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Moral reframing accuracy is enhanced through an educational intervention: Evidence from the *Perspectives* program

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ABSTRACT

With data from 2 studies, we employed an online educational program called *Perspectives* as a method to foster moral understanding and reasoning. Participants learned about individual and group differences in moral/ethical concerns, in part through the lens of Moral Foundations Theory. In Study 1, participants who completed *Perspectives* scored higher on moral reframing accuracy compared to those in a waitlist group who had yet to complete the program. Message reframing accuracy varied based on participants' own moral concerns, cognitive disposition (dichotomous thinking), and conflict resolution strategies. In Study 2, we conceptually replicated the key result using a pre-post design. Students scored higher on message reframing accuracy at the end of the semester compared with their scores from several months prior. These results show promising evidence that educational modules such as *Perspectives* can promote accuracy in moral messaging, with implications for bridging ethical divides in educational settings.

With the rise of affective political polarization in recent years, particularly in North America (Mason, 2018), a startling pattern has emerged which suggests that masses of people have misconceptions and misunderstandings about others' attitudes, especially when it comes to political issues (Mernyk et al., 2022; Yudkin et al., 2019). Survey data show that people overestimate the percentage of partisans with extreme political viewpoints and underestimate the commonly shared attitudes between Democratic and Republican voters on issues ranging from immigration to education (Hawkins et al., 2022; Mernyk et al., 2022). Tied to misperceptions about attitudes is a lack of awareness regarding the diversity of ethical concerns that people may have, how those concerns vary across political groups (Graham et al., 2009), and how knowledge of these concerns can facilitate effective communication (Feinberg & Willer, 2019).

To tackle these challenges, the present research leverages an educational application called *Perspectives*, in which learners go through modules designed to increase their knowledge and sophistication with complex ethical issues, and communication skills. Learners were then assessed on their ability to engage in *moral reframing*, a technique used to craft more empathetic and effective arguments, especially in contexts where there

may be disagreement. By improving peoples' moral reasoning, people can be better equipped to bridge the gap of partisan divides, practice empathy for those with different views, and have better mutual understanding and cooperation.

Addressing challenges in moral education

Contemporary teachers face significant challenges when teaching morals and ethics. This stems from increasing cultural and political polarization, ideologically diverse student backgrounds, and the shifting role of education in fostering civic values. One major issue is the growing affective polarization in American society, where individuals exhibit heightened distrust and animosity toward those with differing political views (Iyengar et al., 2019). This polarization creates a classroom environment where students may resist discussing contentious moral topics or engage in constructive dialogue. A recent report by Heterodox Academy found that 96.2% of students who were reluctant to discuss controversial topics in the classroom feared potential sanctions for their speech (Jones & Price, 2023). In addition, many teachers feel ill-equipped and disempowered to instruct students about complex or controversial topics, with many reporting that they avoid such classroom topics altogether (EdWeek Research Center, 2022). These findings highlight the need for accessible, evidence-based tools to support educators in fostering moral reasoning and empathy in increasingly polarized and diverse educational contexts.

Perspectives was developed to meet this need, as part of an applied educational mission to teach people skills for engaging in dialogue across differences, psychological insights into what makes us polarized, such as confirmation bias and groupthink, as well as to understand diverse perspectives and cultivate intellectual humility. *Perspectives* (formerly *OpenMind*) was created by the Constructive Dialogue Institute (CDI), which was founded to address rising societal division and distrust in America. The goal is for individuals who complete *Perspectives* to be able to carry out difficult conversations effectively, especially when people are communicating with others who have different worldviews or beliefs.

The *Perspectives* program constitutes a set of five to eight 30-minute digital learning modules that are designed to enhance individuals' communication and social/behavioral skills, including readiness to engage across ideologically different groups and engage in effective strategies (e.g., active listening) to manage conflict. The learning modules are based on established psychological research, including Moral Foundations Theory (Graham et al., 2013), dual process models of cognition (e.g., Kahneman, 2011), and the benefits of intellectual humility for learning mastery (Porter, 2023). The modules contain readings, infographics, optional quizzes, videos, and active learning exercises such as 'thought experiments' and interventions to correct misperceptions (e.g., Ahler & Sood, 2018). As an example, in Lesson 2: Uncovering the Moral Foundations, learners view digital flashcards with each of the 6 moral foundations labeled alongside an image on the front, and on the reverse side learners read an explanation of each foundation. For the Fairness foundation, participants see an image of the scales of justice, and after clicking, view this text on the reverse of the digital flashcard: '*We all want to be treated fairly and we dislike when people cheat, even when we're not the ones who are directly affected by the cheater's actions. The fairness foundation underlies the values of justice, equality, and reciprocity. It's also connected to the values of honesty and integrity.*' After

reading them all, participants move onto the next section in which they answer items from the moral foundations questionnaire (e.g., '*The world would be a better place if everyone made the same amount of money.*'). In Lesson 4: When Disagreement Strikes, learners are then prompted to indicate how they would respond when someone voices an opinion that they strongly disagree with. Following this, learners read content about the power of storytelling as a way to effectively communicate across differences to achieve better understanding and empathy. Thus, each lesson mimics the type of educational process that students would normally engage in to learn material on any academic subject, albeit with more relevance to learners' own standpoints and life experiences.[1]

Optionally, student learners can complete 'peer-to-peer' discussions where they practice what they have learned in the modules and engage in direct communication with others who are completing the program. *Perspectives* is a 'scalable intervention' because it can be completed efficiently as part of classroom instruction, or as part of organizational training, or individually. Some promising initial research shows that completing *Perspectives* has a causal impact on reducing affective political polarization, increasing intellectual humility, and increasing communication skills (Welker et al., 2023). However, gaps remain in our knowledge about what this educational program can do for other moral education outcomes, including moral reasoning and sophistication. The current study assesses how *Perspectives* can be leveraged to increase moral reframing.

Moral foundations in communication strategies

One way that effective and empathetic political communication is accomplished is with *moral reframing* (Feinberg & Willer, 2019), which is to first identify specific values or virtues that will appeal more to a given audience, followed by tailoring the argument to be congruent with those values. Effective reframing stems from the idea that people's political attitudes and policy preferences are strongly connected to their ethical concerns, which are meaningfully different across political groups (Feinberg & Willer, 2015). Thus, tailoring an effective argument would depend on whether the intended audience leans more liberal, conservative, or other.

