that the government, in order to reduce CO_2 emissions, was planning to *increase* the price of *environmentally unfriendly energy* by ten percent," while the pull policy read, "Imagine that the government, in order to reduce CO_2 emissions, was planning to *decrease* the price of *environmentally friendly energy* by ten percent." At the end of the survey, participants in the experimental conditions were fully debriefed about the fabricated normative information. The study followed ethical guidelines in Sweden for survey data and were thus conducted in line with the declaration of Helsinki.

Measures

Dependent Variables — All participants were asked to indicate how acceptable they found the two policies on a seven-point Likert scale ranging from 1—*very unacceptable* to 7—*very acceptable* and also to indicate how they would vote on the policy if there were a referendum today, using the dichotomous answer alternatives Yes—*accept the policy* and No—*reject the policy.*

Strength of in-group and outgroup belonging was assessed with two items: "To what extent do you feel that you belong to the group liberals[conservatives]?" rated on a seven-point Likert scale ranging from 1—*Very small extent* to 7—*Very large extent.* These questions were later combined (by subtracting the belonging to liberals from the belonging to conservatives) and used as a continuous ideology variable, ranging from −6—*high liberal identification* to 6—*high conservative identification.* As expected, the liberal versus conservative belongingness had a negative correlation of $r = -.59$, and the continuous and categorical (the variable used to make respective in-group salient) variables had a positive correlation, $r = .80$.

Lastly, participants were asked to state their age and gender. As attention checks, participants in the experimental conditions further responded to "Approximately how many percent found the different policy measures acceptable in the previous questions?", with 10%, 25% and 75% as range of options, and "What group of people expressed support for the previous policies?", with liberals and conservatives as range of options. The trends in the data were descriptively the same when participants who did not pass the attention checks were included in analysis, but the inclusion of inattentive participants rendered some effects not significant.

Results

Validation of In-Group and Outgroup Belonging

Validating identification with respective political group, there was a significant difference between how much liberals and conservatives felt they belonged to the group of liberals, $t = 17.4$, $p < .001$, $d = 2.30$, 95% CI [1.97, 2.62], and to the group of conservatives, $t = -15.6$, $p < .001$, $d = -2.06$, 95% CI [−2.37, −1.75]. There was no significant difference in how much conservatives and liberals felt they belonged to their in-group, $t(266) = 1.35$, $p = .178$, $d = .18$, 95% CI [−0.08, 0.44], and outgroup, $t(266) = -1.37$, $p = .173$, $d = .18$, 95% CI [−0.08, 0.44].

Main Analysis

We performed two (one for each policy) multiple hierarchical regressions with level of support (coded: 0 = minority, 1 = majority), norm group (coded: 0 = in-group, 1 = outgroup), and political ideology as independent variables and acceptability as the dependent variable. Testing H1, majority versus minority support increased acceptability for both policy measures (Table 1). In opposition of H2, we found no main effect of norm group on acceptability. Testing H3, being conservative rather than liberal decreased acceptability for the push, but not the pull measure (although descriptively, liberals tended to be more positive towards the pull policy compared to conservatives, see Table 1).

Table 1

Summary of Two Hierarchical Multiple Regressions for Policy Acceptability in Experiment 1

	Acceptability of pull policy					Acceptability of push policy				
Independent variables	***B***	***SE***	**β**	***t***	***p***	***B***	***SE***	**β**	***t***	***p***
Step 1		**$F(3, 207) = 3.75$, $R^2 = .05$**					**$F(3, 207) = 9.56$, $R^2 = .12$**			
(Constant)	4.97	.20		24.90	< .001	3.95	.23		17.28	< .001
Level of support	.58	.23	.17	2.49	.014	.54	.26	.13	2.03	.044
Norm group	.20	.23	.06	.89	.377	.19	.26	.05	.73	.467
Ideology	−.06	.03	−.13	−1.95	.052	−.17	.04	−.32	−4.79	< .001
Step 2		**$F(6, 207) = 1.94$, $R^2 = .06$**					**$F(6, 207) = 5.6$, $R^2 = .14$**			
(Constant)	4.92	.23		21.32	< .001	3.99	.26		15.25	< .001
Ideology × Norm group	−.01	.06	−.01	−.08	.938	−.15	.07	−.21	−2.14	.034
Ideology × Level of support	−.03	.07	−.04	−.42	.674	.03	.07	.04	.46	.645
Level of support × Norm group	−.26	.47	−.06	−.55	.583	−.19	.53	−.04	−.35	.724
Step 3		**$F(7, 207) = 1.78$, $R^2 = .06$**					**$F(7, 207) = 4.8$, $R^2 = .14$**			
(Constant)	4.94	.23		21.28	< .001	3.99	.26		15.17	< .001
Ideology × Level of support × Norm group	.12	.13	.13	.91	.366	.05	.15	.05	.34	.730

