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Willingness to use moral reframing: Support comes from perceived effectiveness,
opposition comes from integrity concerns

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Abstract

Moral reframing is a communication technique that involves persuading an audience to support an issue they typically oppose on ideological grounds by appealing to concepts and values that align with their moral concerns. Overall, previous research has found that moral reframing can encourage attitude change more so than non-reframed messages. One pending question, though, is whether people would or would not use this technique in the first place (e.g., because it requires embracing values that one might not endorse).

This online study (N = 249) tested the willingness of US-based liberals to use a message appealing to conservative values (morally reframed), vs. one appealing to liberal values (not morally reframed), to persuade a hypothetical conservative audience to be more pro-environmental. Reasons behind message choice and feelings about both messages were measured. Results showed that most participants chose to use the morally reframed message (73%). This choice was justified by the message's perceived persuasive effectiveness, while rejecting it was justified by the need to feel true to one's own beliefs and values. However, regardless of actual message choice, participants overall reported more positive and less negative integrity feelings for the message that was not morally reframed.

Keywords

Moral reframing, moral values, political discourse, intergroup dialogue, political psychology

Word count

7769 words

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Political polarization has become a growing concern in the United States and other Western countries (Carothers & O'Donohue, 2019). In the face of data from the public and lawmakers showing increasing hostility and self-separation on ideological grounds, some have advocated dialogue as a means of preventing social division (e.g., Cleven et al., 2018; Hartman et al., 2022). However, one challenge to effective dialogue is the increasing tendency of partisan publics to draw on different sets of moral values – a challenge that could be met by using moral reframing in conversations (Feinberg & Willer, 2019).

Essentially, moral reframing involves presenting arguments for policies/issues with appeals to values embraced by ideological opponents to convince them to support a position they probably would not otherwise (e.g., US conservatives might be persuaded to support same-sex marriage by appealing to family values and national cohesion; US liberals might be convinced to support high military spending by emphasizing it as a vehicle for social equality). While previous experiments and interventions give a generally positive picture of moral reframing's effectiveness as a persuasion tool (e.g., Feinberg & Willer, 2013, 2015; Kalla et al., 2022; Kaplan et al., 2023; Kidwell et al., 2013; Thomas et al., 2023; Voelkel & Feinberg, 2018; cf. Luttrell & Trentadue, 2023; Peterson & Simonovits, 2017; van de Rijt et al., 2016), little is known about the willingness of partisans to use it in real life.

Will the greater effectiveness of meeting political opponents on their ground be self-evident? Or will there be qualms about personally endorsing – even tactically – values and concepts that belong to the morality of *the other side*? These questions motivated this current study.

Background and previous research

The presence of intergroup or partisan conflict caused by two sides drawing on different sets of moral values can be outlined using Moral Foundations Theory (MFT) (Haidt & Graham, 2007; Haidt & Joseph, 2004). MFT proposes that human morality is based on five psychological intuitions, or *foundations*: care/harm (e.g., concerns about caring for others), fairness/cheating (e.g., concerns about equal treatment), loyalty/betrayal (e.g., concerns about defending one's group), authority/subversion (e.g., concerns about obeying authority figures), and purity/degradation (e.g., concerns about disgust and contamination avoidance) (see Graham et al., 2018). Furthermore, while everyone values all moral foundations to some degree, MFT suggest that innate mental predispositions, specific cultural practices and one's lived experience can influence how people (and societies) prioritize these foundations, which helps explain the differences in moral judgement systems observed between and within countries today (Graham et al., 2013, 2018).

Looking specifically at political liberals and conservatives in the US, Graham et al. (2009) found that liberals generally focus on care/harm and fairness/cheating more than conservatives, whereas conservatives care about loyalty/betrayal, authority/subversion and purity/degradation more than liberals (see also Kivikangas et al., 2021, for a meta-analysis). In fact, some argue that both sides' relative focus on different moral concerns is part of the reason why they respond differently to important political issues – like healthcare, policing, and taxation (e.g., see Ditto & Koleva, 2011; Haidt, 2013; Haidt & Graham, 2007). Thus, it has been proposed that perhaps by acknowledging and working with the other side's primary moral concerns we can help foster more mutual understanding and reduce the division in political discussions (Haidt, 2013; cf. Kugler et al., 2014).

Some researchers have explored this proposal using a message framing technique known as *moral reframing* (see Feinberg & Willer, 2019, for a review). Essentially, it involves presenting an issue to an audience that typically does not support it, using wording and values that align with their moral concerns (e.g., presenting pro-environmental policy appeals to US conservatives using patriotic wording and values). Furthermore, studies have shown that people express more support for issues after being exposed to morally reframed messages (e.g., Feinberg & Willer, 2013, 2015; Hurst & Stern, 2020; Kalla et al., 2022; Kaplan et al., 2023; Kidwell et al., 2013; Thomas et al., 2023; Voelkel & Feinberg, 2018; Wolsko et al., 2016; cf. Day et al., 2014; Luttrell & Trentadue, 2023; Peterson & Simonovits, 2017; van de Rijt et al., 2016).

For instance, Feinberg and Willer (2013) observed that reframing environmental messages using purity/sanctity concerns (e.g., focusing on the contamination/pollution of the environment and the need to purify it) increased conservatives' pro-environmental attitudes to be on par with those of liberals. Voelkel and Feinberg (2018) investigated the effects of moral reframing on people's support for political candidates and found that participants reported less support for a candidate after reading a message that used congruent moral values to criticize them (see also Skitka & Bauman, 2008). Regarding the recent COVID-19 pandemic, Kaplan et al. (2023) found that morally reframed video messages about mask wearing decreased US conservatives' anti-mask beliefs, with this effect lasting at least one-week post-study (cf. Luttrell & Trentadue, 2023). Also, in a field experiment Kalla et al. (2022) showed that morally reframed conversations about abortion that were personalized to each recipient's expressed moral values increased people's pro-abortion attitudes.

It is important to point out, though, that not all research finds moral reframing to be effective (e.g., Day et al., 2014; Kim et al., 2023; Luttrell & Trentadue, 2023; Peterson & Simonovits, 2017; van de Rijt et al., 2016). For example, Day et al. (2014) found that their morally reframed messages only worked when targeting traditionally conservative moral values, as opposed to liberal ones. However, Feinberg and Willer (2019) suggest that the findings from these studies may be partly due to how the researchers constructed their messages. Particularly, research shows that morally reframed messages likely only affect people's attitudes when they stimulate the right moral emotions (Feinberg & Willer, 2013, 2015) and are framed in a way that *feels/sounds right* to the receiver (Kidwell et al., 2013).

Previous research on people's willingness to use moral reframing

Despite moral reframing's potential effectiveness as a persuasion tool, people seem to rarely employ it spontaneously when crafting arguments aimed at gaining the support of political opposition. In two studies, Feinberg and Willer (2015) found that when asked to write a message aimed at persuading political opponents (i.e., convincing conservatives to support same-sex marriage, or liberals to support making English the official US language), fewer than 10% of online participants spontaneously made an appeal to those opponents' values.

Understanding why most people do not use moral reframing is necessary if we want to promote it as an effective political communication/persuasion tool. For example, if it is because people do not instinctively think about alternative moral views (Ditto & Koleva, 2011; Feinberg & Willer, 2019; Haidt, 2013), then one solution may be simply to teach them about moral reframing. Also, if morally reframed messages are seen as more effective, simple pragmatic motivation might explain why some partisans would want to utilize these messages over those not morally

reframed. Some theories of persuasion and social influence, at least, assume that a core objective of the communicator is to effectively influence the message recipient's perspective (e.g., Falk & Scholz, 2018; Miceli et al., 2011).

However, it is possible that individuals do not employ moral reframing because appealing to the beliefs and values of *the other side* makes them feel immoral (Tetlock, 2000, 2002; see also Skitka et al., 2005). If appealing to outgroup values seems “*taboo*” – to use Tetlock’s term – then moral reframing will be avoided regardless of its potential positive trade-off in more effective persuasion. Such a negative reaction to moral reframing may occur when people hold strong moral convictions about their political beliefs and values (see Skitka et al., 2021). These convictions are seen by those who hold them as objectively true and universal; so, any deviance from such values (e.g., by using moral reframing of a related issue) would be seen as fundamentally wrong and evoke an emotional response (Skitka et al., 2005; 2021).