Such strategies also rely on insights from Moral Foundations Theory (MFT). According to this theory (Graham et al., 2013), there are several distinct domains that drive moral cognition. Among them are *Care* (reducing suffering to others), *Fairness* (promoting justice), *Loyalty* (responsibility and obligation to social groups), *Authority* (respect for leaders, traditions and duty), and *Purity* (promoting cleanliness or spirituality, and aversion to disgusting acts). When forming moral judgments, liberals tend to more strongly emphasize care and fairness, while deemphasizing loyalty, authority, and purity, compared with conservatives who tend to emphasize loyalty, authority, and purity more strongly while emphasizing care less strongly. This general pattern of political viewpoints associated with different kinds of moral concerns has been observed in societies all over the world (Atari et al., 2023; Graham et al., 2011) and is thought to account for many of the 'culture war' conflicts between progressives and traditionalists. This theoretical framework had originally been applied to abstract moral principles (i.e., '*chastity is an important and valuable virtue*'; Graham et al., 2011), but recent work has begun to extend this framework to domain-specific processes policy and

candidate preferences (Feinberg & Willer, 2019; Voelkel & Feinberg, 2018), as well as close interpersonal relationship contexts with delicate social situations (Selterman & Koleva, 2015; Selterman et al., 2018). Scholars have also recognized the utility of this theoretical framework for testing associations between emotions and judgments (Landmann & Hess, 2018) and developmental stages for moral reasoning (Glover et al., 2014), although it is not without its critiques, particularly regarding parochial political concerns in America (Haste, 2013).

Based on MFT, researchers began conducting experimental manipulations of message content to test whether they would resonate more with liberals or conservatives (for a review, see Feinberg & Willer, 2019). The results have largely supported this idea. Liberals generally show stronger support for environmental policies, but when a message was reframed to reflect purity values that resonate more strongly for conservatives (with images showing disgusting pollution or garbage landfills), this rendered the difference between liberal and conservative participants' environmental attitudes as non-significant (Feinberg & Willer, 2013). Subsequent studies have found increased conservative support for the Affordable Care Act with a purity framing compared to a fairness framing, increased liberal support for military spending with a fairness framing compared to a loyalty or authority framing, and increased conservative support for marriage equality with a loyalty framing compared to a fairness framing (Feinberg & Willer, 2015). Conservatives have historically opposed cash-based government welfare policies, but in a study on attitudes toward universal basic income, researchers found that conservative participants were more supportive of this policy when it was reframed as consistent with 'financial freedom' (i.e., enabling individuals to decide for themselves what is best), and this framing also reduced negative stereotypes about welfare recipients (Thomas et al., 2023).

Other studies have found effects on candidate support as well as policy preferences. In a set of experiments, conservatives' support for Donald Trump declined when presented with a loyalty framed message compared to a fairness framed message, while liberals' support for Hillary Clinton declined when presented with a fairness framed message compared to a loyalty framed message (Voelkel & Feinberg, 2018). Another experiment found that when conservative participants were shown messages from economically progressive candidates that included authority, loyalty, and purity values in their rhetoric, they were more supportive of such candidates compared to if they saw messages emphasizing equality and justice values (Voelkel et al., 2023). The effects of moral reframing have been found in field experiments as well as lab studies. In an experiment with door-to-door conversations, the research assistant canvassers prompted participants to describe their values and attitudes toward abortion, while listening for a specific moral foundation (e.g., care, loyalty) that participants expressed (Kalla et al., 2022). Canvassers then gave participants either a standard message in support of abortion rights, or a morally reframed message (e.g., '*It is only fair that women are supported in their decisions*'). Participants expressed significantly more policy support for abortion rights after hearing the reframed message, as well as more warmth towards Planned Parenthood. Notably, a common result in these studies is that the key manipulation does not eliminate the difference in attitudes between liberals and conservatives, but it is substantially reduced, with a pattern of attitude convergence across political groups. Overall, moral reframing has a generally depolarizing effect.

In summary, research on moral reframing shows several patterns. First, that policy preferences are malleable depending on whether the message resonates with an audience's values. Second, that people across the political spectrum can display bipartisan support for policies that may have historically been divisive. Third, several studies show that the increased support for candidates/policies following a reframed message (compared to a standard message) is mediated by the participants' felt sense that the policy was consistent with their own values. Given those points, some caveats and gaps in the literature remain. It is worth noting that a small number of studies have failed to detect evidence for the efficacy of moral reframing to move people's attitudes (Arpan et al., 2018; Kim et al., 2023). In addition, other issues have arisen through this work involving people's inability or reluctance to use reframing techniques. Many people are unaware of the different value domains that exist outside their own idiosyncratic experiences or may not be aware of the fact that morally re-framed arguments are persuasive. Among other findings, Feinberg and Willer (2019) reported that 85% of conservatives and 64% of liberals were able to identify the morally re-framed arguments as more persuasive, which leaves a sizable minority unable to do so. Furthermore, the authors reported that 6% of conservatives and 20% of liberals who correctly identified morally re-framed arguments as more persuasive still nonetheless expressed a reluctance to use them when communicating with others. Less is known about how people come to understand or appreciate the value of re-framed statements, and there may be individual differences in the extent to which people are enthusiastic about using them. This leaves room for educational interventions to increase participants' moral reasoning in this area, as well as to understand other factors associated with reframing abilities, which are the goals of the studies in the current paper. A secondary goal of this research was to test for correlations between personality traits and the ability to accurately detect morally reframed arguments. Based on prior research, we also identified a handful of individual differences that may predict moral reframing accuracy.

Political polarization

Studies have shown that affective political polarization (i.e., disdain toward outgroups) is often associated with stereotypes and misconceptions about political factions (Mernyk et al., 2022), though it is unknown whether polarization would be linked with reframing accuracy.

Moral foundations

As described above, moral foundations theory was a guiding theoretical framework for this investigation. Studies have shown that conservatives are more likely to recognize morally re-framed arguments and are receptive to using them (Feinberg & Willer, 2019), while liberals are more likely to rely on stereotypes about political beliefs (Graham et al., 2012). If this is due to a difference in moral concerns, then we would expect that individuals scoring higher in moral concerns about loyalty, authority, and purity to score higher in reframing accuracy, while the other moral foundations (care, equality, and proportionality) would be unrelated to reframing accuracy.

Intellectual humility

Intellectual humility, which is the tendency to recognize the limitations of one's own perspective and the possibility that some of their beliefs may be incorrect, has been shown to correlate with a variety of information processing and intelligence metrics, such as performance on Raven's Matrices and cognitive flexibility (Zmigrod et al., 2019) and more accurate discernment when evaluating facts vs. misinformation (Bowes & Tasimi, 2022) as well as lower sharing of hostile political rumors (Marie & Petersen, 2022). Intellectual humility is also linked with politically relevant variables, including lower political hostility as measured by feeling thermometers (Smith, 2023), measures of social distancing (i.e., willingness to 'friend' and 'follow' others with different viewpoints; Sinclair et al., 2020), and myside bias (Bowes et al., 2022). Researchers suggest that intellectual humility may decrease the impact of partisan cues on judgment. Most relevant to the current study, political arguments written by those who are more intellectually humble are also judged to be more persuasive (Lees et al., 2023).

Dichotomous thinking

Those individuals prone to dichotomous thinking tend to see the world in rigid, binary, polarized terms. This is sometimes labeled as a black-and-white cognitive style or viewpoint, and tendencies toward dichotomous thinking are associated with borderline personality, narcissism, self-esteem, undervaluing others, intolerance for ambiguity, and perfectionism (Oshio, 2009). In particular, we suspected that those prone to dichotomous thinking may have more negative attitudes toward divergent viewpoints, they may also be less accurate in their perceptions of others with different viewpoints.