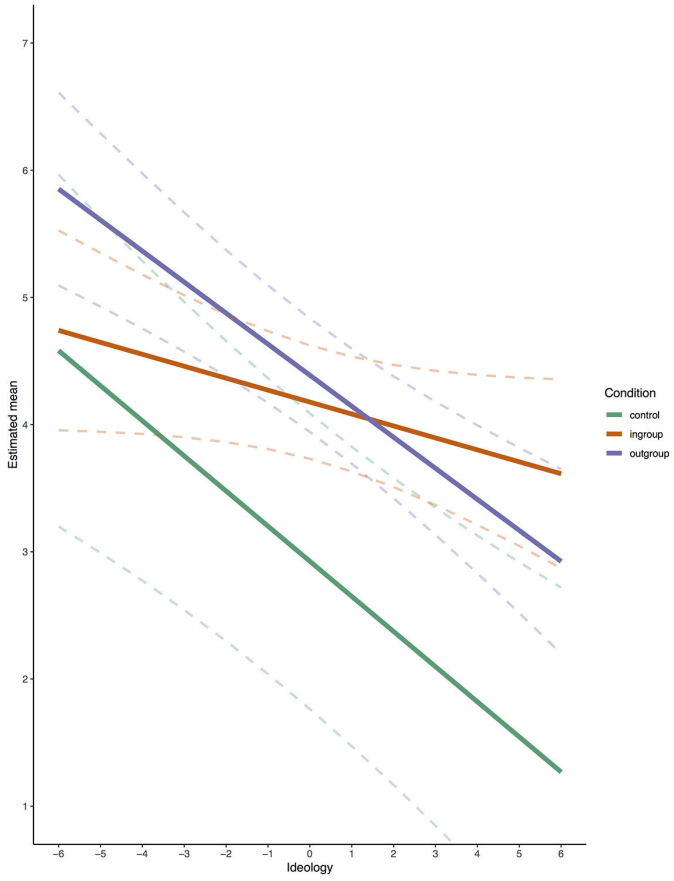
Note. Level of support was coded (0 = minority, 1 = majority), norm group as (0 = in-group, 1 = outgroup), and continuous values of political ideology represent (-6 = Very liberal, 6 = Very conservative).

Most importantly and concerning our research question, in the analysis of the push measure, we found a significant two-way interaction between norm group and ideology. No other interactions were discovered. The interaction was probed with a moderation analysis (PROCESS v.2.16.3, Model 1, Hayes, 2013). We entered norm group (coded: control = 0, in-group = 1, outgroup = 2) as the multicategorical independent variable, ideology as the moderator, and level of support as the covariate.[1] Conditional effects indicated that for people strongly identifying as liberals (i.e., 10th percentile, scale value = -6), an outgroup norm significantly increased acceptability compared with the control condition, $b = 1.32$, $t = 2.06$, $p = .040$, BCCI [2.58, .06], $d = .67$, while an in-group norm did not, $b = .43$, $t = .69$, $p = .491$, BCCI [−.79, 1.64], $d = .21$. For liberals, an outgroup norm also increased acceptability compared with an in-group norm, $b = -.89$, $t = -2.06$, $p = .040$, BCCI [−1.74, −.04], $d = -.44$. In contrast, for people strongly identifying as conservatives (i.e., 90th percentile, scale value = 4), both an in-group norm, $b = 2.25$, $t = 3.08$, $p = .002$, BCCI [.81, 3.69], $d = 1.28$, and an outgroup norm, $b = 1.64$, $t = 2.31$, $p = .022$, BCCI [3.03, .24], $d = .86$, increased acceptability compared with the control condition. An in-group norm did not significantly increase acceptability compared with an outgroup norm, $b = .61$, $t = 1.29$, $p = .198$, BCCI [−.31, 1.34], $d = .3$ (see Figure 1 for all significant levels).

1) We do not view level of support as a covariate, although the model specification that allows multi-categorical independent variables in Process only allows one moderator variable.

Figure 1

Plot of Interaction Effect Between Norm Group and Political Ideology on Estimated Mean Acceptability of Push Policy in Experiment 1



Note. Dotted lines indicate 95% confidence intervals.

Discussion

In Study 1, we supported the hypothesis that majority support generally yields higher policy acceptability than does minority support. Concerning the effect of ideology, it was only in the case of the push measure that we found support for our hypothesis that liberals would be more accepting of environmental policies. Although liberals tended to also be more positive towards the pull policy than conservatives, this difference was not significant.

Contrary to our second hypothesis and some previous research (e.g., Berger & Rand, 2008; Cohen, 2003), we did not find that an in-group norm yielded higher acceptability than an outgroup norm. Instead, we found that an outgroup compared to in-group norm increased acceptability to liberals for the policy issue where ideology had a differential effect (i.e., the push measure). This suggests that people may not be swayed by the "party-over-policy" effect when the policy content strongly communicates a political ideology/identity. Rather, when the policy issue is perceived to be liberal, information that conservatives support the policy might indicate that liberals as a group will be even more supportive, thus increasing liberals' acceptability either via a process of positive distinctiveness or increased opinion validity. If this was the case, it might explain why level of support and norm group did not interact. If people are able to make a directional inference about their in-groups' support from the policy context, it might not matter how many from the outgroup are expressing support (i.e., my in-group is always more supportive than the outgroup in this matter, regardless of minority or majority support).

In order to draw firmer conclusions about the process underlying our results, some limitations must be addressed in Study 2. Firstly, we assume that people interpret outgroup support for in-group policies as unexpected. If this is the case,

we should not observe a positive effect of outgroup support for politically neutral policies (i.e., non-polarized policy). Study 2 adds a politically neutral policy to test this.

Secondly, while Study 1 assumes that an outgroup norm can have a positive effect on acceptability because the policy content allows people to make inferences about their in-groups' support, Study 2 provides a test for this assumption. This also allows us to assess whether the positive outgroup effect is driven by positive distinctiveness or opinion validity. If the effect is driven by positive distinctiveness, we should observe that an unexpected outgroup norm indirectly increases support via an inference that the in-group is more supportive. We should not however observe that an unexpected in-group norm indirectly increases support via an inference that the outgroup is more supportive. If results are driven by opinion validity however, we should observe that both unexpected in-group and outgroup norms indirectly increase support via an inference that the outgroup/in-group is more supportive.