To test whether moral reframing would be supported if presented as an explicit choice, Feinberg and Willer (2015) conducted a post-hoc study – which was reported in summary in their General Discussion. They recruited new liberal (171) and conservative (105) participants and asked them to read two texts – one was morally reframed – about supporting same-sex marriage and higher military spending, respectively. Afterwards, participants had to indicate **a)** which text they thought was more effective at persuading political opponents to support this issue; and **b)** which text they would present if they had to persuade this group. Sixty-four percent of liberals and 85% of conservatives thought that the morally reframed text was more effective. Furthermore, of these participants, 80% of liberals and 94% of conservatives said they would choose to present this message to political opposition.

However, Feinberg and Willer's (2015) brief, post-hoc exploration still does not reveal *why* participants used or did not use moral reframing. Firstly, how much did participants' selection of morally reframed texts depend on being asked whether these were more effective beforehand – thus, explicitly raising the question of effectiveness before making a choice? Secondly, for participants who did not pick the morally reframed message, was their choice also based on perceived effectiveness or were they trying to assert their moral integrity by refusing to use *the other side's* values? Among liberals in the post-hoc exploration, the refusal rate was quite high; only around half of those who judged the morally reframed text as more effective chose to present it. The present study was driven by a need for a dedicated, a-priori test of whether and why people would or would not use moral reframing.

Study overview and hypothesis

In this online study, US-based liberals chose between using a morally reframed message or one that was not morally reframed to persuade an imagined conservative audience to be more pro-environmental. The morally reframed message used wording and values traditionally associated with conservatism in the US, whereas the one that was not morally reframed used liberal wording and values. We investigated participants' message choice as well as their reasons behind it, measuring feelings of integrity (i.e., authenticity and moral purity) as potential reasons against using moral reframing, and perceived effectiveness as a potential reason for using it.

Hypothesis 1: Message choice distribution. The current evidence on whether people prefer to use morally reframed messages when offered the option is limited to Feinberg and Willer's (2015) post-hoc exploration. Especially among liberals, positive evaluation and uptake of the message were tempered by a high

resistance to it. So, we propose a nondirectional, fact-finding hypothesis here with three possible outcomes:

- **H.1a.** The distribution of participants' choice across the two messages will not be significantly different.
- **H.1b.** The proportion of participants who choose the morally reframed message will be significantly higher.
- **H.1c.** The proportion of participants who choose the morally reframed message will be significantly lower.

Hypothesis 2: Predicting message choice. Participants who choose the morally reframed message should do so for reasons of perceived persuasive effectiveness. Also, those who pick the non-reframed one should do so because it makes them feel *morally authentic* (i.e., true to one's beliefs and values; Wood et al., 2008). Consistent with this:

- **H.2.** When perceived effectiveness and moral authenticity measures are entered as predictors of message choice, higher perceived effectiveness will be related to an increase in the odds of choosing the morally reframed message. Conversely, higher reported feelings of moral authenticity will be associated with a decrease in these odds.

Hypothesis 3: Positive and negative integrity feelings associated with both messages. We also wanted to see how differently participants felt about using each message given their choice. For instance, if participants choose the message not morally reframed to feel morally authentic, it is plausible to expect that they will

report more positive, and less negative, integrity feelings about this choice compared to hypothetically using the morally reframed message (see Skitka & Wisneski, 2011).

Conversely, we may see the opposite pattern for participants who choose the morally reframed message (i.e., less positive, and more negative, integrity feelings about their choice compared to the alternative). However, it is also possible that, overall, they are not bothered about the different moral frames – they are simply choosing the message they perceive is most effective for the task at hand. Based on all the above:

- **H.3a.** On average, participants who choose the message not morally reframed will report more positive, and less negative, integrity feelings about their message choice compared to the alternative.
- **H.3b.** On average, participants who choose the morally reframed message will report less positive, and more negative, integrity feelings about their choice compared to using the other message. However, it is also possible that, for these participants, the levels of positive and negative feelings for both messages will not be significantly different.

Additionally, we measured strength of association with environmentalists as an exploratory measure of commitment and identification with the issue in question (i.e., pro-environmentalism). Identifying with the issue position could be related either to **a)** an increase in the probability of using moral reframing – because this identification increases the desire for effectiveness in changing people’s mind about an issue (e.g., see Jaffe, 2018) – or **b)** a decrease – because identification increases the importance of being authentic to oneself. Realizing that the relative strength of these motives is unclear and may vary among different positions and different issues, we proposed a

nondirectional, exploratory hypothesis testing the relationship between strength of identification and message choice. We included this variable in our analyses of the factors predicting message choice.

Methods

Ethics, pre-registration, and reproducibility

This study received ethical approval from the University of Kent (202216508737087736). It was also pre-registered (<https://osf.io/bndgc>). All R scripts created for this research, study materials, anonymized data files, and analysis outputs are available at https://osf.io/p9hmc/?view_only=788440ea95fe49bea190478084b238aa.

Participants

Participants came from Prolific (<https://www.prolific.co/>) – a participant recruitment platform for online research which gives good-quality data (Peer et al., 2022). People could enroll in this study if they were US-based and met the following demographic prescreening criteria: **a)** they answered 3, 4 or 5 on Prolific’s concern about environmental issues measure (5-point scale; 1 = Not at all concerned, 5 = Very concerned); and **b)** they identified as “liberal” on Prolific’s US political spectrum measure. Both prescreening questions were validated at the beginning of the study, using the same wording and response options as in Prolific. People who failed this validation check were not allowed to take part in this study.

Due to finite funding, this study was limited to a final sample of 250 participants. Nevertheless, as recommended by Lakens (2022), a priori sensitivity power analyses using GPower (version 3.1.9.7; Faul et al., 2007) showed that: a Chi-square Goodness of Fit test (used to test hypothesis 1) with a sample of 250 at $\alpha =$

0.05 has 80% power to find an effect size of Cohen's $w = 0.18$ (conventionally, small-to-medium); a logistic regression model (used to test hypothesis 2) with a sample of 250 at $\alpha = 0.05$ has 80% power to find an odds ratio of 1.55; and a 2x2 mixed factorial ANOVA (used to test hypothesis 3) with the same parameters has 80% power to find an effect size of Cohen's $f = 0.13$ (conventionally small).¹

In total, 270 Prolific users completed this study across three different waves of data collection (on 27 May 2022, 30 May, and 1 June). After exclusions (see 'Data preparation' for details), the final dataset used for analysis contained 249 participants (1 agender, 123 females, 122 males, 2 non-binary, 1 transgender man; $M_{\text{age}} = 38.9$ years, $SD = 15$).²

Design

Participants were presented with both a morally reframed and non-reframed message. The only difference between participants was in the stimuli layout (see 'Procedure' for details). The dependent variables in this study were message choice; feelings of moral authenticity; perceived message effectiveness; integrity feelings linked to chosen message; integrity feelings linked to hypothetically using the other message; and strength of association with environmentalists.

Procedure

Using a Qualtrics survey (www.qualtrics.com), the study began by displaying the study information and asking participants for their consent. Afterwards, participants were shown Prolific's two prescreening questions. Those who met the

¹ Screenshots for each sensitivity power analysis are available in the Supplementary Materials.

² We used [Prolific's participant sex balancing option](#) for our data collection on 30 May and 1 June.

prescreening criteria (see 'Participants' subsection), were asked to continue and those who did not were barred from continuing.

Next, participants were presented with the experimental task. They were instructed to imagine that they worked for an independent, non-profit organisation that promoted pro-environmental policies through community workshops. On this occasion, participants had to provide a workshop for people in their local area who were ideologically more conservative and less concerned about the environment. Then, they read the following:

You hope to start the session with a message that will persuade this conservative group to be more open to, and supportive of, pro-environmental action. Below you have two options (messages A and B). **Please read both messages carefully and answer the question at the end.** [Bold and underlined text in original]

Both messages were almost identical in content and length. However, one promoted pro-environmentalism using liberal wording and values (not morally reframed), while the other used conservative wording and values (morally reframed) (see Figure 1). The wording in both messages was developed using the Moral Foundations Dictionary (Graham & Haidt, 2021), to ensure that it emphasized the virtues/vices associated with their targeted moral foundations. The question at the end asked participants to choose between the two messages (i.e., "Think about yourself. Which message would you communicate to this conservative group?").