Belonging

When people experience a sense of social connection and feel that they 'fit' into their community, this tends to coincide with other psychological variables such as having a sense of competence that is related to personal and professional goals (Walton & Cohen, 2007). Because social connection correlates with skill and achievement, it may be the case that people who experience greater social intelligence are thus also better able to cognitively reframe messages to be more broadly appealing.

Conflict resolution

Perhaps most directly related to persuasive messaging, people vary in their communication attitudes and tendencies. This includes negotiation strategies, conflict resolution strategies, balancing cooperation and competition, and more. Some research suggests that successful communication is related to different sets of analytical skills, including an ability to understand the issues in a debate, distinguish between opinions, facts, and interests or motivations, and a capacity to redefine a conflict as a 'mutual problem for the parties to solve' whenever possible (Coleman & Lim, 2001). This is also connected to emotions experienced during conflict (e.g., anxiety, anger) and the tendencies people have to approach or avoid confrontations.

The present studies

In two studies, we sought to examine how completing the educational program *Perspectives* could be associated with an increased ability to identify morally re-framed arguments. In Study 1, we present results from a randomized controlled trial with university students at several North American schools. We also describe ancillary results from this dataset on correlations between reframing accuracy and an array of personality traits and individual differences. In Study 2, we present a conceptual replication of the key finding in Study 1, with a pre-post design that shows improvement in participants over time.

We also hypothesized that (H2) reframing accuracy will correlate positively with scores on moral foundations that are more likely to be endorsed by political conservatives, specifically proportionality, loyalty, authority, and sanctity; (H3) reframing accuracy will correlate negatively with affective political polarization; (H4) reframing accuracy will correlate positively with intellectual humility; (H5) reframing accuracy will correlate negatively with dichotomous thinking; (H6) reframing accuracy will correlate positively with belonging (social fit) scores; (H7) reframing accuracy will be uncorrelated with willingness to censor; and (H8) reframing accuracy will correlate positively with constructive or affectively positive communication tendencies and strategies (Open, Unite, Inform, Positive Emotion) but correlate negatively with destructive or affectively negative communication tendencies (Attack, Negative Emotion).

Method — Study 1

Participants and recruitment

The research team at Constructive Dialogue Institute partnered with university instructors to recruit participants for this study. Students in psychology, behavior analysis, and speech classes completed *Perspectives* as part of a course requirement but consent to participate in the research surveys was voluntary. The full sample of 775 participants was relatively diverse and typical of a sample of college students enrolled in psychology, behavior analysis, and speech courses ($M_{age} = 21.27$, SD = 3.75; 65.47% Female, 46.01% White/Caucasian) and leaned slightly liberal, with 52.74% identifying as some degree of progressive/left in their political views.

Materials and procedure

Participants signed up through the *Perspectives* webpage, at which point the research team assigned participants to an experimental condition and sent participants an email with a link to access their assessments. Demographic information and informed consent were assessed at the beginning of the study. Half of the participants were randomly assigned at the class level within each instructor, with approximately half of the participants completing the *Perspectives* program first, while the other half were placed into the waitlist control group. A detailed description of the *Perspectives* program is described earlier in the Introduction.

After the treatment group completed *Perspectives* (approximately 7 weeks after the start of the study), we measured all participants on the key outcome variable (moral

reframing accuracy). At this point in time, the waitlist control group participants had not yet completed *Perspectives*. Following this, the waitlist control group completed the *Perspectives* program. The entire study duration took approximately 14 weeks.

To assess our key outcome variable, moral reframing accuracy, we created a 6-item questionnaire structured as a quiz, with 1 correct answer for each item. Participants were told that for each item, they would be asked to select which answer choice reflects the 'most effective moral argument' to persuade someone (identified as a liberal or conservative) on a specific issue or topic. Topics included universal healthcare, military spending, anti-discrimination protections for transgender/non-binary individuals, police department spending, international trade agreements, and restrictions on legal voting. The correct answer choice was based on the information provided in the lesson on moral foundations. For items that contained a liberal target, the correct answer choice contained wording that reflected *care* and *equality* foundations, while for items with a conservative target, the correct answer choice contained wording that reflected *loyalty* and *purity*. The full items can be found in Appendix A.

At the beginning of the study (prior to completing the *Perspectives* program), participants initially completed a battery of other individual difference and personality variables that we expected would predict reframing accuracy. Prior research has shown significant conceptually relevant links between these variables.

(1) **Moral and Political Variables**. We measured moral concerns using the *Moral Foundations Questionnaire (V.2;* Atari et al., 2023). This is a 36-item questionnaire developed to assess the degree to which participants show concern about 6 dimensions of moral thought. These dimensions are Care ('*It pains me when I see someone ignoring the needs of another human being*') $\alpha = .91$, Equality ('*Our society would have fewer problems if people had the same income*') $\alpha = .89$, Proportionality ('*I think people who are more hard-working should end up with more money*') $\alpha = .68$, Loyalty ('*Everyone should defend their country, if called upon*') $\alpha = .84$, Authority ('*I think obedience to parents is an important virtue*') $\alpha = .84$, Purity ('*It upsets me when people use foul language like it is nothing*') $\alpha = .76$. We measured affective political polarization using items from the American National Election Studies (reported in Iyengar et al., 2012), including feeling thermometer ratings for political groups (progressives and conservatives) and perceptions of individuals who identify with those groups on several traits ('*patriotic*,' '*honest*,' '*generous*,' etc.). The difference between in-group ratings and out-group ratings comprises the measure of affective polarization.

(2) **Cognitive Variables**. We utilized two measures of intellectual humility: (a) the *Comprehensive Intellectual Humility Scale* (CIHS; Krumrei-Mancuso & Rouse, 2016), which includes items such as '*I can respect others, even if I disagree with them in important ways*,' $\alpha = .81$ and (b) the *Intellectual Humility Scale* (GenIH; Leary et al., 2017), which contains items such as '*I am open to questioning my opinions, positions, and viewpoints because they could be wrong*,' $\alpha = .84$. We utilized the *Dichotomous Thinking Inventory* (DTI; Oshio, 2009), which includes items such as '*There are only "winners" and "losers" in this world*,' $\alpha = .83$. We measured belonging with a *Social Fit Scale* (Walton & Cohen, 2007), which contains items such as '*I feel alienated from the rest of my class*' (r-coded), α

= .89. We measured self-censorship with the *Willingness to Self-Censor Scale* (WTSC; Hayes et al., 2005), which includes items such as '*It is difficult for me to express my opinion if I think others won't agree with what I say,*' α = .75.

