Running head: RESOLVING THE PROGRESSIVE PARADOX

Resolving the Progressive Paradox: Conservative Value Framing of Progressive Economic

Policies Increases Candidate Support

Jan G. Voelkela

Robb Willer<sup>a</sup>

<sup>a</sup>: Department of Sociology, Stanford University, Stanford, USA

Draft Date: 8 May 2019. This paper has not been peer reviewed. Please do not copy or cite without author's permission.

Email addresses: jvoelkel@stanford.edu, willer@stanford.edu

# **Funding Statement**

The authors received funding for this project from The Schmidt Family Foundation and Grow Progress.

### Abstract

While polls show progressive economic policies are popular, progressive candidates typically lose elections in the U.S. One explanation for this *progressive paradox* is that the opponents of progressive candidates often win through "symbolic politics," successfully harnessing values and ideologies that receive broad support from the general public. Here we explore one solution to the progressive paradox, testing whether progressive candidates achieve greater support by framing their policy platforms in terms of values and ideologies that resonate beyond the progressive base. We tested this claim in two experiments (total N=4,138), including one preregistered experiment conducted on a nationally representative sample. We found that a presidential candidate who framed his progressive economic platform to be consistent with more conservative value concerns like patriotism, family, and respect for tradition – as opposed to more liberal value concerns like equality and social justice – was supported significantly more by conservatives and, unexpectedly, by moderates as well. These effects were mediated by perceived value similarity with the candidate. Furthermore, a manipulation of how progressive the candidate's platform was had weak and inconsistent effects, and did not interact with the framing of the platform. These findings indicate that in our experiments framing mattered more than policy, suggesting that moral reframing could be an effective alternative to policy centrism for candidates seeking broader support. Our results illustrate the important effects of value framing of economic policy, offering a solution to the longstanding puzzle regarding the gap between progressive policy and candidate support.

**Keywords**: framing, persuasion, economic policy, political psychology, moral psychology

Resolving the Progressive Paradox: Conservative Value Framing of Progressive Economic

Policies Increases Candidate Support

Surveys find that large majorities of Americans view economic inequality in the U.S. as excessive, indicating that they would prefer to live in a more egalitarian society (Franks & Scherr, 2018; McCall, Burk, Laperriere, & Richeson 2017; Norton & Ariely, 2011) and supporting progressive economic policies (Horowitz, Parker, Graf, & Livingston, 2017; Levitz, 2018; Moore, 2016; Reinhart, 2018). However, these stated policy preferences are not reflected in American electoral results, as candidates who champion progressive economic policies typically lose to less progressive opponents (Ellis & Stimson, 2012; Frank, 2004). How can this tension between the policies most Americans support and the politicians they elect be resolved?

Here we investigate one solution to this paradox, the possibility that candidates who frame progressive economic policies in terms of conservative values will be supported more than progressive candidates who use a liberal value framework. Prior research suggests that conservative value concerns such as patriotism, protection of the family, and respect for American traditions resonate broadly with the American public (Ellis & Stimson, 2012; Lakoff, 2004). By contrast, progressive leaders have typically employed rationales for progressive policy that focus on principles of economic justice and egalitarianism (cf. Lipset & Marks, 2001). While such appeals are likely effective for mobilizing committed support from the American left, appeals with resonance beyond the progressive base may reduce the gap between Americans' views of progressive policy and their support for progressive politicians.

# The Progressive Paradox

We define progressive economic policies as governmental interventions to the free market that aim to reduce economic inequality, poverty, or increase opportunities for upward mobility. Majorities of Americans support prominent progressive economic policies such as raising the minimum wage (Moore, 2016), paid parental leave (Horowitz, Parker, Graf, & Livingston, 2017), investments in infrastructure (Reinhart, 2018), and universal health care (Levitz, 2018). Further, a majority of Americans have supported progressive economic policies over conservative economic policies for decades (Ellis & Stimson, 2012).

These data on policy attitudes, however, stand in stark contrast to the striking failure to implement progressive economic policy in the U.S. Compared to other Western, industrialized countries, the United States has a tax system that is relatively favorable to the wealthy (Hacker & Pierson, 2010; Lawson & Martin, 2018; Piketty & Saez, 2007), a relatively small welfare state (Esping-Andersen & Myles, 2008), a low rate of unionization (Eidlin, 2015), and lacks an influential labor party (Eidlin, 2016; Lipset & Marks, 2001). Despite their support for progressive economic policies, Americans do not vote consistently for candidates who champion these policies (Ellis & Stimson, 2012; Frank, 2004), a pattern that continues to hold (Nilsen, 2018). A decades-old literature has identified a number of explanations for this "progressive paradox", highlighting a range of factors, from the challenge of organizing America's racially diverse working class (Brown-Iannuzzi, Dotsch, Cooley, & Payne, 2017; Du Bois, 1899; Lipset & Marks, 2001; cf. Cortland et al., 2017) to the out-sized influence of wealthy donors in American politics (Gilens & Page, 2014; Goss, 2016; Hacker & Pierson, 2010).

<sup>&</sup>lt;sup>1</sup> We use the term "progressive" instead of "liberal" to describe left-wing economic policies in order to avoid confusion because "liberal" could be understood as the modern American liberalism that embraces market regulation for the sake of social justice, or as neoliberalism that embraces free-market capitalism.

The explanation most relevant to our research is the claim that, while the policies of progressive candidates are generally quite popular, their electoral opponents' often win elections through superior "symbolic politics," successfully employing values and ideologies that receive broad support in the majority conservative American public (Ellis & Stimson, 2012; Grossmann & Hopkins, 2016; Lakoff, 2004). By contrast, progressive candidates have a long history of embedding their rationales for progressive economic policies in a value framework focused on social justice and equality, rarely employing more conservative values and ideologies like patriotism and religiosity that are widely held by the working class (cf. Lipset & Marks, 2001). Some have even argued that progressive economic policies are fundamentally inconsistent with values and ideologies widely held among American conservatives (Martin, 2015). Thus, the tension described by the progressive paradox can in part be attributed to the perceived inconsistency between many Americans' preferences for progressive economic policies on the one hand and conservative value concerns on the other.