Message A always appeared above Message B. However, Qualtrics determined whether participants saw the liberal framed message as Message A, and the conservative one as Message B (Layout 1; see Supplementary Materials), or vice

versa (Layout 2). Both layouts were randomized evenly across participants to control for potential order effects. After participants chose their message, they answered the experimental measures below. Then, they were presented with the study's debriefing information and were redirected back to Prolific.

MESSAGE (A): Non-morally reframed (liberal values)

Our natural environment provides us with valuable resources, breathtaking scenery, and a place to live. But it's also fragile, so we must do our part to take care of it. However, the unchecked activity of greedy corporations and uncaring people is harming our environment, destroying the quality of air we breathe and polluting the water we drink.

In 2020, the Environmental Working Group – a non-profit, nonpartisan organization – estimated that around 200 million Americans are likely exposed to unsafe levels of toxic fluorinated chemicals known as PFAS in their drinking water. PFAS have been linked with birth defects, cancer, and impaired functioning of the immune system.

We must put pressure on our government to do more to protect our environment. Harming it hurts us all, but it has the most devastating consequences for the poorest and most vulnerable members of our society (who are financially trapped in the most polluted communities). Also, destroying our environment leaves nothing for our future generations to enjoy. So, we must show some compassion and protect the environment! It's simply the right thing to do.

MESSAGE (B): Morally reframed (conservative values)

Our country's natural environment is full of valuable resources and breathtaking scenery that one can be proud of. However, the unchecked activity of multinational corporations and reckless individuals is ruining* our great nation's landscape. They're also contaminating our air and water with toxic pollutants, which ultimately pollutes us all.

In 2020, the Environmental Working Group – a non-profit, nonpartisan organization – estimated that around 200 million Americans are likely exposed to unsafe levels of toxic fluorinated chemicals known as PFAS in their drinking water. PFAS have been linked with birth defects, cancer, and impaired functioning of the immune system.

We must be tougher on our political leaders and demand that they do more to preserve** the environment. How can America be taken seriously on the international stage if we can't even show some respect for the place we call home? It's time to come together as one nation and protect our environment from disgusting pollutants, for our sake and for our children's and their future families. We must show some love for our country and fight to keep it clean! It's simply our duty as Americans.

Figure 1. Study materials.

Moral Foundations colour legend: yellow = care/harm, blue = loyalty/betrayal, pink = authority/subversion, grey = purity/degradation.

Note: All underlined words can be found in the Moral Foundations Dictionary (Graham & Haidt, 2021). "Country" is underlined because it has the same meaning as "nation" in this context.

* = “ruin” can also be associated with care/harm

** = “preserve” can also be associated with care/harm and authority/subversion

Measures

All items used for each measure are included in the Supplementary Materials.

Internal attention check statements. Four yes/no/I don’t know statements were presented in a randomized order to gauge participants’ attention, memory, and comprehension of the two pro-environmental messages (e.g., “Both messages had a pro-environmental stance.”).

Moral authenticity. To measure whether feelings of moral authenticity were related to message choice, we used four items adapted from the Wood et al. (2008) Authenticity Scale (e.g., “I chose that message because it’s the one most in line with my beliefs and values.”). These items were presented in a randomized order and on a 7-point Likert scale (1 = Strongly disagree, 7 = Strongly agree; Cronbach’s alpha (α) and Omega coefficient (ω) = .98).

Perceived message effectiveness. To measure whether perceived message effectiveness was linked to message choice, we used four items adapted from Thomas et al. (2019) research on measuring perceived persuasiveness (e.g., “I chose that message because it’s the most likely to change the conservative group’s environmental attitudes.”). These items were presented in a randomized order and on a 7-point Likert scale (1 = Strongly disagree, 7 = Strongly agree; α and ω = .95).

Integrity feelings from message chosen. We used six integrity-related feelings to measure how participants felt about their message choice. Three were negative (i.e., disgusted with myself, impure, dishonest; α = .79, ω = .80) and three were positive (i.e., comfortable with myself, content, sincere; α and ω = .82). They

were presented in a randomized order and on a 5-point scale (1 = Not at all, 5 = Extremely). Participants used a slider for each feeling to indicate their response.

Integrity feelings from hypothetically using the other message. The same six integrity-related feelings were used to measure how participants thought they would feel if they had to use the other message (i.e., the one they did not choose) to persuade the conservative group (negative feelings: $\alpha = .75$, $\omega = .77$; positive feelings: α and $\omega = .82$).

Other reasons behind message choice. Participants were welcomed to write any additional reasons about why they chose one message over the other. Responses were collected using a textbox. If participants did not have (or did not want to share) any additional reasons, they were instructed to write “No, I don’t”.

Strength of association with environmentalists. To measure participants’ connection with environmentalists, we used four items adapted from Huddy et al. (2020) strength of partisan identity scale (e.g., “When people praise environmentalists, it makes me feel good.”). These items were presented in a randomized order and on a 4-point scale (1 = Strongly disagree, 4 = Strongly agree; $\alpha = .76$, $\omega = .78$).

Demographics. Participants’ age and gender were collected.

Data preparation

As specified in the pre-registration, participants were excluded from the final dataset if **a**) they completed the study too fast to have adequately engaged with the stimuli (i.e., in under two minutes); or **b**) they answered a minimum of three internal attention check statements incorrectly. Out of the total 270 participants, one was excluded for reason **(a)** and 17 were discarded for reason **(b)** (see Table A in

Supplementary Materials for a summary of scores). Also, three participants were discarded because they initially failed the prescreening validation check but, instead of returning to Prolific as instructed, they exited and restarted the study to amend their prescreening responses.

Results

Preliminary analysis

Correlation matrix. Following the pre-registration, we calculated the correlations among all dependent variables before testing hypotheses 2 and 3, respectively (see Table 1). Of importance, feelings of moral authenticity were positively correlated with choosing the message that was not morally reframed ($r = .43$, $p < .001$, 95% CI [0.33, 0.53]), while the opposite was true for the message's perceived persuasive effectiveness ($r = -.41$, $p < .001$, 95% CI [-0.51, -0.30]). However, strength of association with environmentalists was practically uncorrelated with message choice ($r = .08$, $p = .237$, 95% CI [-0.05, 0.21]), supporting neither of the alternative predictions about this relationship.

Table 1. Table of correlations among the dependent variables.

Variable	1	2	3	4	5	6	7	8
1. Message choice	—							
2. Feeling of moral authenticity	.43***	—						
3. Perceived message effectiveness	-.41***	-.55***	—					
4. Strength of association with environmentalists	.08	.17*	.08	—				
5. Negative integrity-related	-.19**	-.25***	.13*	.01	—			

feelings from chosen message								
6. Positive integrity-related feelings from chosen message	.30***	.42***	-.19**	.09	-.46***	—		
7. Negative integrity-related feelings from hypothetically using the other message	.14*	.33***	-.26***	.00	.25***	.04	—	
8. Positive integrity-related feelings from hypothetically using the other message	-.04	-.19**	.23***	.19**	-.08	.29***	-.45***	—

* $p < .05$. ** $p < .01$. *** $p < .001$.

Note: Message choice is a dichotomous variable (1 = Liberal framed message (i.e., not morally reframed); 0 = Conservative framed message (i.e., morally reframed)).

Order effects. A Chi-square Test of Independence was used to check whether participants' message choice and the counterbalancing of experimental stimuli layout were related (e.g., *overall, participants pick Message A because it is the first one, regardless of its framing*). The result was not significant, $X^2 (1, N = 249) = 0.098$, $p = .754$, meaning that participants' choice was not dependent on the order in which the messages were presented (see also Table B in Supplementary Materials).

Message choice distribution (hypothesis 1)

A Chi-square Goodness of Fit test revealed that the distribution of participants' message choice was significantly different from a 50/50 split, $X^2 (1, N = 249) = 53.11$, $p < .001$, Cohen's $W = 0.46$ (medium-to-large effect size; 95% CI [0.34, 0.59]).

Specifically, more participants chose the morally reframed message (73%) over the one that was not reframed (27%). This result supports hypothesis H.1b.