Thirdly, both an in-group and an outgroup norm yielded higher acceptability for conservatives compared to the control condition in Study 1. This lack of differentiation for conservatives might be caused by two limitations: a) the lower number of conservative participants may have reduced the power to detect any differential effects. This is remedied in Study 2 by adding a quota function for ideology; or b) that we did not pilot our two policies. While the level of polarization (estimated using the control condition) differs between the pull (d = .62) and the push (d = 1.07) policy, it is possible that liberals perceived the policy to be more polarized than did conservative participants, potentially diluting a differential effect of norm group. This is addressed in Study 2, where we piloted our three policies to ensure that both conservatives and liberals perceived each policy as either conservative, liberal or politically neutral. Due to the difficulty of creating a pro-environmental policy that is perceived to be supported by conservatives but not liberals, the conservative policy instead has negative implications for the environment. Our aim here is to see if conservatives will react similarly as liberals to an unexpected (positive) outgroup norm.

Finally, the two policies assessed in Study 1 were said to be proposed by the US government (Republican at the time the study was conducted), potentially making the sender of the policy more salient, and potentially communicating that the policy was proposed by respondents in- or outgroup. This was remedied in Study 2, by omitting any information about the origin of the policy.

Study 2

Following from Study 1, we wanted to examine whether the differential effect that the outgroup norm had on liberals and conservatives was due to the perceived liberal nature of the environmental push policy. If so, we should be able to replicate the results for the liberal policy and possibly observe the opposite effect when the policy issue is perceived to be more conservatively oriented. Additionally, we included a policy issue that was deemed politically neutral by both liberals and conservatives, to discern the effects when people have no expectation of what the in-group or outgroup support should be. Based on SIT, we hypothesized that in the absence of any prior expectation of in-group and outgroup attitudes, the in-group norm should be more effective than the outgroup norm, regardless of ideology. Building on this and exploring underlying processes, we also hypothesized that any positive effect of the outgroup would be driven by a positive inference about the in-group's support.

> H1: Majority support for a policy will increase acceptability relative to minority support.
>
> H2: Acceptability of a perceived neutral policy will increase among both liberals and conservatives when they are exposed to the in-group norm as opposed to the outgroup norm.
>
> H3: Acceptability of the perceived liberal policy will increase with exposure to outgroup norms compared to in-group norms for liberals but not conservatives.
>
> H4: Acceptability of the perceived conservative policy will increase with exposure to outgroup norms compared to in-group norms for conservatives but not liberals.
>
> H5: The positive effects of outgroup norms will be mediated by an inferential belief that in-group support is higher than outgroup support.

Method

Participants

An a priori power calculation estimated that 666 participants was a sufficient sample to detect the interaction effect between norm group and ideology in Study 1 (i.e. d = .28), with greater than .80 power (α = .05). To ensure an equal amount of conservatives and liberals, we added a quota function for ideology. Accordingly, 751 American MechanicalTurk users participated in the survey, of whom 52% identified as liberal and 48% as conservative. After removing participants who gave incorrect answers to the attention checks, the sample consisted of 660 participants (of whom 151 were in the control condition). Our final sample (M_{age} = 36.45, SD = 11.55, 53% males) consisted of 52.4% liberals and 47.6% conservatives (see Table S:5, Supplementary Materials).

Procedure

The study employed a mixed 2 (norm group: in-group vs. outgroup) × 2 (level of support: majority vs. minority) × 2 (political ideology: liberal vs. conservative) quasi-experimental design with a hanging control condition. The study was created in Qualtrics and distributed via Amazon's MechanicalTurk, and each participant received USD 0.50 as compensation. The procedure was identical to that of Study 1, but also included questions about whether participants believed that the support of the non-referenced group was higher or lower than that of the referenced group (*inferred support*), how effective they believed the policy would be at fulfilling its aim, how important they considered the issue, and which group they believed had most to gain from policy implementation. The three last questions were not relevant to the study's hypotheses and are therefore not analyzed and reported on here. The perceived conservative policy was worded "Imagine a policy that, in order to secure American jobs, power the American economy and maintain the domestic oil and gas provision, made it legal for energy companies to mine oil and natural gas by hydraulic shale drilling (so called fracking) without government approval" while the perceived liberal policy read "Imagine a policy that, in order to decrease the American use of environmentally harmful energy as oil and natural gas, made it illegal to build new oil pipelines in America". Finally, the perceived neutral policy read, "Imagine a policy that, in order to improve traffic safety, made it illegal to drive a car without headlights turned on during daytime."

Measures

Pilot of Policies — Before the main study, we performed a pilot study to confirm the perceived ideology of our three policies. Results from 151 participants (76 liberals and 75 conservatives) indicated that conservatives found the perceived conservative policy more acceptable than did liberals, $t(139) = -2.72$, p = .007, d = −.44, 95% CI [−.77, −.12], that the perceived liberal policy was more acceptable to liberals than conservatives, $t(148) = 4.76$, $p < .001$, d = .77, 95% CI [.44, 1.11], and that acceptability of the perceived neutral policy did not differ significantly between the groups, $t(149)$ = .89, p = .375, d = .14, 95% CI [−.17, .46]. Participants were additionally asked how acceptable they believed liberals and conservatives as groups would find the three policies. The correlations between the perceived acceptability of the policies to liberals and conservatives were: for the perceived conservative policy, r = −.36, $p < .001$; for the perceived liberal policy, r = −.35, $p < .001$; and for the perceived neutral policy, r = .42, $p < .001$. We subsequently used the pilot as a control group for the main study (see Supplementary Materials for analysis on the control group).

Dependent Variables — Acceptability was measured as in Study 1, except that the Likert scale ranged from 1—*extremely unacceptable* to 9—*extremely acceptable*, to avoid any possible ceiling effects. The strength of in-group and outgroup belonging was assessed and used to create the continuous ideology variable as in Study 1. Belongingness to liberals and belongingness to conservatives were negatively correlated, r = −.66, and the continuous and categorical ideology variables correlated strongly, r = .80.