(3) **Conflict Resolution Variables**. We utilized the Negotiation Evaluation Survey (NES; Coleman & Lim, 2001), which is comprised of eight subscales: (a) Evade-Positive; (b) Inform; (c) Open; (d) Unite; (e) Attack; (f) Evade-Negative; (g) Positive Emotion; (h) Negative Emotion. Example items include a tendency to 'defend myself by showing it is the other person's fault' (Attack); 'withdraw emotionally or physically in order to avoid conflict because it makes me uncomfortable' (Evade-Negative); 'when possible, treat the problem as one that can be solved by working together' (Unite); 'openly discuss what is important to me so that the other person can understand me' (Inform); 'ask respectful questions to learn about what is important to the other person' (Open); 'suggest that a problem can be discussed at a later time because I don't have enough information' (Evade-Positive); along with emotion word items such as 'fearful' (Negative Emotion) and 'stimulated/invigorated' (Positive Emotion).

Results and discussion

The data that support the findings of these studies (both Study 1 and Study 2) are openly available here: https://osf.io/b4e7m/?view_only=3168091256c94825a30a7314e251d90c. Of the 775 participants who had valid data, 426 participants provided data on the key outcome measure of moral reframing accuracy at time two. Of these, we excluded participants who had less than two weeks between completing their pre and post surveys, or more than 74 days, and who completed the study procedure in the incorrect order (i.e., completed the post survey before the pre survey) (Final $n = 320$). The completion time cutoffs of two weeks and 74 days were determined based on visual inspection of completion times and indicated when outliers occurred. Removing these participants did not affect the significance, magnitude, or direction of any reported findings. The final sample was also similar to the initial sample (Final sample: $M_{age} = 22.03$, SD = 4.26, 66.67% female, 40.93% White/Caucasian, 60.32% progressive/left).

For this and all other studies reported, we interpreted results as statistically significant only if below the $p < .05$ threshold and if the 95% CIs for experimental conditions did not overlap. Consistent with our main hypothesis (H1), a Welch's t-test revealed that participants in the treatment group had higher levels of moral reframing accuracy at Time 2 ($M = 0.61$, SD = 0.31, $n = 137$) compared to the waitlist control group ($M = 0.49$, SD = 0.29; $n = 183$, and this difference was significant $t(280.12) = 3.37$, $p < .001$, 95% CI difference = [0.05, 0.18], $d = .39$).[2] This finding shows that completing the *Perspectives* program caused participants to score higher in moral reframing accuracy compared to the control group (see Figure 1).

However, for a moral reframing intervention to promote better dialogue, it is important for the intervention to be effective across viewpoints. To test this, we examined whether political ideology (Measured at Time 1) moderated this effect using moderated regression analysis. The ideology (mean centered) × intervention group interaction term was non-significant ($b = -.01$, $t(180) = -.23$, $p = 0.823$), showing that the effectiveness of *Perspectives* did not vary across the liberal to conservative spectrum.[3]
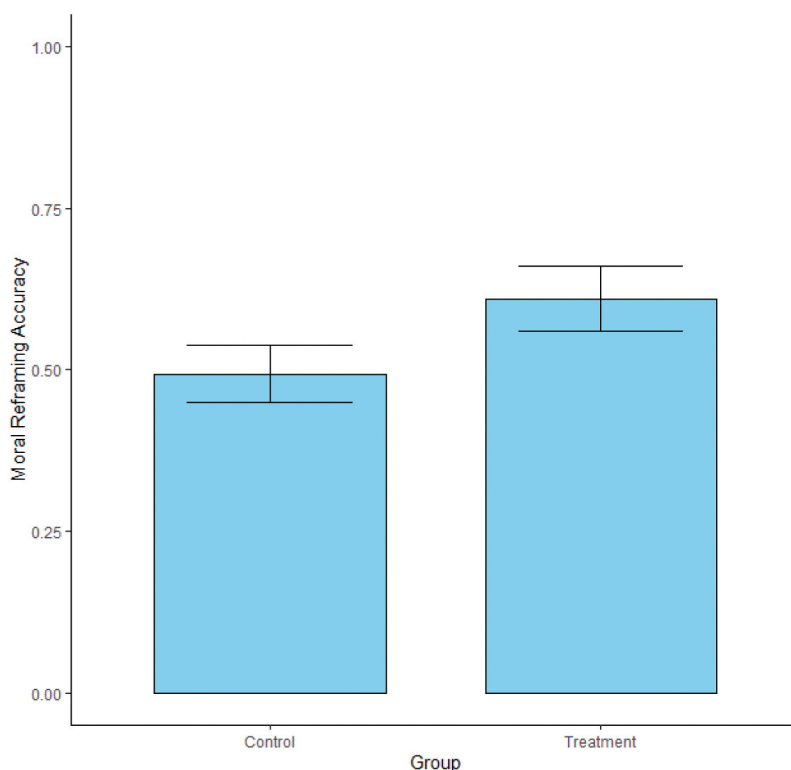
Figure 1. *Perspectives* improves moral reframing, compared to controls (Study 1). Error bars represent 95% confidence intervals around condition group means.

Individual differences analyses

In this section, we grouped analyses into 3 categories of variables: (a) moral and political variables, (b) cognitive variables, and (c) conflict resolution variables. This allowed us to test not only for raw correlations but to examine unique effects of our predictor variables in 3 separate multiple regression models.

Contrary to our hypothesis (H2), we found that reframing accuracy was correlated positively with moral concerns about Care $r = .15$, $p = .006$ and negatively with moral concerns about Loyalty $r = −.11$, $p = .044$, Authority $r = −.18$, $p = .001$, and Purity $r = −.22$, $p < .001$. In a multiple regression model with all 6 moral foundations together, Care $\beta = .15$, $p = .009$ and Purity $\beta = −.17$, $p = .016$ retained significant unique associations with reframing accuracy; total model $F(6, 308) = 4.36$, $p < .001$, $R^2 = .08$). Also contrary to our hypothesis (H3), reframing accuracy was not associated with measures of affective polarization ($ps > .5$).

Partially consistent with our hypothesis (H4), reframing accuracy correlated positively with one measure of intellectual humility (CIHS) $r = .12$, $p = .030$, while the other (GenIH) approached but did not reach significance $r = .10$, $p = .080$. Consistent with our hypotheses (H5), reframing accuracy correlated negatively with dichotomous thinking (DTI) $r = −.23$, $p < .001$ but contrary to our hypothesis (H6) reframing accuracy was uncorrelated with Belonging $r = .11$, $p = .051$.

Consistent with our hypothesis (H7), reframing accuracy was not correlated with willingness to self-censor ($p > .05$). In a multiple regression model with all cognitive variables together, dichotomous thinking $\beta = -.21$, $p < .001$ retained a significant unique association with reframing accuracy; total model $F(5, 312) = 4.36$, $p < .001$, $R^2 = .07$).

Partially consistent with our hypothesis (H8), reframing accuracy correlated positively with Inform $r = .13$, $p = .037$ and negatively with Attack $r = -.17$, $p = .006$, but reframing accuracy was not correlated with Open, Unite, Evade-Pos, Evade-Neg, Positive-Emotion, or Negative-Emotion ($ps > .05$). In a multiple regression model with all 8 communication variables together, Inform $\beta = .20$, $p = .029$ and Attack $\beta = -.19$, $p = .023$ retained significant unique associations with reframing accuracy, although the total regression model did not explain a significant proportion of variance $F(8, 239) = 1.93$, $p = .057$, $R^2 = .06$).