Predicting message choice (hypothesis 2)

Hypothesis 2 was tested using two logistic regression models, as detailed in the pre-registration. **Model 1** contained feelings of moral authenticity and perceived message effectiveness as predictors of message choice (1 = Liberal framed message; 0 = Conservative framed message). **Model 2** simply added strength of association with environmentalists as a third predictor. Since Model 2 was not a better fit than Model 1 (diff. X^2 (1, N = 218) = 0.86, $p = .355$) – strength of association with environmentalists was not a significant predictor – the following results simply focus on Model 1.

Model 1 was statistically significant, X^2 (2, N = 249) = 57.78, $p < .001$, McFadden's (pseudo) $R^2 = 0.20$, Nagelkerke's (pseudo) $R^2 = 0.30$. Both feelings of moral authenticity (diff. X^2 (1, N = 249) = 47.69, $p < .001$) and perceived message effectiveness (diff. X^2 (1, N = 249) = 10.09, $p = .002$) contributed to the prediction model. Specifically, for every 1-unit increase in feelings of moral authenticity – higher scores indicate that these feelings were relevant to participants when making their message choice – the probability of a participant choosing the liberal framed message (i.e., not morally reframed) increased by 60%. However, for every 1-unit increase in perceived message effectiveness, the probability of a participant choosing this message decreased by 38%. These results support H.2.

Table 2. Logistic regression model for predictors of message choice.

Predictor	Estimate	SE	z value	p-value	Odds ratio	95% CI for odds ratio [LL, UL]
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(Intercept)	0.17	1.24	0.14	0.888	1.19	[0.11, 13.47]
Feelings of moral authenticity	0.43	0.11	4.02	< .001	1.53	[1.25, 1.89]
Perceived message effectiveness	-0.50	0.17	-2.96	.003	0.61	[0.43, 0.84]

Note: Estimates represent the log odds of message choice = liberal framed (i.e., not morally reframed) (1) vs. message choice = conservative framed (i.e., morally reframed) (0).

Integrity-related feelings associated with both messages (hypothesis 3)

A 2x2 mixed factorial ANOVA revealed a statistically significant interaction effect between message choice (between-subjects variable) and positive integrity feelings (within-subjects variable), $F(1, 247) = 22.33$, $p < .001$, $\eta_p^2 = 0.08$ (medium effect size; 95% CI [0.03, 0.15]). As predicted in H.3a, participants who chose the liberal framed message (i.e., not morally reframed) reported on average higher levels of positive integrity feelings associated with their own choice ($M = 3.75$, $SE = .12$) than with the conservative reframed message ($M = 3.17$, $SE = .12$), $t(247) = 4.18$, $p < .001$. Also, as predicted in H.3b, participants who chose the conservative framed message reported, on average, lower levels of positive integrity feelings with their own choice ($M = 3.09$, $SE = .07$) than with the alternative message ($M = 3.27$, $SE = .07$), $t(247) = -2.23$, $p = .027$. This latter difference, however, was smaller in quantitative terms.

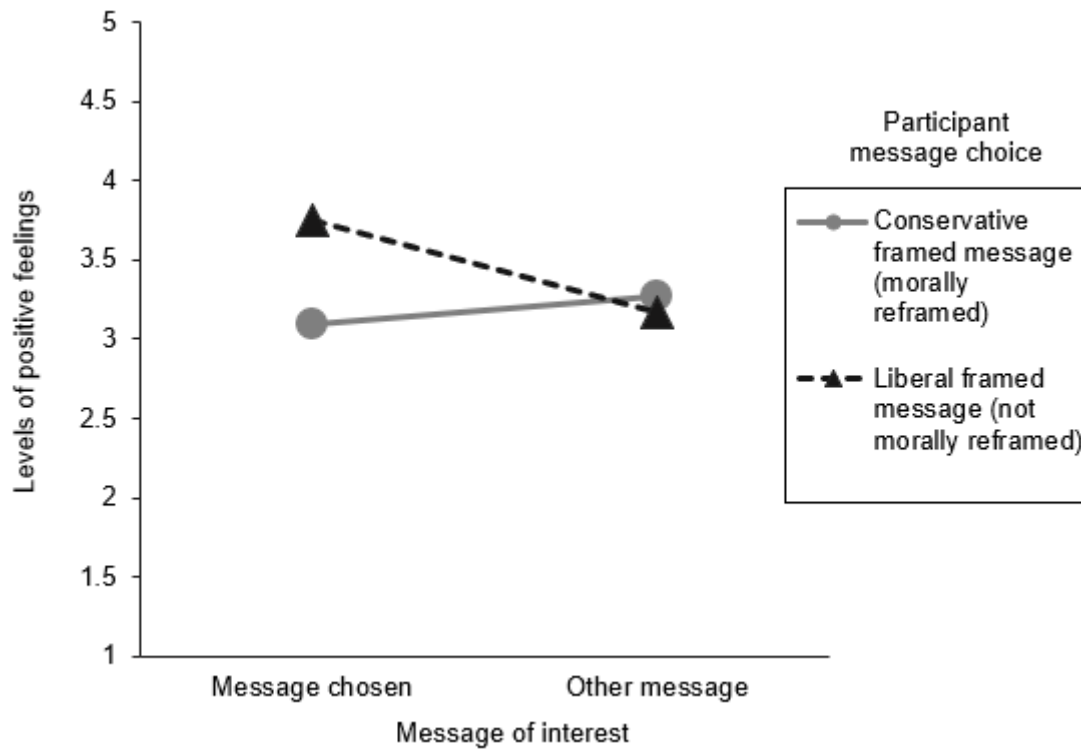


Figure 2. Levels of positive, integrity-related feelings as a function of participants' message choice (i.e., liberal framed vs. conservative framed) and targeted message (i.e., the one they chose vs. the one they did not choose to communicate).

Another 2x2 mixed factorial ANOVA revealed a statistically significant interaction effect between message choice (between-subjects variable) and negative integrity feelings (within-subjects variable), $F(1, 245) = 18.93$, $p < .001$, $\eta_p^2 = 0.07$ (medium effect size; 95% CI [0.02, 0.14]). As predicted in H.3a, participants who chose the liberal framed message reported, on average, lower levels of negative integrity feelings associated with their message choice ($M = 1.08$, $SE = .06$) compared to the conservative framed message ($M = 1.32$, $SE = .06$), $t(245) = -3.39$, $p < .001$. Also, as predicted in H.3b, participants who chose the conservative framed message reported, on average, higher levels of negative integrity feelings linked to using their message choice ($M = 1.28$, $SE = .04$) than the alternative message ($M = 1.16$, $SE = .04$), $t(245) = 2.80$, $p = .006$. However, it is important to point out that both

differences are small in quantitative terms and that the absolute level of negative, integrity-related feelings was likewise near the scale minimum.