Inferred support was measured by asking "Do you think the liberal/conservative support for the … policy is higher or lower than the conservative/liberal support?" rated on a seven-point Likert scale ranging from 1—*much lower* to 7—*much higher*. Participants receiving an in-group norm were asked how supportive they believed the outgroup would be and those receiving an outgroup norm were asked how supportive they believed their own in-group would be.

These two questions were later combined to create one variable (described in more detail in the "Results" section of the moderated mediation analysis).

Lastly, participants were asked to report their age and gender, and answer the attention checks as in Study 1. Participants who did not give correct answers to both attention checks were not included in the analysis. Inclusion of inattentive participants did not however affect the results.

Results

Validation of In-Group and Outgroup Belonging

There was a significant difference between how much liberals and conservatives felt belonging to the group of liberals, $t(504) = 23.7$, $p < .001$, $d = 1.85$, 95% CI [1.66, 2.03], and to the group of conservatives, $t(447) = -24.2$, $p < .001$, $d = -1.89$, 95% CI [−2.07, −1.7]. While there was no significant difference in how much belonging to their in-group liberals and conservatives felt, $t(504) = 1.91$, $p = .057$, $d = .15$, 95% CI [−0.00, .3], conservatives felt stronger belonging to their outgroup than liberals did, $t(504) = -2.3$, $p = .022$, $d = -.18$, 95% CI [−.33, −.03].

Hypotheses 1–4

To test our first four hypotheses, we performed three (one for each policy) multiple hierarchical regressions with acceptability as the dependent variable and norm group (coded: 0 = in-group, 1 = outgroup), ideology, and level of support (coded: 0 = minority, 1 = majority) as independent variables (Table 2, see also Supplementary Materials for comparison with control condition).

Table 2

Summary of Three Hierarchical Multiple Regressions for Policy Acceptability in Experiment 2

	Acceptability of perceived conservative policy					Acceptability of perceived liberal policy					Acceptability of perceived neutral policy				
Independent variables	***B***	***SE***	**β**	***t***	***p***	***B***	***SE***	**β**	***t***	***p***	***B***	***SE***	**β**	***t***	***p***
Step 1	$F(3, 505) = 25.3$, $R^2 = .13$					$F(3, 504) = 45.2$, $R^2 = .21$					$F(3, 505) = .5$, $R^2 = .00$				
(Constant)	3.84	.19		19.80	< .001	5.36	.18		29.99	< .001	4.84	.20		24.15	< .001
Ideology	.24	.03	.34	8.12	< .001	−.31	.03	−.46	−11.57	< .001	−.02	.03	−.03	−.72	.474
Level of support	.50	.22	.10	2.28	.023	.26	.20	.05	1.29	.198	.24	.23	.05	1.06	.288
Norm group	−.03	.22	−.01	−.15	.880	−.26	.20	−.05	−1.29	.196	.01	.23	.00	.06	.955
Step 2	$F(6, 505) = 12.89$, $R^2 = .13$					$F(6, 504) = 25.44$, $R^2 = .24$					$F(6, 505) = .76$, $R^2 = .01$				
(Constant)	3.69	.23		16.36	< .001	5.57	.21		27.06	< .001	4.73	.23		20.26	< .001
Ideology × Level of support	.00	.06	.00	−.01	.995	−.08	.05	−.09	−1.57	.118	−.01	.06	−.01	−.17	.867
Ideology × Norm group	−.01	.06	−.01	−.08	.936	−.17	.05	−.18	−3.17	.002	−.08	.06	−.08	−1.24	.217
Norm group × Level of support	−.56	.44	−.09	−1.27	.205	.63	.40	.11	1.57	.117	−.50	.46	−.08	−1.08	.279
Step 3	$F(7, 505) = 11.04$, $R^2 = .13$					$F(7, 504) = 21.85$, $R^2 = .24$					$F(7, 505) = 1.05$, $R^2 = .01$				
(Constant)	3.70	.23		16.29	< .001	5.59	.21		26.99	< .001	4.70	.23		20.05	< .001
Ideology × Norm group × Level of support	.03	.12	.02	.26	.796	.07	.11	.06	.68	.498	−.20	.12	−.16	−1.66	.098

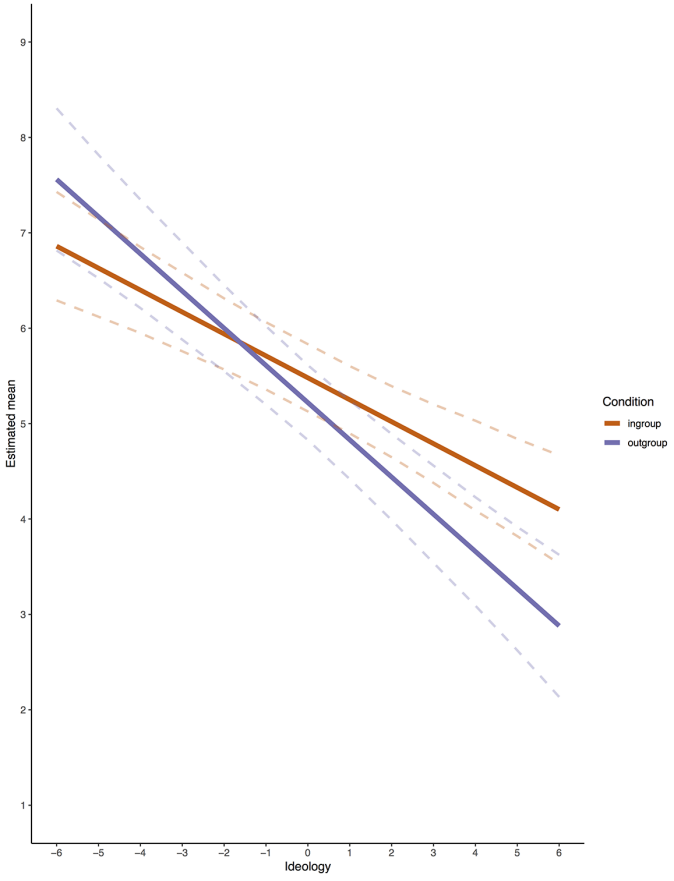
Note. Level of support was coded (0 = minority, 1 = majority), norm group as (0 = in-group, 1 = outgroup), and continuous values of political ideology represent (-6 = Very liberal, 6 = Very conservative).