# **Reconciling Progressive Policies and Conservative Value Concerns**

The current research investigates the possibility that progressive economic policies and conservative value concerns are in fact reconcilable, a claim that – if true – would allow progressive candidates to appeal to voters who are ideologically conservative. This claim fits with recent work showing that the ideological and value bases of policies are quite malleable, and that these policies can be reframed as consistent with values and ideologies of those who do not currently support those policies, leading to increased support as a result. For example, individuals high in system justification were more supportive of pro-environmental policies after reading a message that framed environmental protection as a way to preserve American traditions (Feygina, Goldsmith, & Jost, 2010).

Consistent with this, prior work on "moral reframing" (Feinberg & Willer, 2013, 2015; Kidwell, Farmer, & Hardesty 2013; Voelkel & Feinberg, 2018; Wolsko, Ariceaga, & Seiden 2016; cf. Day, Fiske, Downing, & Trail 2014) finds that various political positions can be persuasively reframed as consistent with values of different ideological groups. For example, results of one experiment showed that reading an essay emphasizing that gay men and women were proud and patriotic Americans increased conservatives' support for same-sex marriage relative to a more conventional argument for same-sex marriage based on egalitarianism. Similarly, liberals who read an argument that the military helps disadvantaged people overcome poverty and inequality reported significantly greater support for military spending than liberals who read a pro-military spending argument based on patriotism and respect for authority (Feinberg & Willer, 2015). A recent study extended this argument to the framing of redistributive policies, finding that when these policies were framed as consistent with values of loyalty, traditions, and purity, donations for an organization working towards the reduction of economic inequality increased among people who endorse loyalty values (Franks & Scherr, 2018). Building on this work, we propose that progressive candidates can increase electoral success by framing their policies as consistent with conservative value concerns and that this increase will be greatest among more conservative voters.<sup>2</sup>

Note that this prediction is non-trivial for several reasons. First, moral concerns regarding harm and justice are often seen as universally recognized whereas patriotism and respect for traditions are part of the moral sense that characterizes conservatives, but not liberals (Haidt, 2012). Based on this, one might expect that liberal value framing will result in larger overall

<sup>&</sup>lt;sup>2</sup> Note that the correlation between these values and policies observed in the contemporary U.S. is not inevitable. In other time periods progressive policies have been rhetorically linked with values like group loyalty and religious sanctity, values that we currently associate with political conservatism.

support than conservative value framing because it resonates with a larger group of people. However, work on moral reframing suggests that conservatives are typically unpersuaded by liberal value framing (e.g. Feinberg & Willer, 2013, 2015), casting doubt on the universal appeal of liberal moral foundations. Second, it may be rhetorically impossible to coherently advocate for progressive policies in terms of conservative value concerns. This would be the case if conservative values are inextricably linked to conservative economic policies. We argue instead that the relationship between progressive policy and conservative value concerns is more malleable, making it possible to craft these connections in coherent and persuasive ways.

### **The Present Research**

The aim of the current research is to test the idea that conservative value framing increases support for progressive political candidates. Specifically, we test the *moral reframing hypothesis* (Feinberg & Willer, 2015) which in this context proposes that conservative participants will support a progressive political candidate more if he frames his economic policies as consistent with conservative instead of liberal values. We examined this hypothesis in two large-scale experiments as part of a larger project on the influence of policy platforms and value framing on candidate support. We examined levels of support for a hypothetical Democratic candidate in the 2020 presidential election who employed one of three economic platform frames: one based on liberal values of social justice and equality, one based on conservative values of patriotism and tradition, and a third based on a technical emphasis on growth and employment. Our larger project was designed to test several hypotheses related to these treatments, however, in the current paper we focus on the moral reframing hypothesis, i.e. on the comparison of the liberal and the conservative frame conditions and in Study 1, an additional control condition (the hypothesis and results relating to the technical frame condition

which is not relevant to the evaluation of the moral reframing hypothesis are the subject of another paper).<sup>3</sup>

Several features of our design make our studies rigorous tests of our hypothesis, advancing prior work on moral reframing in important ways. First, our two experiments were highly powered with a combined sample size of 4,138 participants. Second, whereas previous research on moral reframing typically used convenience samples, our second study utilizes a nationally representative sample, ensuring our results are generalizable to the American public. Third, our second study followed a pre-registered analysis plan with a priori specified hypotheses. Fourth, our design in both studies included a second factor that manipulated the progressiveness of the economic policy platform, allowing us to test the robustness of the framing effects over two different economic policy platforms. Finally, recent research has shown that the effects of campaign messages on candidate support can be nullified by salient party cues (Kalla & Broockman, 2018; see also Cohen, 2003), but party cues are an integral part of the political landscape. Thus, we tested the effects of value framing in the presence of party cues to increase the generalizability of our findings. Overall, these methodological features should ensure relatively high levels of internal and external validity.

### Study 1

The first study tested the moral reframing hypothesis in a large-scale, online surveyexperiment. We compared participants' support for a hypothetical Democratic candidate in the 2020 presidential election who framed their progressive economic policy platform as either

<sup>&</sup>lt;sup>3</sup> All data, study materials, and analysis scripts for Studies 1 and 2 are openly accessible at https://osf.io/6vykw/?view\_only=01297e35ffcf419bb1681b13c98e9d0a

<sup>&</sup>lt;sup>4</sup> The policy factor was also included to examine the influence of more progressive policies on candidate support. We tested two hypotheses for this factor which can be found in the preregistration for Study 2. Results are presented in the manuscript but due to space reasons and inconclusive results not further discussed.

consistent with liberal or conservative value concerns. In addition, Study 1 included a control frame condition to determine whether potential differences between the liberal and conservative frame conditions represent a positive effect of the conservative frame condition (as predicted by the moral reframing hypothesis) or instead a negative effect of the liberal frame condition.

### Method

**Participants.** Based on a priori power analyses conducted with GPower (Faul, Erdfelder, Lang, & Buchner, 2007), we estimated we would need a sample size of 1721 to achieve 95% power to detect the interaction effect predicted by the moral reframing hypothesis, assumed to be small in size (f = .1). Taking exclusion criteria into account and rounding up to a round number, we aimed for a final sample size of 2500 participants.