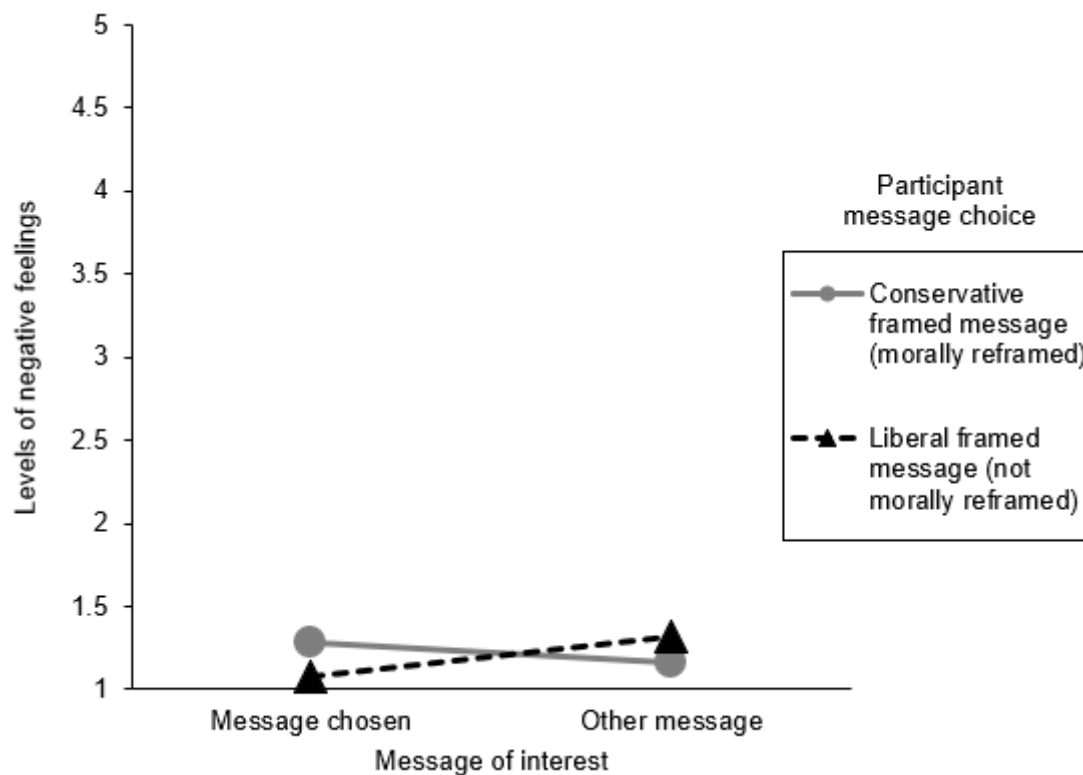


Figure 3. Levels of negative, integrity-related feelings as a function of participants' message choice (i.e., liberal framed vs. conservative framed) and targeted message (i.e., the one they chose vs. the one they did not choose to communicate).

Other reasons behind message choice (written-in responses)

As mentioned in the 'Measures' subsection, participants were invited to write any other reasons they had for choosing one message over the other. The rationale for this was to have data to explore potential alternative explanations for message choice in case our findings did not support our predictions. Ultimately, all the results backed our hypotheses, but we decided to go ahead and analyse this qualitative data – using thematic analysis – to provide an additional level of detail to these findings.

Participants who chose the liberal framed message (i.e., not morally reframed). Twenty-six out of the 67 participants who picked the liberal framed message provided additional written information (39%). The main argument given by most people to justify their message choice was about perceived message tone. Particularly, participants tended to describe the liberal framed message as having a *softer, calmer, and more diplomatic* tone, while the conservative framed message was seen as more *pushy, strident, and confrontational*.

However, the underlying reason why such tone comparison was important varied across participants. For example, some argued that the morally reframed message would have pushed the conservative audience away from supporting environmental action – which is why they did not use it. “The second message [conservative framed] seemed to have blamed individuals and America too much. I know conservatives would only listen to someone if they painted the US in a good light”, wrote Participant 9. “I think message A [liberal framed] was less strident, which I think is important in getting allies who are more conservative than I am”, wrote Participant 134.

For other individuals, the focus on message tone had more to do with their personal dislike of nationalistic rhetoric – which is what they thought the morally reframed message encompassed. “[The conservative framed message] seemed more of a patriotic slant than the other and that's just...not for me”, wrote Participant 148. Participant 245 expressed even stronger views about this: “I can't stand people who use the whole 'MERICA IS THE BEST [caps in original] /patriotic duty crap to sway support, so I'd be embarrassed for myself if I used it”. Such personal preferences influenced one participant's choice despite thinking that the conservative framed message might be better received:

I choose [sic] the message that I did because I felt the first message [conservative framed] was too sensationalized and nationalistic.

Environmental issues are a global issue and should not have to be leveraged with an 'American [sic] First' attitude. Maybe the other message [conservative framed] would be more affective [sic] in some communities, but it felt too disingenuous. (Participant 130)

On a smaller scale, some participants referenced the liberal framed message's embrace of traditional liberal values as the reason behind their choice (e.g., care, empathy). Finally, a few participants admitted to not having a strong preference for either message or finding it difficult to pick the most compelling of the two.

Participants who chose the conservative framed message (i.e., morally reframed). Sixty-two out of the 182 participants who picked the conservative framed message provided additional information (34%). Overall, most mentioned perceived persuasiveness as the primary reason for their choice. Specifically, this stemmed from the message's use of wording and values typically associated with US conservatism. "I chose Message A [conservative framed] because the end goal is the same, but the language being used was more likely to affect the conservative mindset", wrote Participant 229. "I felt the first message [conservative framed] talked more specifically about our country and did a better job of appealing to the sense of national pride", wrote Participant 126.

Furthermore, for many participants it was as much about what the conservative framed message mentioned as it was about what it did not (i.e., liberal wording and values). Take Participant 115, for example:

I understand the area where I live (. ...) I did not think they [very conservative white Republicans] would respond well to a plea based on sympathy for poor communities who suffer the impact of environmental pollution more than others. I felt I would most likely be able to reach them by appealing to their pride in America. (Participant 115)

In particular, the reference to *greedy* corporations in the liberal framed message was a deciding factor for many participants. "I thought that the phrase 'greedy corporations' would be antagonizing", wrote Participant 205. "(...) Attacks on some of their [conservatives'] core beliefs such as capitalism with phrases such as 'greedy companies [corporations]' would likely close them off to any of my further points", wrote Participant 74.

Participants also differed in their reaction towards using the conservative framed message. Some saw it as a means to an end, like Participant 37: "(...) I feel like if I truly care about the environment, it's not about the word choice I use to convince people, but that people are effectively convinced". Also, individuals like Participant 117 were not against the wording/values presented in the message:

The message I chose [conservative framed] contained language that I felt would resonate with a conservative group. While I'm not conservative, it doesn't mean that I don't believe those things either. If it's pro-environment, there are several angles to highlight in a promotional message (...).
(Participant 117)

However, others viewed their message choice with considerable cynicism. For example, this might have been due to their expressed contempt towards conservative people in general.

The first message [liberal framed] mentioned the impact on poor communities and overall health of the less-fortunate [*sic*]. Conservatives broadly do not care about that, and most likely applaud the suffering of those they disagree with.

The other message [conservative framed] was the only option that seemed to have any hope of reaching someone that identifies as conservative.

(Participant 103)

(...) The one I chose [conservative framed] has less about compassion and love of the environment (which conservatives don't have nor do they care for) and more about what they can get out of the environment. also [*sic*] it didn't badmouth corporations as much, and conservatives love big corps.

(Participant 129)

Finally, a small group of participants picked the conservative framed message specifically because it was perceived as more *aggressive* and *urgent* sounding. Also, as with the previous group, a few participants did not know which message to choose.

Discussion

Roughly three out of every four liberal participants chose to communicate the conservative framed pro-environmental message (morally reframed) over the liberal framed one (not morally reframed) to persuade an imagined conservative audience to be more pro-environmental. Thus, as postulated by Feinberg and Willer (2015, 2019), it is likely that the main reason why most people rarely use moral reframing spontaneously is because they simply do not think of it (see also Ditto & Koleva, 2011; Haidt, 2013).

However, our main objective with this research was to explore why people would or would not use moral reframing when given the opportunity. As predicted in H.2, the decision to choose the morally reframed message was linked to its perceived persuasive effectiveness, whereas choosing the message not morally reframed was associated with a need to feel integrity in affirming one's beliefs and values. Also, unexpectedly, strength of association with environmentalists was not a useful predictor of message choice in either direction; perhaps people's connection with environmentalists is not as strictly linked to either an absolutist or consequentialist mentality as we thought.

Furthermore, we explored how differently participants felt about using each message given their choice. In line with H.3, participants who chose the liberal framed message (not morally reframed) reported, overall, higher levels of positive and lower levels of negative integrity feelings about using their message choice compared to the alternative. Conversely, those who chose the conservative framed message (morally reframed) reported, on average, lower levels of positive and higher levels of negative integrity feelings about using their message choice compared to the liberal framed one. Thus, integrity was often a concern, even if it did not dictate the final decision.

Research implications

The main implication of this current research is that asking partisans to use moral reframing would not necessarily be an exercise in futility. As a matter of fact, most participants in this study chose to use the morally reframed message when given the opportunity. Nevertheless, there are still other considerations to keep in mind before treating moral reframing as the "go-to" tool for political communication/persuasion.