Testing H1, it was only for the conservative policy that we found that a majority versus minority support increased acceptability. Testing H2, we did not find that an in-group versus outgroup norm significantly increased acceptability for the neutral policy. Testing H3, we again found a significant interaction between norm group and ideology in the liberal policy, which we probed with a moderation analysis (PROCESS v.2.16.3, Model 1, Hayes, 2013). We entered norm group (coded: −0.5 = in-group, 0.5 = outgroup) as the independent variable, ideology as the moderator variable, and acceptability as the dependent variable. Level of support was entered as the covariate (see Footnote 1). Concerning H3, conditional effects showed that for people identifying strongly as liberals (i.e., 10th percentile, scale value = -6), an

outgroup versus in-group norm did not significantly increase policy acceptability, $b = .63$, $t = 1.77$, $p = .078$, BCCI [−.07, 1.34], $d = .25$, while for people identifying strongly as conservatives (i.e., 90th percentile, scale value = 5), an outgroup versus in-group norm decreased acceptability, $b = -1.13$, $t = -3.22$, $p = .001$, BCCI [−1.82, −.44], $d = -.46$ (see Figure 2 for all significant levels). Finally, in contrast to H4, we did not find that an outgroup norm increased conservative support for the conservative policy.

Figure 2

Plot of Interaction Effect Between Norm Group and Ideology on Estimated Mean Acceptability of Perceived Liberal Policy in Experiment 2



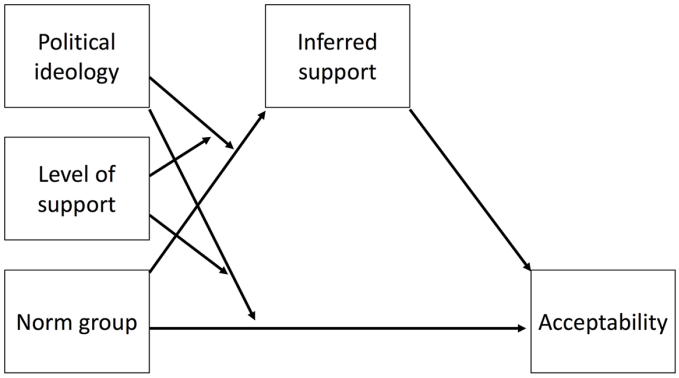
Note. Dotted lines indicate 95% confidence intervals.

Hypothesis 5

To test H5, that an outgroup norm would have a positive indirect effect on support via an inference that one's in-group would have higher support than the outgroup, we conducted three (one for each policy) moderated mediation analyses (PROCESS v.2.16.3, Model 12, Hayes, 2013). We entered acceptability as the dependent variable, norm group as the independent variable (coded: −0.5 = in-group, 0.5 = outgroup), level of support (coded: −0.5 = minority, 0.5 = majority) and ideology as moderators, and inferred support as the mediator (Figure 3). To simplify interpretation of results, inferred support was centered on 4 at which participants infer equal in-group and outgroup support. The results for the in-group norm reflect the inferred support of the participants' outgroup, while the results for the outgroup norm reflect the inferred support of their in-group. Thus, the variable inferred support reflects how supportive the in-group is perceived to be compared to how supportive the outgroup is perceived to be. All confidence intervals (BCCI) were bias corrected and bootstrapped from 5000 samples and are at a 95% confidence level. All effect sizes reported are partially standardized indirect effects (*psi*).

Figure 3

Conceptual Diagram of the Moderated Moderated Mediation Model Tested



We found support for H5, that an outgroup norm has a positive indirect effect on policy acceptability via an inference that one's in-group is more supportive, in all three policies. For the conservative policy (Table 3), we found that for people strongly identifying as liberal, an outgroup norm decreased policy acceptability via a belief that their in-group would be less supportive. For people strongly identifying as conservative, an outgroup norm increased acceptability via a belief that their in-group would be more supportive.

Table 3

Regressions for Perceived Conservative Policy in Experiment 2

	Inferred support (*m*)						Acceptability (*y*)					
					95% CI						95% CI	
Independent variables	***B***	***SE***	***t***	***p***	***LL***	***UL***	***B***	***SE***	***t***	***p***	***LL***	***UL***
(Constant)	−.24	.09	−2.75	.006	−.41	−.07	4.14	.11	37.66	< .001	3.92	4.35
Inferred support							.29	.06	5.25	< .001	.18	.40
Ideology	−.04	.02	−1.63	.104	−.08	.01	.25	.03	8.70	< .001	.19	.31
Level of support	−.35	.17	−1.98	.048	−.69	−.00	.60	.22	2.73	.007	.17	1.03
Norm group	−.66	.17	−3.79	< .001	−1.01	−.32	.15	.22	.70	.486	−.28	.59
Ideology × Level of support	.05	.05	1.04	.297	−.04	.14	−.02	.06	−.26	.796	−.13	.10
Ideology × Norm group	.47	.05	10.23	< .001	.38	.56	−.14	.06	−2.28	.023	−.27	−.02
Norm group × Level of support	−.31	.35	−.88	.381	−.99	.38	−.46	.44	−1.05	.292	−1.32	.40
Ideology × Norm group × Level of support	−.26	.09	−2.78	.006	−.44	−.08	.11	.12	.91	.362	−.12	.33
	$F(7, 498) = 20.23$, $R^2 = .22$						$F(8, 497) = 13.61$, $R^2 = .18$					

Note. Level of support was coded (-0.5 = minority, 0.5 = majority), norm group as (-0.5 = in-group, 0.5 = outgroup), and continuous values of political ideology represent (-6 = Very liberal, 6 = Very conservative) Inferred support is centered on the value that represent (Equal support from both the in-group and outgroup). Index of moderated moderated mediation: −.08, *SE* = .03, 95% CI [−.16, −.02]

For the liberal policy (Table 4), we found that for people strongly identifying as liberal, an outgroup norm increased policy acceptability via a belief that their in-group would be more supportive. For people strongly identifying as conservative, an outgroup norm decreased acceptability via a belief that their in-group would be less supportive.