We recruited US citizens from a large panel of previously recruited Amazon Mechanical Turk workers. Our initial sample size consisted of 2751 participants who received a small payment for their participation. We excluded three participants due to duplicate IP addresses (keeping only the first case for each participant), 185 participants due to missing values, 119 participants due to failed comprehension checks, and one participant who was below age 18, yielding a final sample of 2443 participants. According to post hoc power analyses, this sample size results in 99% power to detect the interaction effect predicted by the moral reframing hypothesis. Via the use of quota sampling, our sample was approximately representative with regard to gender and ethnicity and consisted of large proportions of liberals (39.7%), moderates (20.5%), and conservatives (39.8%). Demographic characteristics of the sample are summarized in Table 1.

Table 1: Demographic Characteristics of the Samples in Studies 1 and 2

	Study 1	Study 2
Political Ideology		
1 (Extremely liberal)	9%	7%
2	16%	15%
3	15%	14%
4	21%	25%
5	18%	19%
6	14%	14%
7 (Extremely conservative)	7%	6%
Gender		
Female	50%	51%
Male	50%	49%
Other	0.3%	NA
Age	Mean = $38.22$ ;	Mean = $49.81$ ;
	SD = 11.97	SD = 16.71
Ethnicity		
White	62%	66%
Black	13%	11%
Hispanic	18%	17%
Asian	6%	2%
Multiple ethnicities	NA	3%
Other	2%	1%
Education		
No college	9%	19%
Some college	36%	45%
Bachelor's degree	40%	21%
Postgraduate	15%	16%
Income	Median =	Median =
	\$50,000 to \$59,999	\$50,000 to \$59,999
Sample size (n)	2443	1695

**Design, Procedure, and Measures.** The study had a 2 (policy condition: moderately progressive versus highly progressive) x 4 (frame condition: control versus liberal versus conservative versus technical) between-subjects design. The procedure consisted of two parts. In

Part 1, participants were introduced to a hypothetical Democratic candidate, Scott Miller running for president in 2020. Each participant read three sets of information about Scott Miller – information about his economic policy platform (policy information), excerpts from a speech given by him about his political principles (frame information), and excerpts from the same speech about how his policies and principles are linked (policy and frame information). The order of the policy information and the frame information was randomized, while the policy and frame information section was always presented last.

Participants were randomly assigned to one of two policy conditions. In the moderately progressive policy conditions, participants learned that Scott Miller supported four relatively moderate progressive policies: setting up an infrastructure program with 200,000 new jobs, maintaining the Affordable Care Act in its current form, increasing the federal minimum wage to \$9.50, and creating a parental leave program that would provide one month of paid leave for all working mothers. In the highly progressive policy conditions, Scott Miller supported setting up an infrastructure program with 5,000,000 new jobs, expanding Medicare to cover all uninsured Americans, increasing the minimum wage to \$12.00, and creating a parental leave program that would provide three months of paid leave for all working mothers and fathers.

Participants were randomly assigned to one of four frame conditions. While the frame information in the *control frame condition* provided participants with basic information about the American election system, participants in the other frame conditions read excerpts from a speech in which Scott Miller explains his political principles. For example, in the *liberal frame condition*, participants read that Scott Miller's "vision for our country is based on principles of economic justice, fairness, and compassion" and that he stands for "economic policies that are based on justice and care, policies that will stop corporations from exploiting working people,

pocketing huge profits while offering their workers substandard wages and benefits." In the *conservative frame condition*, participants read that Scott Miller's "vision for America is based on respect for the values and traditions that were handed down to us: hard work, loyalty to our country, and the freedom to forge your own path" and that he believes "it is patriotic to put American families ahead of big money donors and special interests."

The section with policy and frame information depended both on the policy and frame conditions participants were assigned. While participants in the control frame condition read basic information about the American presidential nomination system, all other participants read excerpts from a speech in which how Scott Miller explained how his policy positions and principles are linked. Policy platform and value frame were manipulated independently of each other. For example, in the moderately progressive policy – liberal frame condition, participants read: "I support these policies because they will help reduce economic inequality and promote economic justice. My federal infrastructure plan will create 200,000 jobs, good jobs with fair pay and benefits." In the moderately progressive policy – conservative frame condition, participants read "I support these policies because showing respect for hard-working Americans is a sacred national tradition that I believe we must honor. My federal infrastructure plan will create 200,000 jobs, good jobs with dignity and respectable wages." In the highly progressive policy – liberal frame condition, participants read the same rhetoric, but the policy was changed accordingly (for example to "5,000,000 jobs" instead of "200,000 jobs"). The complete wording of all stimuli is included in Supplementary Materials.

In Part 2, we measured participants' support for, and impression of, the Democratic candidate. Our main dependent variable, *candidate support*, was measured with two items: "How much would you support or oppose Scott Miller's candidacy for president in 2020?", answered

on a slider scale from 0 (strongly oppose) to 100 (strongly support), and "How likely would you be to vote for Scott Miller for president in 2020?", answered on a slider scale from 0 (very unlikely) to 100 (very likely). The two items were averaged to form the *candidate support* composite (r = .94). We collected additional measures of perceptions of the candidate and indicators of support, including liking, competence, how principled he was, consistency, identification with the candidate, support for his economic platform and each policy in it, willingness to help the candidate campaigning, and intention to vote for him versus Donald Trump in the 2020 election, as well as measures of perceptions of, and support for, Donald Trump.

As a manipulation check, we measured the *perceived conservatism of the candidate's values* with the item: "To what extent do you feel Scott Miller promotes liberal or conservative values?", answered on a scale from 0 ("entirely promotes liberal values") to 100 ("entirely promotes conservative values"). As a possible mediator<sup>5</sup>, participants' *perceived value similarity* with the candidate was assessed with the item: "To what extent do you feel Scott Miller has the same values you do?", answered on a scale from 0 ("not at all") to 100 ("a great deal"). To measure political ideology, our hypothesized moderator, participants rated their ideology on a scale from 1 ("extremely liberal") to 7 ("extremely conservative"). Since political ideology was assessed after the policy and frame manipulations, we tested whether it was predicted by frame condition, policy condition, or their interaction. All of these effects were non-significant, *ps* > .257. Finally, as part of a short demographic survey, participants indicated their gender, age, ethnicity, education, and income.

<sup>&</sup>lt;sup>5</sup> Perceived value similarity also functioned as a manipulation check item in Studies 1 and 2 (preregistered in Study 2). Political ideology and frame condition influenced perceived value similarity in the expected way (see Supplementary Materials for details).