Mainly, previous research has largely ignored what factors apart from the message/argument itself influence the effectiveness of moral reframing (see Hurst & Stern, 2020; Wolsko et al., 2016, for an exception). For example, it is plausible that the success of a morally reframed appeal also depends on the (perceived) credibility of the message source (i.e., whether it is trustworthy, reliable; Druckman, 2001a; see also Chong & Druckman, 2007). Moreover, given the moral nature of these appeals, the message source may need to demonstrate that they genuinely acknowledge – or even identify with – the audience’s moral concerns to be considered credible (see Hurst & Stern, 2020; Kahan et al., 2011; Wolsko et al., 2016). Otherwise, they may be perceived as deceitful and not be taken seriously.

To illustrate this, take Voelkel et al. (2023) research investigating how moral value framing is linked to people’s support/opposition for economically progressive politicians in the US. They found that conservatives (and moderates) supported Scott Miller – a hypothetical Democratic presidential candidate – more when he framed his economically progressive policies using conservative wording/values (morally reframed) compared to liberal wording/values (not morally reframed). However, in both experimental conditions, participants also read about Scott’s political principles, which aligned with those values raised in his policy appeal (e.g., in the moral reframing condition, Scott’s principles were based on traditional conservative values like ingroup loyalty, and respect for traditions). Therefore, it is possible that conservatives (and moderates) supported Scott more in the moral reframing condition because they saw him as a genuine source for those moral concerns – and not pandering to other people’s values simply to get more votes.

Additionally, another factor that may influence the effectiveness of moral reframing is the presence of counterarguments. It has been suggested in previous

framing literature that the impact of frames would likely diminish if they were used in scenarios with counterarguments (Druckman, 2001b; Riker, 1995; Sniderman & Theriault, 2004). However, Chong and Druckman's (2007) research revealed that this does not necessarily have to be the case. For example, one thing they found was that the success of a frame depended on the strength of its arguments compared to that of the counterarguments presented. Thus, apart from the morally reframed appeal's content and source, its influence may also vary by context (e.g., the type of counterarguments it is up against).

Having said all this, we do not mean to undermine the findings from previous moral reframing research. Understandably, researchers used isolated experimental settings to assess the effects of morally reframed appeals independently from other factors. Nevertheless, given all the available evidence now that morally reframed messages can work in these settings (e.g., Anderson et al., 2014; Feinberg & Willer, 2013, 2015; Kaplan et al., 2023; Thomas et al., 2023; Voelkel et al., 2023; Voelkel & Feinberg, 2018), perhaps it is time to broaden the research scope and start exploring those contextual factors that matter in more realistic scenarios (e.g., those akin to real life political discussions). Ultimately, while most people may be willing to use this technique, further research might reveal that it is only effective when employed by certain individuals and under certain circumstances.

Moving away from these considerations about effectiveness, there is also the (potential) debate over whether moral reframing should be used at all to target traditionally conservative values (i.e., the loyalty/betrayal, authority/subversion, and purity/degradation moral foundations). In particular, some have argued that we should not treat these values as moral because of their strong correlation with right-wing authoritarianism and social dominance attitudes (e.g., Jost, 2017; Jost et al.,

2003; Kugler et al., 2014; Nilsson & Jost, 2020; cf. Federico et al., 2012; Greenberg & Jonas, 2003), as well as system-justifying beliefs (e.g., *society is inherently fair to everyone and, thus, no social change is needed*; Hennes et al., 2012; Jost & Hunyady, 2005; Liaquat et al., 2023). Also, others worry that appealing to these values may unintentionally activate conservatives' broader ideology (Lakoff, 2009, 2010), which could be counterproductive in getting them to support more progressive issues/policies/positions.

However, we do not think that these concerns should prevent researchers from exploring moral reframing that appeals to traditionally conservative values. Firstly, while the loyalty/betrayal, authority/subversion, and purity/degradation foundations from Moral Foundations Theory might not always be linked to moral behaviour, this does not make them inherently immoral (see Kugler et al., 2014, p. 428). We propose – similarly to Feinberg and Willer (2019) and Voelkel et al. (2023) – that the moral nature of any morally framed appeal depends on the context and actions they are linked to.

Also, previous research shows that most people who identify as conservative do not hold staunch conservative views across all social and economic issues (e.g., Ellis & Stimson, 2009; Feldman & Johnston, 2014; Morgan & Wisneski, 2017; Weber, n.d.). In fact, US liberals' and conservatives' stances on some policy issues are not too far apart (e.g., more moderate and younger Republican's support for pro-environmental action; Funk, 2021; Tyson & Kennedy, 2020). Where both groups may disagree more on is about how these issues should be addressed (e.g., whether to engage in environmental action that is economically costly in the short-term or not). If these divisions are partly linked to different primary moral concerns – as previously

mentioned – then moral reframing could prove to be a very useful communication tool.

Research limitations and directions for future studies

As with all studies, this current research has its limitations. Firstly, it only looked at one unrepresentative sample of US-based liberals concerned about the environment; thus, the generalizability of our findings is limited. Our choice to focus on liberal participants made sense in the light of Feinberg and Willer's (2015) post-hoc exploration finding that this group was more divided in presenting a morally reframed message than conservatives were. However, it could be that a different choice of issues would have delivered a message choice pattern that led to more refusal among conservatives. Ultimately, further studies are needed on more representative samples and on other topic areas to better understand if partisans would generally employ moral reframing when given the opportunity.

Another limitation is that we measured participants' intentions to use a morally reframed message and not actual behaviour. Although previous research has found that people's intentions are a good predictor of subsequent behaviour, this is not always the case (see Sheeran & Webb, 2016, for a review). Particularly, intentions might not lead to action if the latter is (potentially) costly, risky, or unpleasant (e.g., see Ferrari & Leippe, 1992), or if this commitment to act is not internalized as part of one's self-identity (Aquino & Reed, 2002). Regarding this study, it is plausible to expect that some participants would have felt uneasy – or just would not have cared – about persuading a conservative audience in real life. Therefore, our finding that three out of four liberal participants were willing to use moral reframing might be an over-estimate.

Future studies could aim to address the limitations from this current research. In addition, they could also explore what other factors exist that can predict people's use of moral reframing. For example, it is possible that the extent to which people see the world in absolute/deontological terms influences their use of moral reframing (e.g., if they believe that certain values are always wrong/immoral, then they may never appeal to them regardless of the circumstances; Arceneaux, 2019). Also, people's use of morally reframed appeals could likely depend on their own partisan polarization (e.g., extreme partisans might be less likely to engage with and accept the other side's political concerns; Iyengar & Westwood, 2015).

Lastly, future studies could also further our understanding about whether moral reframing is a worthwhile technique to promote for political communication/persuasion. Concretely, researchers could investigate the extent to which the effectiveness of morally reframed appeals depend on the message source and context – ideas that we mentioned in the 'Research implications' subsection.

Conclusion

The primary objective of this current research was to explore why people would or would not use moral reframing when given the opportunity. The results showed that people's decision to use this communication technique was linked to its perceived persuasive effectiveness, whereas not using it was associated with a need to feel morally authentic. In this study, most people opted for using moral reframing to communicate with political opposition than not (73%). Ultimately, these are encouraging results for those who wish to promote the use of moral reframing more widely; however, further research is needed to ascertain exactly how effective of a communication technique it really is.