Table 4

Regressions for Perceived Liberal Policy in Experiment 2

	Inferred support *(m)*						Acceptability *(y)*					
					95% CI						95% CI	
Independent variables	***B***	***SE***	***t***	***p***	***LL***	***UL***	***B***	***SE***	***t***	***p***	***LL***	***UL***
(Constant)	−.03	.08	−.36	.718	−.19	.13	5.38	.10	53.19	< .001	5.19	5.58
Inferred support							.13	.06	2.35	.019	.02	.24
Ideology	.00	.02	.18	.859	−.04	.05	−.31	.03	−11.56	< .001	−.36	−.26
Level of support	−.15	.16	−.92	.356	−.47	.17	−.30	.20	−1.38	.168	−.12	.68
Norm group	.14	.16	.84	.402	−.18	.45	−.35	.20	−1.75	.081	−.75	.04
Ideology × Level of support	.10	.04	2.28	.023	.01	.18	−.10	.05	−1.82	.069	−.20	.01
Ideology × Norm group	−.63	.04	−14.89	< .001	−.72	−.55	−.09	.06	−1.38	.169	−.22	.04
Norm group × Level of support	−.33	.32	−1.02	.309	−.96	.30	.71	.41	1.75	.081	−.08	1.51
Ideology × Norm group × Level of support	−.05	.08	−.55	.584	−.21	.12	.08	.11	.74	.461	−.13	.29
	$F(7, 497) = 35.27, R^2 = .33$						$F(8, 496) = 19.98, R^2 = .24$					

Note. Level of support was coded (-0.5 = minority, 0.5 = majority), norm group as (-0.5 = in-group, 0.5 = outgroup), and continuous values of political ideology represent (-6 = Very liberal, 6 = Very conservative) Inferred support is centered on the value that represent (Equal support from both the in-group and outgroup). Index of moderated moderated mediation: −.01, *SE* = .01, 95% CI [−.04, .01].

Finally, for the neutral policy (Table 5), we again found that for people strongly identifying as liberal, an outgroup norm increased acceptability via a belief that their in-group would be more supportive. For people strongly identifying as conservative, an outgroup norm decreased acceptability via a belief that their in-group would be less supportive.

Table 5

Regressions for Perceived Neutral Policy in Experiment 2

	Inferred support (*m*)						Acceptability (*y*)					
					95% CI						95% CI	
Independent variables	***B***	***SE***	***t***	***p***	***LL***	***UL***	***B***	***SE***	***t***	***p***	***LL***	***UL***
(Constant)	−.31	.07	−4.51	< .001	−.44	−.17	5.16	.11	46.54	< .001	4.94	5.37
Inferred support							.58	.07	8.07	< .001	.44	.72
Ideology	.02	.02	1.34	.180	−.01	.06	−.03	.03	−1.14	.254	−.09	.02
Level of support	−.62	.14	−4.53	< .001	−.88	−.35	.60	.22	2.70	.007	.16	1.03
Norm group	−.33	.14	−2.39	.017	−.59	−.06	.22	.22	.99	.324	−.21	.64
Ideology × Level of support	.01	.04	.38	.705	−.06	.08	−.02	.06	−.27	.787	−.13	.10
Ideology × Norm group	−.22	.04	−6.23	< .001	−.30	−.15	.06	.06	1.04	.299	−.06	.18
Norm group × Level of support	.17	.27	.62	.537	−.37	.70	−.69	.43	−1.58	.115	−1.54	.17
Ideology × Norm group × Level of support	−.00	.07	−.06	.952	−.15	.14	−.20	.11	−1.74	.082	−.42	.03
	$F(7, 498) = 9.41, R^2 = .12$						$F(8, 497) = 9.17, R^2 = .13$					

Note. Level of support was coded (-0.5 = minority, 0.5 = majority), norm group as (-0.5 = in-group, 0.5 = outgroup), and continuous values of political ideology represent (-6 = Very liberal, 6 = Very conservative) Inferred support is centered on the value that represent (Equal support from both the in-group and outgroup). Index of moderated moderated mediation: −.00, *SE* = .04, 95% CI, [−.09, .09].

All the indirect effects were significant under both the minority and majority conditions (see Table 6 for indirect effects across level of support and ideology). For the conservative policy, however, the indirect effect of an outgroup norm was found to be significantly stronger under minority support than under majority support.