### Results

Analytic strategy. We recoded all continuous dependent variables to range from 0 to 1 to make effects comparable across variables. Political ideology was recoded to range from -3 to 3 such that zero had a meaningful interpretation as ideologically moderate. We used multiple linear regression analyses to test the moral reframing hypothesis. First, we checked whether the frame manipulation worked as intended by testing its effects on perceived conservatism of the candidate's values. Next, we present the results for our main dependent variable, regressing candidate support on the interaction effect of political ideology and frame condition. In addition, we conducted a moderated mediation analysis to examine the mechanism underlying the moral reframing hypothesis, testing whether perceived value similarity with the candidate mediates the ideology x frame condition interaction. Finally, we summarize the effects of moral reframing on additional dependent variables. In all models, we controlled for policy condition, gender, ethnicity, and education (all dummy-coded) as well as age and income (both mean-centered).

*Manipulation check: Perceived conservatism of the candidate's values.* As expected, we found that the candidate's values were perceived as significantly more conservative in the conservative frame condition than in the control condition, b = 0.11, SE = 0.01, t(2426) = 8.60, p < .001, 95% CI for b = [0.09, 0.14]. Additionally, the candidate's values were perceived to be significantly less conservative (i.e. more liberal) in the liberal frame condition than in the control condition, b = -0.05, SE = 0.01, t(2426) = -4.17, p < .001, 95% CI for b = [-0.08, -0.03]. Although there were significant interaction effects (for details see Supplementary Materials), we found the same pattern for all ideological groups: conservative, moderate, and liberal participants perceived the candidate's values to be significantly more conservative in the conservative frame

condition than in the control condition and significantly less conservative in the liberal frame condition than in the control condition. Overall, these results indicate that our manipulations of liberal and conservative value frames were successful.

Main dependent variable: Candidate support. The results of the regression analysis are shown in Table 2, Column 2. The predicted political ideology x frame condition interaction effect was significant, F(3, 2423) = 10.08, p < .001,  $R^2$  increase = .01. Simple effect analyses were conducted to probe the effect of the different frame conditions for liberals (ideology = -2), moderates (ideology = 0), and conservatives (ideology = 2) within the model with the interaction effect. We used these concrete scale points for follow-up analyses of the interaction effect because these scale points are more readily interpretable for political ideology than one standard deviation above or below the mean. The results are illustrated in Figure 1.

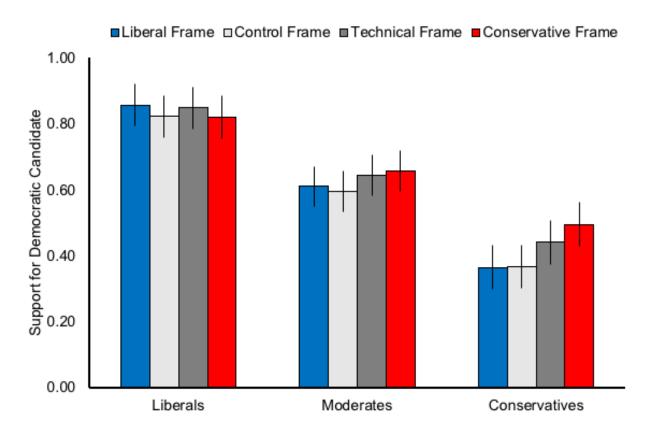
These analyses indicate that conservative value framing increased candidate support. Conservative participants supported the candidate significantly more in the conservative frame condition than in either the liberal frame condition, b = 0.13, SE = 0.02, t(2423) = 6.09, p < .001, 95% CI for b = [0.09, 0.17], or the control frame condition, b = 0.13, SE = 0.02, t(2423) = 6.02, p < .001, 95% CI for b = [0.09, 0.17]. There was no significant difference between the liberal frame condition and the control frame condition among conservatives, b = -0.00, SE = 0.02, t(2423) = -0.11, p = .913, 95% CI for b = [-0.04, 0.04].

Parallel analyses for moderates yielded similar though somewhat weaker effects. Moderate participants supported the candidate significantly more in the conservative frame condition than in either the liberal frame condition, b = 0.05, SE = 0.01, t(2423) = 3.41, p < .001, 95% CI for b = [0.02, 0.07], or the control frame condition, b = 0.06, SE = 0.01, t(2423) = 4.58, p < .001, 95% CI for b = [0.04, 0.09]. There was no significant difference between the liberal

Table 2: The Unstandardized Regression Coefficients and Standard Errors for the Effects of Political Ideology and Frame Condition on Candidate Support in Study 1

	Main Effects Model  b (SE)	Moral Reframing Model b (SE)
Intercept	0.50 (0.01)	0.49 (0.01)
Political Ideology	-0.11 (0.00)	-0.12 (0.01)
Policy Condition		
Moderately Progressive	Reference Category	Reference Category
Highly Progressive	0.04 (0.01)	0.04 (0.01)
Frame Condition		
Liberal	Reference Category	Reference Category
Control	-0.02 (0.01)	-0.02 (0.01)
Conservative	0.05 (0.01)	0.05 (0.01)
Technical	0.03 (0.01)	0.03 (0.01)
Political Ideology x Frame Condition		
Political Ideology x Liberal	Reference Category	Reference Category
Political Ideology x Control	-	0.01 (0.01)
Political Ideology x Conservative	-	0.04 (0.01)
Political Ideology x Technical	-	0.02 (0.01)
Gender		
Male	Reference Category	Reference Category
Female	0.05 (0.01)	0.05 (0.01)
Other	0.10 (0.09)	0.09 (0.09)
Age (mean-centered)	-0.00 (0.00)	-0.00 (0.00)
Ethnicity		
White	Reference Category	Reference Category
Black	0.09 (0.02)	0.10 (0.02)
Hispanic	0.02 (0.01)	0.02 (0.01)
Asian	0.05 (0.02)	0.05 (0.02)
Other	-0.03 (0.03)	-0.03 (0.03)
Education		
Bachelor's degree	Reference Category	Reference Category
No college	0.08 (0.02)	0.08 (0.02)
Some college	0.03 (0.01)	0.02 (0.01)
Postgraduate	-0.02 (0.01)	-0.02 (0.01)
Income (mean-centered)	-0.00 (0.00)	-0.00 (0.00)
Adjusted R <sup>2</sup>	0.42	0.43
Sample size (n)	2443	2443

Figure 1: Estimated marginal means of candidate support in Study 1 for each frame condition and three levels of participants' self-reported political ideology. Based on ordinary least squares (OLS) regressions with controls for policy condition, gender, age, ethnicity, education, and income; bars indicate 95% confidence interval. Candidate support recoded to zero to one scale; higher values reflect greater support.



frame condition and the control frame condition among moderates, b = 0.02, SE = 0.01, t(2423) = 1.18, p = .240, 95% CI for b = [-0.01, 0.04].