In addition to the main experimental effect, the results from this study showed significant associations between reframing accuracy and individual differences in moral concerns, cognitive disposition, and conflict resolution. Contrary to our predictions, we observed that it was moral concern about caring for others that predicted reframing accuracy, which is systematically associated with liberal political views. By contrast, moral purity concern, which is systematically associated with conservative political views, was linked with worse reframing accuracy. Reframing accuracy scores were positively correlated with one of two measures of intellectual humility, which suggests a role for humility in accurate social perception that may be partially dependent on measurement. Reframing accuracy scores were also negatively linked with dichotomous thinking, suggesting that when people engage in nuanced processing, this predicts their adeptness in conflict resolution. Put together, dichotomous thinking was the most powerful cognitive predictor of reframing accuracy scores. Finally, reframing accuracy scores were linked with informative conflict resolution, and inversely related to attack strategies. Reframing accuracy was not significantly associated with affective political polarization, willingness to censor, belonging, open, uniting, or tendencies to evade conflict, or affectively positive/negative conflict resolution outcomes.[4] Overall these findings suggest that fostering understanding of diverse moral foundations through educational tools can directly enhance learners' abilities to engage in constructive moral reasoning.

Study 2

In Study 2, we aimed to conceptually replicate the key findings from Study 1 by tracking how well students' moral reframing skills increased across several months, using a pre-posttest methodology over the course of a semester-long introductory level college course. Consistent with the key finding from Study 1, our main hypothesis (H1) for Study 2 was that moral reframing scores will be higher for the post-test compared to the pre-test, coinciding with participants having completed the *Perspectives* program.

Table 1. Means, standard deviations, and 95% confidence intervals for moral reframing in Study 2 ($N = 300$).

	Pre-Test			Post-Test		
	Mean	SD	95% CI	Mean	SD	95% CI
Moral Reframing Accuracy	3.36	1.91	3.14, 3.57	4.07	1.85	3.86, 4.28

Materials and procedure

The procedure consisted of the same exercise that participants completed in Study 1. Participants were prompted to choose among several statements to select the most morally compelling argument for a series of issues, from the perspective of someone who has a specific viewpoint (i.e., liberal or conservative). Scores on each of the 6 prompts were averaged together to form an overall moral reframing accuracy score. Participants completed the moral reframing exercise as a course assignment at 2 points during the Fall 2022 semester, before (October 2022) and after (December 2022) completing the *Perspectives* learning module. Participants were not shown the correct answers after completing the first reframing exercise. In total, 300 students fully completed the assignment and questionnaire items and also gave consent for their responses to be used for research. The average age was 19.05 years old (SD = 1.05), with 60% of the sample identifying as women. A majority (64%) of participants identified as Democrats, while the rest identified as Independent (17%), Republican (12%), or none of those (7%).
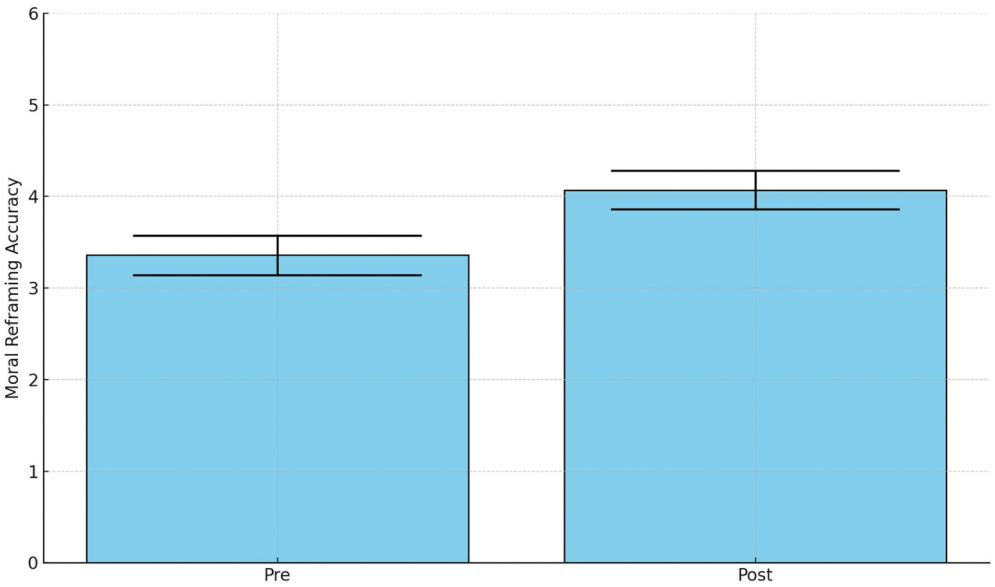

Figure 2. Pre and post-test moral reframing accuracy scores for participants in Study 2. Error bars represent 95% confidence intervals around mean scores at time 1 (pre) and time 2 (post).

Results and discussion

The average pre-test moral reframing score was $M = 3.36$ (SD = 1.91; 95% CI [3.14, 3.57]), while the average post-test moral reframing score was $M = 4.07$ (SD = 1.85; 95% CI [3.86, 4.28]). These data are displayed in Table 1. A within-subjects ANOVA revealed that this was a significant change $F (1, 299) = 39.53$, $p < .001$, $d = .38$. See Figure 2 below. We then probed whether the change in scores over time varied as a function of political party identification. There was a main effect of party ID on the pre-test reframing score $F (3, 296) = 3.76$, $p < .011$, such that Democrats ($M = 3.47$; $SD = 1.87$; 95% CI [3.21, 3.74]) and Independents ($M = 3.72$; $SD = 2.05$; 95% CI [3.14, 4.30]) scored higher than Republicans ($M = 2.50$; $SD = 1.50$; 95% CI [1.99, 3.01]). However, consistent with Study 1, the interaction between moral reframing scores and party ID was not significant $F (3, 296) = 1.39$, $p = .247$.

   The results show a conceptual replication of the key findings in Study 1. After going through the *Perspectives* module as part of an introductory level college course, participants showed improved accuracy after completing the *Perspectives* module compared to their initial score. Although Democrats and Independents scored higher than Republican participants, this result should be interpreted with caution since the sub-sample sizes were uneven (most participants were Democrats). There was no interaction between political party identification and increasing accuracy scores.