References

- Anderson, S. E., Potoski, M., DeGolia, A., Gromet, D., Sherman, D., & Van Boven, L. (2014). Mobilization, polarization, and compromise: The effect of political moralizing on climate change politics. In *APSA 2014 Annual Meeting Paper*.
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2451887
- Aquino, K., & Reed, A. (2002). The self-importance of moral identity. *Journal of Personality and Social Psychology*, 83(6), 1423–1440. <https://doi.org/10.1037/0022-3514.83.6.1423>
- Arceneaux, K. (2019). The roots of intolerance and opposition to compromise: The effects of absolutism on political attitudes. *Personality and Individual Differences*, 151, 109498. <https://doi.org/10.1016/j.paid.2019.07.008>
- Carothers, T., & O'Donohue, A. (2019). *Democracies divided: The global challenge of political polarization* (T. Carothers & A. O'Donohue, Eds.). Brookings Institution Press.
- Chong, D., & Druckman, J. N. (2007). Framing public opinion in competitive democracies. *American Political Science Review*, 101(4), 637–655.
<https://doi.org/10.1017/S0003055407070554>
- Cleven, E., Baruch Bush, R. A., & Saul, J. A. (2018). Living with no: Political polarization and transformative dialogue. *Journal of Dispute Resolution*, Article 7.
<https://scholarship.law.missouri.edu/jdrAvailableat:https://scholarship.law.missouri.edu/jdr/vol2018/iss1/7>

- Day, M. V., Fiske, S. T., Downing, E. L., & Trail, T. E. (2014). Shifting liberal and conservative attitudes using moral foundations theory. *Personality and Social Psychology Bulletin*, 40(12), 1559–1573. <https://doi.org/10.1177/0146167214551152>
- Ditto, P. H., & Koleva, S. P. (2011). Moral empathy gaps and the American culture war. *Emotion Review*, 3(3), 331–332. <https://doi.org/10.1177/1754073911402393>
- Druckman, J. N. (2001a). On the limits of framing effects: Who can frame? *The Journal of Politics*, 63(4), 1041–1066. <http://www.jstor.org/stable/2691806>
- Druckman, J. N. (2001b). Using credible advice to overcome framing effects. *Journal of Law, Economics, and Organization*, 17(1), 62–82. <https://doi.org/10.1093/jleo/17.1.62>
- Ellis, C., & Stimson, J. A. (2009). Symbolic ideology in the American electorate. *Electoral Studies*, 28(3), 388–402. <https://doi.org/10.1016/j.electstud.2009.05.010>
- Falk, E., & Scholz, C. (2018). Persuasion, influence, and value: Perspectives from communication and social neuroscience. *Annual Review of Psychology*, 69, 329–356. <https://doi.org/10.1146/annurev-psych-122216-011821>
- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39(2), 175–191. <https://doi.org/10.3758/BF03193146>
- Federico, C. M., Deason, G., & Fisher, E. L. (2012). Ideological asymmetry in the relationship between epistemic motivation and political attitudes. *Journal of Personality and Social Psychology*, 103(3), 381–398. <https://doi.org/10.1037/a0029063>
- Feinberg, M., & Willer, R. (2013). The moral roots of environmental attitudes. *Psychological Science*, 24(1), 56–62. <https://doi.org/10.1177/0956797612449177>

- Feinberg, M., & Willer, R. (2015). From gulf to bridge: When do moral arguments facilitate political influence? *Personality and Social Psychology Bulletin*, 41(12), 1665–1681.
<https://doi.org/10.1177/0146167215607842>
- Feinberg, M., & Willer, R. (2019). Moral reframing: A technique for effective and persuasive communication across political divides. *Social and Personality Psychology Compass*, 13(12), Article e12501. <https://doi.org/10.1111/spc3.12501>
- Feldman, S., & Johnston, C. (2014). Understanding the determinants of political ideology: Implications of structural complexity. *Political Psychology*, 35(3), 337–358.
<https://doi.org/10.1111/pops.12055>
- Ferrari, J. R., & Leippe, M. R. (1992). Noncompliance with persuasive appeals for a prosocial, altruistic act: Blood donating. *Journal of Applied Social Psychology*, 22(2), 83–101. <https://doi.org/10.1111/j.1559-1816.1992.tb01523.x>
- Funk, C. (2021, May 26). *Key findings: How Americans' attitudes about climate change differ by generation, party and other factors*. Pew Research Center.
<https://www.pewresearch.org/fact-tank/2021/05/26/key-findings-how-americans-attitudes-about-climate-change-differ-by-generation-party-and-other-factors/>
- Graham, J., & Haidt, J. (2021). *Moral foundations dictionary*.
<https://moralfoundations.org/wp-content/uploads/files/downloads/moral%20foundations%20dictionary.dic>
- Graham, J., Haidt, J., Koleva, S., Motyl, M., Iyer, R., Wojcik, S. P., & Ditto, P. H. (2013). Moral foundations theory: The pragmatic validity of moral pluralism. In P. G. Devine & E. A. Plant (Eds.), *Advances in Experimental Social Psychology* (1st ed., Vol. 47, pp. 55–130). Elsevier Inc. <https://doi.org/10.1016/B978-0-12-407236-7.00002-4>

- Graham, J., Haidt, J., Motyl, M., Meindl, P., Iskiwicz, C., & Mooijman, M. (2018). Moral foundations theory: On the advantages of moral pluralism over moral monism. In K. Gray & J. Graham (Eds.), *Atlas of moral psychology* (pp. 211–222). The Guilford Press.
- Graham, J., Haidt, J., & Nosek, B. A. (2009). Liberals and conservatives rely on different sets of moral foundations. *Journal of Personality and Social Psychology*, 96(5), 1029–1046. <https://doi.org/10.1037/a0015141>
- Greenberg, J., & Jonas, E. (2003). Psychological motives and political orientation--The left, the right, and the rigid: Comment on Jost et al. (2003). *Psychological Bulletin*, 129(3), 376–382. <https://doi.org/10.1037/0033-2909.129.3.376>
- Haidt, J. (2013). *The righteous mind: Why good people are divided by politics and religion*. Penguin Books.
- Haidt, J., & Graham, J. (2007). When morality opposes justice: Conservatives have moral intuitions that liberals may not recognize. *Social Justice Research*, 20(1), 98–116. <https://doi.org/10.1007/s11211-007-0034-z>
- Haidt, J., & Joseph, C. (2004). Intuitive ethics: How innately prepared intuitions generate culturally variable virtues. *Daedalus*, 133(4), 55–66. <https://doi.org/10.1162/0011526042365555>
- Hartman, R., Blakey, W., Womick, J., Bail, C., Finkel, E. J., Han, H., Sarrouf, J., Schroeder, J., Sheeran, P., Van Bavel, J. J., Willer, R., & Gray, K. (2022). Interventions to reduce partisan animosity. *Nature Human Behaviour*, 6(9), 1194–1205. <https://doi.org/10.1038/s41562-022-01442-3>

- Hennes, E. P., Nam, H. H., Stern, C., & Jost, J. T. (2012). Not all ideologies are created equal: Epistemic, existential, and relational needs predict system-justifying attitudes. *Social Cognition*, 30(6), 669–688. <https://doi.org/10.1521/soco.2012.30.6.669>
- Huddy, L., Davies, C., & Sandor, J. (2020). Measuring the direction and strength of partisan identity. In H. Oscarsson & S. Holmberg (Eds.), *Research handbook on political partisanship* (pp. 103–122). Edward Elgar Publishing.
<https://doi.org/10.4337/9781788111997.00014>
- Hurst, K., & Stern, M. J. (2020). Messaging for environmental action: The role of moral framing and message source. *Journal of Environmental Psychology*, 68.
<https://doi.org/10.1016/j.jenvp.2020.101394>
- Iyengar, S., & Westwood, S. J. (2015). Fear and loathing across party lines: New evidence on group polarization. *American Journal of Political Science*, 59(3), 690–707. <https://doi.org/10.1111/ajps.12152>
- Jaffe, C. (2018). Melting the polarization around climate change politics. *The Georgetown International Environmental Law Review*, 30, 455–497.
https://www.law.georgetown.edu/environmental-law-review/wp-content/uploads/sites/18/2018/07/melting-_GT-GELR180017.pdf
- Jost, J. T. (2017). Ideological asymmetries and the essence of political psychology. *Political Psychology*, 38(2), 167–208. <https://doi.org/10.1111/pops.12407>
- Jost, J. T., Glaser, J., Kruglanski, A. W., & Sulloway, F. J. (2003). Political conservatism as motivated social cognition. *Psychological Bulletin*, 129(3), 339–375.
<https://doi.org/10.1037/0033-2909.129.3.339>