Analogous analyses among liberal participants yielded no significant differences between the three conditions, all |b|s < 0.04, all SEs = 0.02, all |t(2423)|s < 1.73, all ps > .084. Furthermore, we found no evidence that the frame condition interacted with the policy manipulation. All interaction effects involving policy condition were non-significant, ps > .211.

However, we found a significant main effect of policy condition indicating that participants in the highly progressive policy condition supported the candidate more than participants in the moderately progressive policy condition, b = 0.04, SE = 0.01, t(2423) = 4.21, p < .001, 95% CI for b = [0.02, 0.06]. Taken together, these results support the moral reframing hypothesis. Notably, the effect sizes were considerable. Although the increase in explained variance by the moral reframing interaction was relatively small, conservative value framing – as opposed to liberal value framing – resulted, on average, in a 13-point increase of support on a scale from 0 to 100 among conservatives.

We also tested whether moral reframing resulted in increased candidate support in the full sample. In a main-effects-only model (cf. Table 2, Column 1), we found that participants supported the candidate significantly more in the conservative frame condition than in either the liberal frame condition, b = 0.05, SE = 0.01, t(2426) = 3.26, p = .001, 95% CI for b = [0.02, 0.07], or the control frame condition, b = 0.06, SE = 0.01, t(2426) = 4.52, p < .001, 95% CI for b = [0.04, 0.09]. There was no significant difference between the liberal frame condition and the control frame condition, b = 0.02, SE = 0.01, t(2426) = 1.27, p = .206, 95% CI for b = [-0.01, 0.04]. These results suggest that conservative framing increases the overall support for progressive candidates in the study sample.

*Mediation analysis.* We next tested whether the interaction of political ideology and frame condition on candidate support was mediated by perceived value similarity. A biascorrected bootstrap estimation approach with 5,000 samples was used to estimate the indirect

<sup>&</sup>lt;sup>6</sup> In Supplementary Materials, we detail several additional checks we conducted to ensure the robustness of our findings, including bootstrapping regression coefficients to account for violations of standard regression assumptions, excluding participants in the technical frame condition from the analysis, and using the measure of political ideology participants indicated in a prescreen survey instead of the post-manipulation measure of political ideology we collected in the current survey. The results reported above are robust to all of these checks.

effects. We found evidence that the interaction of political ideology and frame condition on candidate support was mediated by perceived value similarity. The 95% confidence interval for the indirect effect for the political ideology x conservative (versus liberal) frame condition interaction via perceived value similarity on candidate support did not include zero, b = 0.05, SE = 0.01, 95% CI = [0.03, 0.06], nor did the 95% confidence interval for the indirect effect for the political ideology x conservative (versus control) frame condition interaction via perceived value similarity on candidate support, b = 0.04, SE = 0.01, 95% CI = [0.02, 0.05]. In contrast, the 95% confidence interval for the indirect effect for the political ideology x liberal (versus control) frame condition interaction via perceived value similarity on candidate support included zero, b = -0.01, SE = 0.01, 95% CI = [-0.02, 0.00]. The pattern of this mediation can be understood in two steps.

First, the political ideology x frame condition interaction effect predicted perceived value similarity. As described in more detail in the *Additional Analyses for Manipulation Check* - *Manipulation check: Perceived value similarity* section in the Supplementary Materials, conservative participants perceived the candidate's values as significantly more similar to their own in the conservative frame condition than in either the liberal frame condition or the control frame condition. There was no significant difference between the liberal frame condition and the control frame condition among conservatives. Additionally, moderate participants perceived the candidate's value as significantly more similar to their own in the conservative frame condition than in either the liberal frame condition and the control frame condition. Moderate participants also perceived the candidate's values as significantly more similar to their own in the liberal frame condition than in the control frame condition. However, liberal participants perceived the candidate's values as significantly more similar to their own in the liberal frame condition than

in either the conservative frame condition or the control frame condition. There was no significant difference between the conservative frame condition and the control frame condition among liberals.

Second, the mediator, perceived value similarity, significantly predicted candidate support, controlling for the political ideology x frame condition interaction effect, b = 0.84, SE =0.01, t(2422) = 72.79, p < .001, 95% CI for b = [0.82, 0.86]. Accordingly, we find the following indirect effects among the different political groups. Among conservative participants, the increase in candidate support in the conservative frame condition (relative to the liberal and control frame conditions) was mediated by perceived value similarity. The 95% confidence interval for the indirect effect for the comparison of the conservative frame condition and the liberal frame condition did not include zero, b = 0.13, SE = 0.02, 95% CI = [0.09, 0.17], nor did the 95% confidence interval for the indirect effect for the comparison of the conservative frame condition and the control frame condition include zero, b = 0.15, SE = 0.02, 95% CI = [0.11, 0.19]. Additionally, among moderate participants, the effect of the conservative frame (relative to the liberal and control frame conditions) was also mediated by perceived value similarity. The 95% confidence interval for the indirect effect for the comparison of the conservative frame condition and the liberal frame condition did not include zero, b = 0.03, SE = 0.01, 95% CI = [0.01, 0.06], nor did the 95% confidence interval for the indirect effect for the comparison of the conservative frame condition and the control frame condition include zero, b = 0.08, SE = 0.01, 95% CI = [0.06, 0.10]. Notably, there was a significant indirect effect indicating that the liberal frame condition (relative to the control frame condition) increased support for the candidate via perceived value similarity among moderate participants. The 95% confidence interval for the indirect effect for the comparison of the liberal frame condition and the control frame condition

did not include zero, b = 0.05, SE = 0.01, 95% CI = [0.03, 0.07]. Among liberal participants, there were significant indirect effects indicating that the liberal frame condition (relative to the conservative and control frame conditions) increased support for the candidate via perceived value similarity. The 95% confidence interval for the indirect effect for the comparison of the liberal frame condition and the conservative frame condition did not include zero, b = 0.06, SE = 0.02, 95% CI = [0.03, 0.09], nor did the 95% confidence interval for the indirect effect for the comparison of the liberal frame condition and the control frame condition include zero, b = 0.07, SE = 0.02, 95% CI = [0.04, 0.10]. Overall, these analyses are consistent with the idea that the interaction of political ideology and frame condition on candidate support was mediated by perceived value similarity.