General discussion

Across two studies, we have shown how the *Perspectives* program has an effect on moral reframing accuracy, which increased as a function of completing the educational module, and in part due to trait individual differences. In our first sample, we observed that participants who completed *Perspectives* scored higher on moral reframing compared to those who did not yet complete the program (Study 1), and participants in a second sample scored higher after completing the program compared to beforehand (Study 2). This shows evidence that moral reframing, like other social cognitive skills, can be learned. We also observed (Study 1) that participants' scores varied as a function of traits, including general moral concerns, cognitive attributes, and communication styles. Those who scored higher on reframing tended to have stronger concerns about caring for others and weaker concerns about purity. Higher reframing scores were also linked with less of a tendency to engage in dichotomous thinking, higher tendency toward informative conflict resolution tactics, and lower tendency toward attacking conflict resolution tactics.

   The literature on moral communication suggests that people typically craft political statements in terms of their own values, rather than the values of their audience, which makes these statements less persuasive than they otherwise would be (Feinberg & Willer, 2019). The practice of reframing messages is to make them more ethically appealing to the target of a persuasive attempt. This requires knowledge and intelligence about how audiences differ from each other, as well as social skills inherent in perspective-taking and nuanced thinking, which makes this an area ripe for educational interventions. The *Perspectives* program is an educational model designed to do exactly that—to inform participants about the diversity of ethical concerns that people have, and to foster

openness and curiosity in users. As people discover what psychological motivations underlie others' political viewpoints, they become more knowledgeable and more effective communicators.

In addition, we observed that reframing accuracy is correlated with individual difference factors, which other studies have shown will also change as a function of completing the *Perspectives* program. As people complete *Perspectives*, they show improvement in intellectual humility and communication skills, as well as decreased affective political polarization. This adds evidence that teaching people about others' beliefs and virtues is linked with cognitive sophistication.

Given evidence from prior studies described above (Feinberg & Willer, 2019; Graham et al., 2012), we had predicted that reframing accuracy would be associated with more conservative virtues such as purity, and less with liberal virtues such as care. We also expected that reframing accuracy would be negatively associated with affective political polarization. Neither of those predictions were supported by the data. Regarding moral concerns, prior research shows that ethically-driven care for others is linked with greater empathic concern (Koleva et al., 2012), so it is possible that those scoring higher in care are more motivated to understand others' minds, and thus, show greater skill at reframing. Individual differences in empathy are a possible mechanism to explain the connection between care concerns and reframing accuracy. Prior studies also suggest that purity concerns are linked with a desire to protect oneself, in contrast to care concerns which are linked with a desire to protect others (Chakroff et al., 2013). Some evidence also suggests that religious individuals (who typically score high on measures of purity) felt disgust at their own impious thoughts (Ritter et al., 2016). Based on this, weaker reframing accuracy as a function of purity concerns could be motivated by a defensive mechanism. Finally, while some evidence suggests that *Perspectives* is associated with reductions in affective polarization (Welker et al., 2023), it may be that polarization and reframing accuracy operate independently of each other. Each of these may change as a function of learning about moral psychology, but they need not be directly linked.

As stated above, one of the findings from prior research is that a substantial minority of participants (especially liberals) are reluctant to use morally reframed messages. What remains to be studied is why this motivation exists at all. Some have speculated that individuals may refuse to reframe their messages as a matter of principle (Feinberg & Willer, 2019). It may be that some personality traits (e.g., pragmatism) are more strongly associated with a desire to use the most effective messages available, while other traits (e.g., dogmatism) are more strongly associated with an insistence on deploying one's own values in messaging, rather than the audience's values. This may also vary based on situational context. Perhaps in activist spaces, people are more likely to use their own group's values in messaging, while in situations more geared toward viewpoint diversity, people are more considerate of others' values.

Limitations

While the current studies offer evidence that moral reframing accuracy can be learned, our sample consisted of primarily college students. It should not be assumed that these findings would generalize to all populations of learners. On the other hand, some studies suggest that highly educated Americans are

ironically the least accurate in estimating others' attitudes, which is driven by overreliance on political stereotypes (Yudkin et al., 2019). Thus, more educated individuals may benefit the most from this type of educational intervention. Our assessment for reframing accuracy consisted of a multiple choice quiz-style questionnaire, in which the correct answer was displayed to participants. It is possible that different results would emerge had we prompted participants to write reframed messages in a free-response format. In a similar vein, the statements we utilized were generic and may not be directly applicable to the type of political messages that practitioners or average individuals use in typical conversation. It is also possible that people may still be reluctant to utilize messages that they believe to be more effective, because they may conflict with their own values. Thus, we should not assume that increasing perceptual accuracy would necessarily lead to increased utilization.

Strengths and future directions

As for strengths, the study designs allowed us to test improvement over time as well as for causality. Thus, the experimental effect cannot be attributed to third variable or selection effects such as interest in ethics, politics, or communication. In addition, the educational program we utilized is efficient and scalable to a wide variety of institutional contexts. Future research on moral reframing could investigate the degree to which people can apply acquired knowledge to a variety of different communication modalities, such as social media posts, in-person dialogue, campaign slogans, etc.

   In conclusion, while the current studies add to a growing literature on political communication and persuasion, they suggest that the ability to connect and communicate across divides is a learnable skill. Our program equipped learners with critical skills for ethical communication and perspective-taking that might help bridge partisan divides and equip learners with critical skills for ethical communication and perspective-taking. The *Perspectives* program may also offer a solution to rising levels of political polarization (Iyengar et al., 2019).

Notes

1. Interested readers who wish to view or participate in the current version of *Perspectives* can do so at https://constructivedialogue.org/perspectives/.
2. With a traditional t-test, the results are similar: $t(318) = 3.41$, $p < .001$, 95% CI Difference = [0.05, 0.18], $d = .39$).
3. In a previous publication using these data (Welker et al., 2023), we excluded participants that failed attention check items. When participants who failed these items were excluded from the data analysis, this did not change the significance or direction of the effect of *Perspectives* on moral reframing ($t(255.66) = -2.52$, $p = .012$, $d = -.31$). In these data, political views also did not moderate the effect of *Perspectives* ($b = -.02$, $t(156) = -0.50$, $p = 0.618$).
4. We retained data from participants if they responded to at least one of the moral reframing items. We also ran the analyses with participants excluded if they responded to less than half of the reframing accuracy items. The results were virtually identical in both cases.

Author contributions

Dylan Selterman developed key hypotheses, created study materials, collected data, conducted analyses, and wrote large sections of the manuscript. Keith Welker refined study materials, collected data, conducted analyses, and wrote sections of the manuscript. Mylien Duong refined study materials, collected data, and supervised the study protocol. All authors approve the final version of the manuscript for submission.

Disclosure statement

No potential conflict of interest was reported by the author(s).