Table 6

Conditional Indirect Effects of Norm Group on Policy Acceptability Through Inferred Support in Experiment 2

	Conservative policy			Liberal policy			Neutral policy		
Ideology	***ab***	**BCCI**	***psi***	***ab***	**BCCI**	***psi***	***ab***	**BCCI**	***psi***
Minority									
-6	-1.21	-1.79, -.67	-.46	.53	.02, 1.13	.21	.53	.13, 1.04	.21
-4	-.85	-1.28, -.47	-.32	.36	.01, .78	.14	.28	-.02, .63	.11
0	-.15	-.34, -.03	-.06	.04	-.01, .17	.02	-.24	-.50, -.02	-.09
3	.38	.17, .68	.14	-.20	-.50, -.02	-.08	-.62	-1.05, -.28	-.24
5	.73	.38, 1.19	.28	-.37	-.83, -.02	-.15	-.88	-1.46, -.42	-.34
Majority									
-6	-.84	-1.37, -.45	-.32	.52	.02, 1.07	.21	.64	.27, 1.12	.25
-4	-.64	-1.05, -.34	-.24	.34	.01, .72	.13	.38	.11, .73	.15
0	-.24	-.46, -.09	-.09	-.00	-.09, .05	.00	-.14	-.37, .07	-.05
3	.06	-.12, .28	.02	-.27	-.59, -.02	-.11	-.53	-.90, -.24	-.21
5	.26	.04, .61	.10	-.44	-.94, -.02	-.17	-.79	-1.28, -.39	-.31

Note. Values for ideology are 10th, 25th, 50th, 75th and 90th percentiles, with -6 indicating strongest identification as liberal and 5 strongest identification as conservative.

Discussion

In Study 2, we found varied support for the hypothesis that majority versus minority support would increase acceptability; It did for the perceived conservative policy, but not for the perceived liberal policy, as in Study 1. In line with our discussion of Study 1, level of support may become increasingly redundant if people are able to make stronger inferences about the direction of support from their in-group based on how polarized the policy is perceived to be. We additionally found a negative direct effect: when conservatives were judging a liberal policy, an outgroup versus in-group norm decreased acceptability of that policy. That we did not observe this direct effect for the conservative policy may be due to the level of polarization for this issue (see General Discussion).

Concerning H5, we found that an outgroup norm does have a positive indirect effect on acceptability for in-group policies, when people infer that their in-group is more supportive than the outgroup. Conversely, an outgroup norm had a negative indirect effect on acceptability for outgroup policies, when people infer that their in-group is less supportive than the outgroup. Contrary to some previous findings (e.g., Cohen, 2003; Druckman et al., 2013) our study indicates that people do not necessarily reinterpret the ideological position of a policy issue based on which norm group is expressed as supportive, as the group piloted to be perceived as more supportive was also inferred to be the most supportive group. That an outgroup norm indirectly decreased policy acceptability to conservatives but increased it to liberals for the neutral policy might be due to this policy having been perceived as less impactful than the other two polices, potentially confounding the interpretation of results. We are therefore hesitant to draw any conclusions from the neutral policy.

General Discussion

Over two studies, we examined how the acceptability of five policies to conservatives and liberals was affected by varying the level (minority vs. majority) and source (in-group vs. outgroup) of normative support for policy. A new central finding is that an outgroup norm may yield higher acceptability than an in-group norm when the policy is perceived as an in-group policy, e.g., when liberals evaluate a perceived liberal policy. Conversely, we found that an in-group norm may increase acceptability more than an outgroup norm when the policy is perceived as an outgroup policy, e.g., when conservatives evaluate a perceived liberal policy. We further find that the outgroup norm has a positive indirect effect on acceptability via an inference that one's in-group is more supportive of the policy than the

outgroup, while the in-group norm has a positive indirect effect on acceptability via an inference that one's outgroup is more supportive than the in-group.

These indirect effects appear to be stronger for liberals than for conservatives (see Table 6). This may be due to the fact that liberals tended to identify more strongly with their ideological group than conservatives did. People who strongly identify with their political in-group typically respond more strongly to normative cues (Malka & Lelkes, 2010). Furthermore, Democrats often respond more strongly to partisan cues than Republicans (Druckman et al., 2013; Ehret et al., 2018; Van Boven et al., 2018). Whether this is due to Democrats/liberals generally identifying more strongly with their in-group than Republicans/conservatives, or whether these are two separate effects, should be further investigated.

While Study 1 replicates the outgroup effect found by Bohner et al. (2010) in a different context, Study 2 provides additional evidence that the normative effect of an unexpected position may apply to in-groups as well as outgroups. Bohner et al. (2010) interpreted their effects as driven by a processes of positive distinction, where an unexpected outgroup norm makes people infer that the in-group likely has even more positive attitudes. However, our additional finding that an in-group norm increases acceptability for an outgroup policy via an inference that the outgroup is even more supportive is not in line with positive distinctiveness. Rather, it suggests a process of opinion validation. That is, when an outgroup is supportive of an in-group policy and participants believe that the in-group is also supportive (vice-versa for in-group norm), this in turn provides information that two heterogeneous groups are in consensus on a political issue, making support for the specific policy appear to be a valid opinion (e.g., Harkins & Petty, 1987; Lopes et al., 2007).

However, we only provided an indirect test of the assumed process driving the effects. Depending on which of these theoretical explanations are evident in this context, it may have implications for the long-term effect of manipulating outgroup support on polarization. If positive distinctiveness is driving the effect, people may focus on the relative difference between two groups and still perceive that environmental issues are polarized, over time potentially increasing polarization. However, if our results are in fact driven by a perceived consensus among liberals and conservatives as the data pattern would suggest, continued polarization may not be an issue with this type of norm manipulation.

Alternatively, some research shows that information in general has a greater impact on attitudes when the information is new as opposed to familiar (e.g., Slothuus, 2008; Wiest et al., 2015). While we argue that the outgroup norm may have a positive impact due to increased validity of the opinion, we have not controlled for whether the information is simply new and therefore more impactful. However, as we did not observe any effects of either an in-group or outgroup norm compared to control condition for the politically neutral policy (where new information was provided but no pre-existing expectation of in-group support existed) we do not believe that the results are driven by the newness of the information.