Other dependent variables. The moral reframing effect was obtained for other perceptions of the progressive candidate and indicators of support as well. Specifically, conservative participants in the conservative frame condition liked the candidate more, perceived him to be more competent, identified with him more, and supported his economic platform more, compared to conservative participants in either the liberal frame condition or the control frame conditions. Similar effects, though lower magnitude, were found among moderate participants. Conservative (but not moderate) participants in the conservative frame condition also perceived the candidate to be more principled and were more willing to help the candidate campaign and more likely to intend to vote for him versus Donald Trump in the 2020 election. The latter effect was likely driven by increased support for the Democratic candidate since perceptions and indicators of support for Trump were unaffected by the frame manipulation. Importantly, there was no significant difference in the perceived "consistency" of the Democratic candidate between the conservative frame condition and the liberal frame condition, suggesting that fitting

progressive policies with conservative value concerns did not lead to a perception of the progressive candidate as incoherent or hypocritical. More details on these additional analyses can be found in Supplementary Materials.

### **Discussion**

This study provided initial support for the moral reframing hypothesis. Despite salient party cues, conservative value framing increased support for an advocate of progressive policies among conservatives. The conservative frame also led to unanticipated gains among moderates. Furthermore, we found this effect was mediated by perceived value similarity. Importantly, comparisons with a neutral control condition indicate that these effects were positive effects of the conservative frame rather than negative effects of the liberal frame.

## Study 2

Although the first study found strong support for the moral reframing hypothesis, like most prior moral reframing studies, it was conducted on a non-representative, convenience sample. Given that the ability to generalize to the American population is an important consideration in studies of public opinion dynamics, the second study aimed to directly replicate the results of Study 1 with a preregistered experiment on a nationally representative sample.

### Method

**Preregistration.** The determination of the sample size via a priori power analyses, data exclusion procedures, central hypotheses, recoding of independent and dependent variables, and the statistical models for the test on our main dependent variable were all preregistered. Based on methodological research on the drawbacks of weights for significant testing (Winship & Radbill, 1994), our preregistered analysis script specified that we would use unweighted

<sup>&</sup>lt;sup>7</sup> The preregistration is accessible at https://osf.io/mbu28/?view\_only=c9286310bf934d2088f4e03e15707145

regression analyses for hypothesis testing. However, we conducted robustness checks including weights that are reported in Supplementary Materials.

**Participants.** We recruited a general population sample of U.S. adults age 18 years and older from NORC's AmeriSpeak Panel for this study. AmeriSpeak is a probability-based panel designed to be representative of the US household population. Randomly selected US households were sampled using area probability and address-based sampling, with a known, nonzero probability of selection from the NORC National Sample Frame. Sample size was determined by multiple preregistered a priori power analyses and cost constraints. Based on power analyses with GPower (Faul et al., 2007) for significant tests with alpha = 0.05, we estimated that we would need a sample size of n = 1650 to achieve at least 92% power for detecting each of the hypothesized effects. Our initial sample size consisted of 2612 participants which included participants from both a small pretest and the full sample. After excluding 193 participants due to doubled ids or doubled IP addresses (keeping only the first cases), 402 participants due to missing values, and 322 participants due to failed comprehension checks, we obtained a final sample of 1695 participants which, as preregistered, includes the pretest participants. According to post hoc power analyses, this sample size results in 93% power to detect the interaction effect predicted by the moral reframing hypothesis, assumed to be small in size (f = .1). Demographic characteristics of the sample are summarized in Table 1.

**Design, Procedure, and Measures.** The design, procedure, and measures paralleled that of Study 1, except that the study was shortened to reduce the cost. Regarding the design, we dropped the control frame condition, resulting in a 2 (policy condition: moderately progressive versus highly progressive) x 3 (frame condition: liberal versus conservative versus technical), between-subjects design. We retained only the most relevant dependent variables (candidate

support (r = .94), willingness to help campaigning, identification with the candidate, support for the candidate's economic platform, and intention to vote for the candidate versus Donald Trump in the 2020 election), political ideology as a hypothesized moderator, and perceived value similarity as a possible mediator. In addition to the frame manipulation check (reworded to "How liberal or conservative are Scott Miller's values?"), we added a policy manipulation check ("How liberal or conservative are Scott Miller's policies?"). Both were answered on scales from 0 (extremely liberal) to 100 (extremely conservative). NORC provided demographic information for each panel member (gender, age, ethnicity, education, and income). Since political ideology was assessed after the policy and frame manipulations, we tested whether it was predicted by frame condition, policy condition, or their interaction. All of these effects were non-significant, ps > .254.

#### Results

Manipulation checks: Perceived conservatism of the candidate's values and policies. As expected, we found that the candidate's values were perceived to be significantly more conservative in the conservative frame condition than in the liberal frame condition, b = 0.12, SE = 0.01, t(1679) = 8.98, p < .001, 95% CI for b = [0.09, 0.15]. All interaction effects involving policy condition and frame condition as well as the main effect of policy condition were non-significant, ps > .354. This result suggests that our manipulations of liberal and conservative value frames were successful.

We also found that the candidate's policies were perceived to be significantly more conservative in the moderately progressive policy conditions than in the highly progressive policy conditions, b = 0.02, SE = 0.01, t(1679) = 2.16, p = .031, 95% CI for b = [0.00, 0.04]. Interestingly, the candidate's policies were also perceived to be significantly more conservative

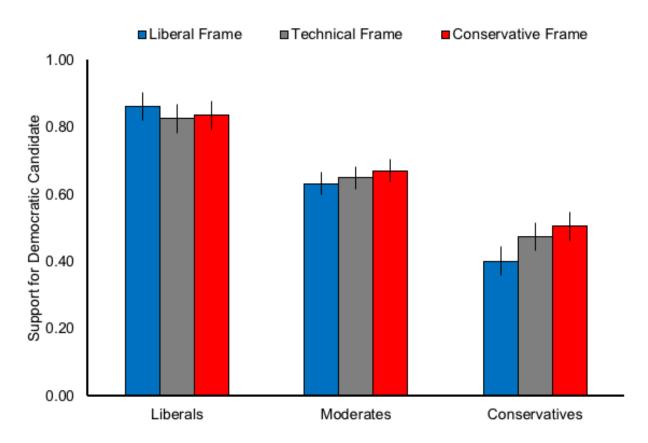
in the conservative frame conditions than in the liberal frame conditions, b = 0.09, SE = 0.01, t(1679) = 6.50, p < .001, 95% CI for b = [0.06, 0.11]. All interaction effects involving policy condition and frame condition were non-significant, ps > .362. These results indicate that our manipulation of highly progressive versus moderately progressive policies was successful and that participants used the value framing as a cue to categorize both the candidate's values and policies.