- Jost, J. T., & Hunyady, O. (2005). Antecedents and consequences of system-justifying ideologies. *Current Directions in Psychological Science*, 14(5), 260–265.
<https://doi.org/10.1111/j.0963-7214.2005.00377.x>
- Kahan, D. M., Jenkins-Smith, H., & Braman, D. (2011). Cultural cognition of scientific consensus. *Journal of Risk Research*, 14(2), 147–174.
<https://doi.org/10.1080/13669877.2010.511246>
- Kalla, J. L., Levine, A. S., & Broockman, D. E. (2022). Personalizing moral reframing in interpersonal conversation: A field experiment. *Journal of Politics*, 84(2), 1239–1243.
<https://doi.org/10.1086/716944>
- Kaplan, J. T., Vaccaro, A., Henning, M., & Christov-Moore, L. (2023). Moral reframing of messages about mask-wearing during the COVID-19 pandemic. *Scientific Reports*, 13, 10140. <https://doi.org/10.1038/s41598-023-37075-3>
- Kidwell, B., Farmer, A., & Hardesty, D. M. (2013). Getting liberals and conservatives to go green: Political ideology and congruent appeals. *Journal of Consumer Research*, 40(2), 350–367. <https://doi.org/10.1086/670610>
- Kim, I., Hammond, M. D., & Milfont, T. L. (2023). Do environmental messages emphasising binding morals promote conservatives' pro-environmentalism? A pre-registered replication. *Social Psychological Bulletin*, 18.
<https://doi.org/10.32872/spb.8557>
- Kivikangas, J. M., Fernández-Castilla, B., Järvelä, S., Ravaja, N., & Lönnqvist, J.-E. (2021). Moral foundations and political orientation: Systematic review and meta-analysis. *Psychological Bulletin*, 147(1), 55–94. <https://doi.org/10.1037/bul0000308>

- Kugler, M., Jost, J. T., & Noorbaloochi, S. (2014). Another look at moral foundations theory: Do authoritarianism and social dominance orientation explain liberal-conservative differences in “moral” intuitions? *Social Justice Research*, 27(4), 413–431. <https://doi.org/10.1007/s11211-014-0223-5>
- Lakens, D. (2022). Sample size justification. *Collabra: Psychology*, 8(1), 33267. <https://doi.org/10.1525/collabra.33267>
- Lakoff, G. (2009). *The political mind: A cognitive scientist's guide to your brain and its politics* (2nd ed.). Penguin Books.
- Lakoff, G. (2010). Why it matters how we frame the environment. *Environmental Communication*, 4(1), 70–81. <https://doi.org/10.1080/17524030903529749>
- Liaquat, U., Jost, J. T., & Balcetis, E. (2023). System justification motivation as a source of backlash against equality-promoting policies – and what to do about it. *Social Issues and Policy Review*, 17(1), 131–154. <https://doi.org/10.1111/sipr.12093>
- Luttrell, A., & Trentadue, J. T. (2023). Advocating for mask-wearing across the aisle: Applying moral reframing in health communication. *Health Communication*. <https://doi.org/10.1080/10410236.2022.2163535>
- Miceli, M., de Rosis, F., & Poggi, I. (2011). Emotion in persuasion from a persuader's perspective: A true marriage between cognition and affect. In R. Cowie, C. Pelachaud, & P. Petta (Eds.), *Emotion-oriented systems: Cognitive Technologies* (pp. 527–558). Springer Verlag. https://doi.org/10.1007/978-3-642-15184-2_28
- Morgan, G. S., & Wisneski, D. C. (2017). The structure of political ideology varies between and within people: Implications for theories about ideology's causes. *Social Cognition*, 35(4), 395–414. <https://doi.org/10.1521/soco.2017.35.4.395>

- Nilsson, A., & Jost, J. T. (2020). The authoritarian-conservatism nexus. *Current Opinion in Behavioral Sciences*, 34, 148–154. <https://doi.org/10.1016/j.cobeha.2020.03.003>
- Peer, E., Rothschild, D., Gordon, A., Evernden, Z., & Damer, E. (2022). Data quality of platforms and panels for online behavioral research. *Behavior Research Methods*, 54(4), 1643–1662. <https://doi.org/10.3758/s13428-021-01694-3>
- Peterson, E., & Simonovits, G. (2017). Costly values: The limited benefits and potential costs of targeted policy justifications. *Journal of Experimental Political Science*, 4(2), 95–106. <https://doi.org/10.1017/XPS.2017.3>
- Riker, W. H. (1995). The political psychology of rational choice theory. *Political Psychology*, 16(1), 23–44. <https://www.jstor.org/stable/3791448>
- Sheeran, P., & Webb, T. L. (2016). The intention-behavior gap. *Social and Personality Psychology Compass*, 10(9), 503–518. <https://doi.org/10.1111/spc3.12265>
- Skitka, L. J., & Bauman, C. W. (2008). Moral conviction and political engagement. *Political Psychology*, 29(1), 29–54. <https://doi.org/10.1111/j.1467-9221.2007.00611.x>
- Skitka, L. J., Bauman, C. W., & Sargis, E. G. (2005). Moral conviction: Another contributor to attitude strength or something more? *Journal of Personality and Social Psychology*, 88(6), 895–917. <https://doi.org/10.1037/0022-3514.88.6.895>
- Skitka, L. J., Hanson, B. E., Morgan, G. S., & Wisneski, D. C. (2021). The psychology of moral conviction. *Annual Review of Psychology*, 72, 347–366. <https://doi.org/10.1146/annurev-psych-063020-030612>
- Skitka, L. J., & Wisneski, D. C. (2011). Moral conviction and emotion. *Emotion Review*, 3(3), 328–330. <https://doi.org/10.1177/1754073911402374>

- Sniderman, P. M., & Theriault, S. M. (2004). The structure of political argument and the logic of issue framing. In W. E. Saris & P. M. Sniderman (Eds.), *Studies in public opinion: Attitudes, nonattitudes, measurement error, and change* (pp. 133–165). Princeton University Press. <https://doi.org/10.2307/j.ctv346px8.9>
- Tetlock, P. E. (2000). Coping with trade-offs: Psychological constraints and political implications. In A. Lupia, M. D. McCubbins, & S. L. Popkin (Eds.), *Elements of Reason: Cognition, Choice, and the Bounds of Rationality* (pp. 239–263). Cambridge University Press. <https://doi.org/10.1017/CBO9780511805813.011>
- Tetlock, P. E. (2002). Social functionalist frameworks for judgment and choice: Intuitive politicians, theologians, and prosecutors. *Psychological Review*, 109(3), 451–471. <https://doi.org/10.1037//0033-295X.109.3.451>
- Thomas, C. C., Walton, G. M., Reinhart, E. C., & Markus, H. R. (2023). Mitigating welfare-related prejudice and partisanship among U.S. conservatives with moral reframing of a universal basic income policy. *Journal of Experimental Social Psychology*, 105. <https://doi.org/10.1016/j.jesp.2022.104424>
- Thomas, R. J., Masthoff, J., & Oren, N. (2019). Can I influence you? Development of a scale to measure perceived persuasiveness and two studies showing the use of the scale. *Frontiers in Artificial Intelligence*, 2(24). <https://doi.org/10.3389/frai.2019.00024>
- Tyson, A., & Kennedy, B. (2020, June 23). *Two-thirds of Americans think government should do more on climate*. Pew Research Center. <https://www.pewresearch.org/science/2020/06/23/two-thirds-of-americans-think-government-should-do-more-on-climate/>

- van de Rijt, A., Akin, I., Willer, R., & Feinberg, M. (2016). Success-breeds-success in collective political behavior: Evidence from a field experiment. *Sociological Science*, 3, 940–950. <https://doi.org/10.15195/v3.a41>
- Voelkel, J. G., & Feinberg, M. (2018). Morally reframed arguments can affect support for political candidates. *Social Psychological and Personality Science*, 9(8), 917–924. <https://doi.org/10.1177/1948550617729408>
- Voelkel, J. G., Mernyk, J. S., & Willer, R. (2023). Moral reframing increases support for economically progressive candidates. *PNAS Nexus*, 2(6). <https://doi.org/10.1093/pnasnexus/pgad154>
- Weber, C. (n.d.). *Ideology and values in political decision making*. Oxford Research Encyclopedia of Politics; Oxford University Press. <https://doi.org/10.1093/acrefore/9780190228637.013.998>
- Wolsko, C., Ariceaga, H., & Seiden, J. (2016). Red, white, and blue enough to be green: Effects of moral framing on climate change attitudes and conservation behaviors. *Journal of Experimental Social Psychology*, 65, 7–19. <https://doi.org/10.1016/j.jesp.2016.02.005>
- Wood, A. M., Linley, P. A., Maltby, J., Baliousis, M., & Joseph, S. (2008). The authentic personality: A theoretical and empirical conceptualization and the development of the Authenticity Scale. *Journal of Counseling Psychology*, 55(3), 385–399. <https://doi.org/10.1037/0022-0167.55.3.385>