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References

Ahler, D. J., & Sood, G. (2018). The parties in our heads: Misperceptions about party composition and their consequences. *The Journal of Politics*, *80*(3), 964–981. https://doi.org/10.1086/697253

Arpan, L. M., Xu, X., Raney, A. A., Chen, C., & Wang, Z. (2018). Politics, values, and morals: Assessing consumer responses to the framing of residential renewable energy in the United States. *Energy Research & Social Science*, *46*, 321–331. https://doi.org/10.1016/j.erss.2018.08.007

Atari, M., Haidt, J., Graham, J., Koleva, S., Stevens, S. T., & Dehghani, M. (2023). Morality beyond the WEIRD: How the nomological network of morality varies across cultures. *Journal of Personality and Social Psychology*, *125*(5), 1157–1188. https://doi.org/10.1037/pspp0000470

Bowes, S. M., Costello, T. H., Lee, C., McElroy-Heltzel, S., Davis, D. E., & Lilienfeld, S. O. (2022). Stepping outside the echo chamber: Is intellectual humility associated with less political myside bias? *Personality and Social Psychology Bulletin*, *48*(1), 150–164. https://doi.org/10.1177/0146167221997619

Bowes, S. M., & Tasimi, A. (2022). Clarifying the relations between intellectual humility and pseudoscience beliefs, conspiratorial ideation, and susceptibility to fake news. *Journal of Research in Personality*, *98*, 104220. https://doi.org/10.1016/j.jrp.2022.104220

Chakroff, A., Dungan, J., Young, L., & Zalla, T. (2013). Harming ourselves and defiling others: What determines a moral domain? *PLOS ONE*, *8*(9), e74434. https://doi.org/10.1371/journal.pone.0074434

Coleman, P. T., & Lim, Y. Y. J. (2001). A systematic approach to evaluating the effects of collaborative negotiation training on individuals and groups. *Negotiation Journal*, *17*(4), 363–392. https://doi.org/10.1111/j.1571-9979.2001.tb00246.x

EdWeek Research Center (2022, October). *Educators are deeply conflicted on teaching heated cultural issues, survey finds*. Education Week. https://www.edweek.org/teaching-learning/educators-are-deeply-conflicted-on-teaching-heated-cultural-issues-survey-finds/2022/10

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), 1–12. https://doi.org/10.1111/spc3.12501

Glover, R. J., Natesan, P., Wang, J., Rohr, D., McAfee-Etheridge, L., Booker, D. D., Bishop, J., Lee, D., Kildare, C., & Wu, M. (2014). Moral rationality and intuition: An exploration of relationships between the defining issues test and the moral foundations questionnaire. *Journal of Moral Education*, *43*(4), 395–412. https://doi.org/10.1080/03057240.2014.953043

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. Devine & A. Plant (Eds.), *Advances in experimental social psychology* (Vol. 47, pp. 55–130). Academic 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

Graham, J., Nosek, B. A., Haidt, J., Iyer, R., Koleva, S., & Ditto, P. H. (2011). Mapping the moral domain. *Journal of Personality and Social Psychology*, *101*(2), 366–385. https://doi.org/10.1037/a0021847

Graham, J., Nosek, B. A., Haidt, J., & Young, L. (2012). The moral stereotypes of liberals and conservatives: Exaggeration of differences across the political spectrum. *PLOS ONE*, *7*(12), e50092. https://doi.org/10.1371/journal.pone.0050092

Haste, H. (2013). Deconstructing the elephant and the flag in the lavatory: Promises and problems of moral foundations research. *Journal of Moral Education*, *42*(3), 316–329. https://doi.org/10.1080/03057240.2013.818529

Hawkins, S., Vallone, D., Oshinski, P., Xu, C., Small, C., Yudkin, D., Duong, F., & Wylie, J. (2022). *Defusing the history wars: Finding common ground in teaching America's national story*. More in Common. https://www.moreincommon.com/media/y4rpsigy/defusing-the-history-wars_more-in-common-1.pdf

Hayes, A. F., Glynn, C. J., & Shanahan, J. (2005). Willingness to self-censor: A construct and measurement tool for public opinion research. *International Journal of Public Opinion Research*, *17*(3), 298–323. https://doi.org/10.1093/ijpor/edh073

Iyengar, S., Lelkes, Y., Levendusky, M., Malhotra, N., & Westwood, S. J. (2019). The origins and consequences of affective polarization in the United States. *Annual Review of Political Science*, *22*(1), 129–146. https://doi.org/10.1146/annurev-polisci-051117-073034

Iyengar, S., Sood, G., & Lelkes, Y. (2012). Affect, not ideology: A social identity perspective on polarization. *Public Opinion Quarterly*, *76*(3), 405–431. https://doi.org/10.1093/poq/nfs038

Jones, P., & Price, K. (2023). *Special report: The "where" of campus expression*. Heterodox Academy. https://heterodoxacademy.org/campus-expression-survey/

Kahneman, D. (2011). *Thinking, fast and slow*. Farrar, Straus and Giroux.

Kalla, J. L., Levine, A. S., & Broockman, D. E. (2022). Personalizing moral reframing in interpersonal conversation: A field experiment. *The Journal of Politics*, *84*(2), 1239–1243. https://doi.org/10.1086/716944

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*, 1–24. https://doi.org/10.32872/spb.8557

Koleva, S. G., Ditto, J., Iyer, P., Ditto, R, J., & Ditto, P. H. (2012). Tracing the threads: How five moral concerns (especially Purity) help explain culture war attitudes. *Journal of Research in Personality*, *46*(2), 184–194. https://doi.org/10.1016/j.jrp.2012.01.006

Krumrei-Mancuso, E. J., & Rouse, S. V. (2016). The development and validation of the comprehensive intellectual humility scale. *Journal of Personality Assessment*, *98*(2), 209–221. https://doi.org/10.1080/00223891.2015.1068174

Landmann, H., & Hess, U. (2018). Testing moral foundation theory: Are specific moral emotions elicited by specific moral transgressions? *Journal of Moral Education*, *47*(1), 34–47. https://doi.org/10.1080/03057240.2017.1350569

Leary, M. R., Diebels, K. J., Davisson, E. K., Jongman-Sereno, K. P., Isherwood, J. C., Raimi, K. T., Deffler, S.A., & Hoyle, R. H. (2017). Cognitive and interpersonal features of intellectual humility. *Personality & Social Psychology Bulletin*, *43*(6), 793–813. https://doi.org/10.1177/0146167217697695

Lees, J., Todd, H., Barranti, M., & Druckman, J. (2023). Women, the intellectually humble, and liberals write more persuasive political arguments. *Proceedings of the National Academy of Sciences Nexus*, *2*(5), pgad143. https://doi.org/10.1093/pnasnexus/pgad143

Marie, A., & Petersen, M. B. (2022). *Moralization of rationality can stimulate, but intellectual humility inhibits, sharing of hostile conspiratorial rumors*. OSF preprint. https://osfio/k7u68.

Mason, L. (2018). *Uncivil agreement: How politics became our identity*. University of Chicago Press.