Main dependent variable: Candidate support. The results of the regression analysis are shown in Table 3, Column 2. The predicted political ideology x frame condition interaction effect was significant, F(2, 1677) = 7.23, p < .001,  $R^2$  increase = .01. The results of the simple effect analyses are illustrated in Figure 2. These analyses indicate that conservative participants supported the candidate significantly more in the conservative frame condition than in the liberal frame condition, b = 0.10, SE = 0.02, t(1677) = 4.36, p < .001, 95% CI for b = [0.06, 0.15]. Parallel analyses for moderates yielded a similar but weaker effect, b = 0.04, SE = 0.02, t(1677)= 2.54, p = .011, 95% CI for b = [0.01, 0.07]. Analogous analyses among liberals yielded no significant difference between the conservative and the liberal frame conditions, b = -0.03, SE =0.02, t(1677) = -1.11, p = .269, 95% CI for b = [-0.07, 0.02]. We did not find evidence that the effect of the frame condition interacted with the policy manipulation. All interaction effects involving policy condition were non-significant, all ps > .914. In contrast to Study 1, the main effect of policy condition was non-significant, b = 0.01, SE = 0.01, t(1677) = 0.94, p = .346, 95% CI for b = [-0.01, 0.04]. While the increase in explained variance by the moral reframing interaction was relatively small, the effect size of the simple effect among conservatives was meaningful. Conservative value framing resulted, on average, in a 10-point increase in support on a scale from 0 to 100 among conservatives. These results replicate the findings in support of

Table 3: The Unstandardized Regression Coefficients and Standard Errors for the Effects of Political Ideology and Frame Condition on Candidate Support in Study 2

	Main Effects Model  b (SE)	Moral Reframing Model b (SE)
Intercept	0.51 (0.02)	0.51 (0.02)
Political Ideology	-0.10 (0.00)	-0.12 (0.01)
Policy Condition		
Moderately Progressive	Reference Category	Reference Category
Highly Progressive	0.01 (0.01)	0.01 (0.01)
Frame Condition		
Liberal	Reference Category	Reference Category
Conservative	0.04 (0.02)	0.04 (0.02)
Technical	0.02 (0.02)	0.02 (0.02)
Political Ideology x Frame Condition		
Political Ideology x Liberal	Reference Category	Reference Category
Political Ideology x Conservative	-	0.03 (0.01)
Political Ideology x Technical	-	0.03 (0.01)
Gender		
Male	Reference Category	Reference Category
Female	0.08 (0.01)	0.08 (0.01)
Age (mean-centered)	-0.00 (0.00)	-0.00 (0.00)
Ethnicity		
White	Reference Category	Reference Category
Black	0.14 (0.02)	0.14 (0.02)
Hispanic	0.06 (0.02)	0.06 (0.02)
Asian	0.05 (0.04)	0.04 (0.04)
Multiple	0.04 (0.04)	0.03 (0.04)
Other	0.08 (0.06)	0.07 (0.06)
Education		
Bachelor's degree	Reference Category	Reference Category
No college	0.05 (0.02)	0.05 (0.02)
Some college	0.00 (0.02)	0.00 (0.02)
Postgraduate	0.01 (0.02)	0.00 (0.02)
Income (mean-centered)	-0.01 (0.00)	-0.01 (0.00)
Adjusted R <sup>2</sup>	0.32	0.33
Sample size (n)	1695	1695

Figure 2: Estimated marginal means of candidate support in Study 1 for each frame condition and three levels of participants' self-reported political ideology. Based on ordinary least squares (OLS) regressions with controls for policy condition, gender, age, ethnicity, education, and income; bars indicate 95% confidence interval. Candidate support recoded to zero to one scale; higher values reflect greater support.



the moral reframing hypothesis found in Study 1.8

Notably, the moral reframing effect also resulted in increased candidate support across our full sample. In a main-effects-only model (cf. Table 3, Column 1), we found that participants

<sup>&</sup>lt;sup>8</sup> In Supplementary Materials, we detail several additional checks we conducted to ensure the robustness of our findings, including bootstrapping regression coefficients to account for violations of standard regression assumptions, excluding participants in the technical frame condition from analysis, and excluding participants from the pretest. The results reported above are robust to all of these checks. We also conducted several robustness checks using weights. Overall, these analyses indicate results in the same direction but with lower effect sizes.

supported the candidate significantly more in the conservative frame condition than in the liberal frame condition, b = 0.04, SE = 0.02, t(1679) = 2.55, p = .011, 95% CI for b = [0.01, 0.07].

# Mediation analysis.

As in Study 1, we found evidence that the interaction of political ideology and frame condition on candidate support was mediated by perceived value similarity. The 95% confidence interval for the indirect effect for the political ideology x conservative (versus liberal) frame condition interaction via perceived value similarity on candidate support did not include zero, b = 0.05, SE = 0.01, 95% CI = [0.03, 0.06]. The pattern of this mediation can be understood in two steps.

First, the political ideology x frame condition interaction effect predicted perceived value similarity. As described in more detail in the *Additional Analyses for Manipulation Check* - *Manipulation check: Perceived value similarity* section in the Supplementary Materials, conservative participants perceived the candidate's values as significantly more similar to their own in the conservative frame condition than in the liberal frame condition. Additionally, moderate participants also perceived the candidate's values as significantly more similar to their own in the conservative frame condition than in the liberal frame condition. However, there was no significant difference in perceived value similarity between the conservative frame condition and the liberal frame condition among liberal participants.