But why did an outgroup norm compared to in-group norm increase the acceptability of liberals in Study 1 but not Study 2, and why did an in-group norm compared to outgroup norm increase the acceptability of conservatives in Study 2 but not Study 1? As can be seen in Table 7, the interaction between norm group and ideology appears to occur for policies that are perceived as more polarized (i.e., the push policy in Study 1 and the perceived liberal policy in Study 2). While the trends of in-group and outgroup norm are the same for both policies, the push policy in Study 1 is more polarized than the liberal policy in Study 2. While the lack of differentiation between in-group and outgroup for conservatives in the push policy may likely be related to the small conservative sample in Study 1, the non-significant effect of outgroup norms for liberals in Study 2 may be related to this policy not being perceived to be as polarized as in the first study.

Table 7

Summarizing Table of Main and Interaction Effects Across Experiment 1 and 2

Policies	Polarization (based on the control groups)	Main effect of level of support	Main effect of ideology	Main effect of norm group	Interaction between ideology and norm group
Push policy (Exp. 1)	d = 1.07	Majority vs. minority increases support	Liberals more supportive than conservatives	*n.s.*	Outgroup vs. in-group norm increases the acceptability of liberals
Perceived liberal policy (Exp. 2)	d = .77	*n.s.*	Liberals more supportive than conservatives	*n.s.*	In-group vs. outgroup norm increases the acceptability of conservatives
Pull policy (Exp. 1)	d = .62	Majority vs. minority increases support	*n.s.*	*n.s.*	*n.s.*
Perceived conservative policy (Exp. 2)	d = .44	Majority vs. minority increases support	Conservatives more supportive than liberals	*n.s.*	*n.s.*
Perceived neutral policy (Exp. 2)	d = .20	*n.s.*	*n.s.*	*n.s.*	*n.s.*

Limitations

Some limitations with these two studies should be highlighted. Study 1 only included 268 participants, and an unequal number of conservatives and liberals, so may have been too underpowered to detect a three-way interaction between political ideology, norm group and level of support, had such an effect existed. As Study 2 did not aim to test this three-way interaction, the power calculation for that experiment was based on the two-way interaction from Study 1.

While we found significant differences between norm groups and the control condition in Study 1, we did not in Study 2 (see Supplementary Materials). This may be related to the fact that the control group was not assessed in the main experiment, rather it was the pilot sample that made up the control group. Because of this, the control group did not answer the same questions than the other participants concerning the strength of their felt belonging to their respective in-groups and outgroups. The ideological strength of participant beliefs in the control group may have varied compared with that of the experimental groups, making a direct comparison difficult. Although the control group was assessed only a few days prior to the experimental conditions, this may have further rendered the group comparisons unequal.

It should also be acknowledged that while the policies in Study 2 were piloted to be perceived as conservative, liberal or politically neutral, this also varied the policy domains studied, which may have introduced a confound in the design. Lastly, the indirect effect of an outgroup on acceptability via inferred in-group support is correlational, and no causal inferences about this process can be made based on these two studies.

Practical Implications

For three out of five policies, we found that majority versus minority support increased acceptability. This main effect did not, however, affect the influence of the norm group or the direction of inference about the in-group or outgroup. Rather, people who strongly identify as either liberal or conservative seem to make an initial judgment as to whether

they perceive the policy to be liberal or conservative and make consistent assessments thereafter. This is vital in terms of practical implications. If existing policy support is already low, communicating a minority norm may be as beneficial as communicating a majority norm depending on the group that communicates the norm. Norm groups can in this way be used to shift the degree of people's preferences while still presenting truthful information. Given that manipulating majority conservative support of a pro-environmental push policy could have been met with some level of skepticism by participants, it may have reduced the strength of the positive effect of an unexpected outgroup norm. Future research might consider piloting the believability of such experimental manipulations, or, in line with our results, rely on presenting minority support, as this appear to be similarly effective.

While news media may often report the public opinion on environmental policies of both Republicans/conservatives and Democrats/liberals, Republican/conservative and Democratic/liberal organizations and parties are more likely to present information about their own groups' opinion on both in-group and outgroup policies, in order to convey the party line and influence voters. This type of one-sided communication may have unintended effects on voters, as this research suggests that even presenting information that a minority of an in-group is in support of an outgroup policy may actually increase support for said policy. This line of research may also have bearing on how messages from political or organizational representatives are evaluated. If, for example, a Republican politician argues in favor of abortion rights, Democratic support for abortion rights may increase even more than if a Democratic representative advocates them, while a Republican spokesperson might be a prerequisite for any Republican support.

Lastly, although left-right polarization on environmental issues is now a widespread problem occurring in countries with different governmental configurations (Birch, 2020), the effects observed in this study may potentially be stronger in countries with bipartisan systems than multi-party systems, as the former may increase the salience of political in-groups and outgroups.

Conclusions

Over two studies, we showed that strategically using different types of norm groups to communicate social norms may be an effective way of overriding existing levels of support to increase acceptability of environmental policies. Where the ideological nature of a policy would attract a group of listeners (e.g., introducing an environmental push policy to a liberal/leftist audience or a free market solution to a conservative/rightwing audience), specific policy acceptability may be most easily achieved by highlighting outgroup support for the policy. However, if the ideological nature of the policy would repel a group of listeners (e.g., introducing an environmental push measures to a conservative/rightwing audience or a free market solution to liberal/leftist audience), acceptability may instead be promoted by highlighting in-group support for the policy. This highlights the importance of considering contextual factors such as policy content when using social norms to influence decision-making processes.

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

Supplementary Materials

The Supplementary Materials contain descriptive statistics and analyses on voting intention for all policies (for access see Index of Supplementary Materials below).

Index of Supplementary Materials

Ejelöv, E., Hansla, A., & Nilsson, A. (2022). *Supplementary materials to "Can unexpected support promote environmental policy acceptability? An experimental investigation of norm source and strength"* [Descriptive statistics and analyses]. PsychOpen GOLD. https://doi.org/10.23668/psycharchives.6507

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