Mernyk, J. S., Pink, S. L., Druckman, J. N., & Willer, R. (2022). Correcting inaccurate metaperceptions reduces Americans' support for partisan violence. *Proceedings of the National Academy of Sciences*, *119*(16), e2116851119. https://doi.org/10.1073/pnas.2116851119

Oshio, A. (2009). Development and validation of the dichotomous thinking inventory. *Social Behavior and Personality: An International Journal*, *37*(6), 729–741. https://doi.org/10.2224/sbp.2009.37.6.729

Porter, T. (2023). Jingle-jangle fallacies in intellectual humility research. *The Journal of Positive Psychology*, *18*(2), 221–223. https://doi.org/10.1080/17439760.2022.2154698

Ritter, R. S., Preston, J. L., Salomon, E., & Relihan-Johnson, D. (2016). Imagine no religion: Heretical disgust, anger and the symbolic purity of mind. *Cognition and Emotion*, *30*(4), 778–796. https://doi.org/10.1080/02699931.2015.1030334

Selterman, D., & Koleva, S. (2015). Moral judgment of close relationship behaviors. *Journal of Social and Personal Relationships*, *32*(7), 922–945. https://doi.org/10.1177/0265407514554513

Selterman, D., Moors, A. C., & Koleva, S. (2018). Moral judgment toward relationship betrayals and those who commit them. *Personal Relationships*, *25*(1), 65–86. https://doi.org/10.1111/pere.12228

Sinclair, A. H., Stanley, M. L., & Seli, P. (2020). Closed-minded cognition: Right-wing authoritarianism is negatively related to belief updating following prediction error. *Psychonomic Bulletin & Review*, *27*(6), 1348–1361. https://doi.org/10.3758/s13423-020-01767-y

Smith, G. (2023). You know you're right: How intellectual humility decreases political hostility. *Political Psychology*, *44*(6), 1319–1335. https://doi.org/10.1111/pops.12903

Thomas, C. C., Walton, G. M., Reinhart, E. C., & Markus, H. R. (2023). Mitigating welfare-related prejudice and partisanship among US conservatives with moral reframing of a universal basic income policy. *Journal of Experimental Social Psychology*, *105*, 104424. https://doi.org/10.1016/j.jesp.2022.104424

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), pgad154. https://doi.org/10.1093/pnasnexus/pgad154

Walton, G. M., & Cohen, G. L. (2007). A question of belonging: Race, social fit, and achievement. *Journal of Personality and Social Psychology*, *92*(1), 82. https://doi.org/10.1037/0022-3514.92.1.82

Welker, K. M., Duong, M., Rakhshani, A., Dieffenbach, M., Coleman, P., & Haidt, J. (2023). The online educational program 'Perspectives' improves affective polarization, intellectual humility, and conflict management. *Journal of Social and Political Psychology*, *11*(2), 437–457. https://doi.org/10.5964/jspp.10651

Yudkin, D. A., Hawkins, S., & Dixon, T. (2019). The perception gap: How false impressions are pulling Americans apart. More in Common. https://perceptiongap.us/

Zmigrod, L., Zmigrod, S., Rentfrow, P. J., & Robbins, T. W. (2019). The psychological roots of intellectual humility: The role of intelligence and cognitive flexibility. *Personality and Individual Differences*, *141*, 200–208. https://doi.org/10.1016/j.paid.2019.01.016

Appendix A. Moral re-framing accuracy prompts

Instructions to participants: These days, there are many political issues that Americans disagree on, and many issues for which people can find common ground. We are interested in whether you can select the most morally and emotionally compelling argument on a particular issue, from the perspective of someone who has a specific viewpoint which may be the same or different from yours. Please focus on the moral and emotional component of the argument more than the facts it is asserting.

(1) Which argument would be the most effective *moral* argument to persuade a **conservative who opposes universal healthcare** to change their mind?
  - We should uphold our nation's standing in the world by ensuring that all U.S. citizens have access to quality healthcare. Together we can ensure that patriotic American families are provided for.
  - People need to act with empathy and compassion towards less fortunate people and protect them from illnesses even if they cannot afford the medicine they need.
  - We must ensure that everyone has fair and equal access to healthcare. It is unjust for only the wealthiest earners to have access to doctors and medicine.
  - It is important to follow the conclusions of economic studies, which very clearly show that policymakers should adopt a universal healthcare program.
(2) Which argument would be the most effective *moral* argument to persuade a **liberal who opposes maintaining current levels of military spending** to change their mind?
  - It is important to keep funding our military because it unifies America and ensures that the United States is the greatest nation in the world.
  - Military service is an established pathway to reduce inequality because disadvantaged citizens will receive subsidized healthcare and education (e.g., the GI bill) and job-placement programs.
  - We should keep funding our military because the military is one of our best protections against foreign adversaries who are threatening our society and our way of life.
  - To make an informed decision, we should follow the conclusions of political science and international relations studies, which overwhelmingly show that our military should be funded at its current levels.
(3) Which argument would be the most effective *moral* argument to persuade a **conservative who opposes extending legal anti-discrimination protections to transgender/non-binary individuals** to change their mind?
  - We need to uphold our nation's core values and loyalty to every citizen. As dedicated citizens of the United States, transgender Americans should receive legal protections.
  - People should act with empathy and compassion toward vulnerable and marginalized groups. Transgender individuals have been targeted for abuse, harassment, and violence, and we must protect them.
  - It is important to ensure that everyone is treated fairly and equally under the law. It is unjust for only cisgender individuals to have legal protections.
  - We need to follow the conclusions of psychological research, which firmly concludes that transgender/non-binary individuals deserve anti-discrimination protections to ensure quality of life.
(4) Which argument would be the most effective *moral* argument to persuade a **liberal who opposes maintaining current levels of police department spending** to change their mind?

- It is important to keep funding our police departments because they preserve American institutions and maintain law and order so that criminals do not interfere with our way of life.
- We need to keep funding our police departments because they protect and defend our most vulnerable populations, including communities of color, from being attacked or victimized by violence.
- We should keep funding our police departments because they ensure that those who violate the law will be dealt with in a manner that is proportionate to their wrongdoing.
- We're best off basing our decision on the results of recent criminology studies. These studies show that our police departments should be funded at their current levels.

(5) Which argument would be the most effective *moral* argument to persuade a **liberal who opposes international trade agreements** to change their mind?
- We need to form trade agreements with other nations to uphold America's standing in the world and ensure our nation's leadership.
- The US should form trade agreements with other nations to facilitate economic opportunities for hard working entrepreneurs who deserve access to international markets.
- It is important to form trade agreements with other nations to reduce poverty around the world and reduce the unfair wealth gap between the richest individuals and the lower/middle class.
- The majority of economic studies conclude that we should enter international trade agreements to economic growth and prosperity. We need to follow these recommendations.

(6) Which argument would be the most effective *moral* argument to persuade a **conservative who supports restrictions on legal voting** to change their mind?
- We must uphold America's sacred tradition of the democratic process and remain an example of freedom throughout the world by ensuring that anyone who is legally permitted to vote can vote.
- It is critical to oppose any new restrictions on legal voting since these restrictions are based on dishonest and false claims about voter fraud, which is virtually non-existent.
- We need to ensure that everyone has fair and equal access to the ballot box so that anyone who is legally allowed to vote may exercise that basic human right.
- It is important to follow the conclusions of recent studies in political science research. These studies primarily show that we should not enact new restrictions on legal voting.