Second, the mediator, perceived value similarity, significantly predicted candidate support, controlling for the political ideology x frame condition interaction effect, b = 0.83, SE = 0.01, t(1676) = 61.78, p < .001, 95% CI for b = [0.80, 0.86]. Accordingly, we find the following indirect effects among the different political groups. Among conservative and moderate participants, the increase in candidate support in the conservative frame condition (relative to the

liberal frame condition) was mediated by perceived value similarity. For conservatives, the 95% confidence interval for the indirect effect for the comparison of the conservative frame condition and the liberal frame condition did not include zero, b = 0.15, SE = 0.02, 95% CI = [0.10, 0.19]. For moderates, the 95% confidence interval for the indirect effect for the comparison of the conservative frame condition and the liberal frame condition did not include zero, b = 0.06, SE = 0.01, 95% CI = [0.03, 0.08]. In contrast, there was no significant indirect effect via perceived value similarity among liberals. The 95% confidence interval for the indirect effect for the comparison of the conservative frame condition and the liberal frame condition included zero, b = -0.03, SE = 0.02, 95% CI = [-0.07, 0.00]. Overall, these analyses are consistent with the idea that the interaction of political ideology and frame condition on candidate support was mediated by perceived value similarity.

Other dependent variables. The moral reframing effect extended to other important indicators of candidate support. Conservative participants in the conservative frame condition were more willing to help the candidate campaign, identified more with the candidate, and supported his economic platform more compared to conservative participants in the liberal frame condition. Similar, though smaller, effects were found among moderate participants. In addition, although the ideology x frame condition interaction effect was not significant for the voting intention variable, a main effect of frame condition indicates that participants in the conservative frame condition were more likely to report intending to vote for the candidate in an election against Donald Trump, compared to participants in the liberal frame condition. More details on these additional analyses can be found in Supplementary Materials. Overall, these analyses replicate the findings of Study 1 suggesting that conservative value framing increases conservatives' support for a progressive candidate on a variety of measures.

### **Discussion**

This study replicates the findings from Study 1 in support of the moral reframing hypothesis. Once again, we found that the increase in candidate support was also found for moderates and was mediated by perceived value similarity. In contrast to most prior research on moral reframing, our results were obtained on a nationally representative sample. This makes the results generalizable to the American population.

### **General Discussion**

Americans support many core progressive economic policies at high levels, yet rarely elect progressive candidates, a paradox widely discussed in academic and popular literature. The current research suggests that conservative value framing is one way to resolve this progressive paradox. We find consistently that when progressive candidates frame their policies as consistent with conservative, as opposed to liberal, values, they receive greater support from conservatives and moderates. Notably, there was no backlash to conservative framing among liberal participants. Thus, overall, these results suggest that the most successful candidate in our research advocated for progressive policies in terms of conservative value concerns. While typically viewed as in tension, this research suggests progressive policies and conservative value concerns are reconcilable in practice, and that such a combination can be persuasive. To this point, participants in Study 1 rated a progressive candidate with conservative value concerns as similarly "consistent" as a progressive candidate with liberal values. Taken together, these findings suggest that the moral and ideological underpinnings of policies and candidates are more malleable than commonly assumed.

Our studies were rigorous tests of the moral reframing hypothesis. The first study was highly powered, included a manipulation of policy platform across which we obtained consistent

results, and included party cues that usually reduce persuasion effects. The second study maintained all of these features and was conducted on a nationally representative survey with pre-registered hypotheses and procedures. Nonetheless, future research is needed to replicate the current results in settings featuring counter-arguments, temporally closer to elections (Kalla & Broockman, 2018), and ideally in the context of real political campaigns. Another interesting avenue for future research is the comparison of value cues and policy cues. Our results suggest that value cues might be more influential than policy cues (see Cohen, 2003, for a similar argument comparing party cues and policy cues). This suggests that moral reframing may offer a more effective path to building political consensus than policy compromise. Another promising future direction would be to study the effect of moral reframing on other factors that influence candidate support. For example, in the current studies, we tested whether conservative framing – as opposed to liberal framing – would reduce the effect of racial resentment on candidate support (cf. Simmons & Bobo, 2018). We found support for this hypothesis in Study 1, but not Study 2. These inconclusive, results (see Supplementary Materials for more information) merit further attention.

It would be irresponsible not to note that, while we found evidence that the framing technique we tested here was effective, this does not mean that its use is necessarily socially desirable. For example, one can readily identify a number of oppressive dictatorships that sought to ideologically link conservative moral values such as loyalty and purity with redistributive economic policy agendas, with disastrous effect. It is important to emphasize that, as with any effective political tool, the ethical value of moral reframing depends critically on the ends to which it is put.

# Acknowledgement

We thank Matthew Feinberg, Jeremy Freese, David Grusky, Ryan Johnson, Xiaohai Liu, Matt Martin, Lindsay Owens, Chrystal Redekopp, as well as the members of the Institute for Research in the Social Sciences at Stanford University for their advice and contributions to this project.

# References

- Brown-Iannuzzi, J. L., Dotsch, R., Cooley, E., & Payne, B. K. (2017). The relationship between mental representations of welfare recipients and attitudes toward welfare. *Psychological Science*, 28(1), 92-103. doi: 10.1177/0956797616674999
- Cohen, G. L. (2003). Party over policy: The dominating impact of group influence on political beliefs. *Journal of Personality and Social Psychology*, 85(5), 808-822. doi:10.1037/0022-3514.85.5.808
- Cortland, C. I., Craig, M. A., Shapiro, J. R., Richeson, J. A., Neel, R., & Goldstein, N. J. (2017). Solidarity through shared disadvantage: Highlighting shared experiences of discrimination improves relations between stigmatized groups. *Journal of Personality and Social Psychology*, 113(4), 547-567. doi:10.1037/pspi0000100
- 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. doi:10.1177/0146167214551152
- Du Bois, W. E. B. (1899) *The Philadelphia Negro: A Social Study*. Philadelphia, PA: University of Pennsylvania Press.
- Eidlin, B. (2015). Class vs. special interest: Labor, power, and politics in the United States and Canada in the twentieth century. *Politics & Society*, *43*(2), 181-211. doi:10.1177/0032329215571280
- Eidlin, B. (2016). Why is there no labor party in the United States? Political articulation and the Canadian comparison, 1932 to 1948. *American Sociological Review*, 81(3), 488-516. doi:10.1177/0003122416643758

- Ellis, C., & Stimson, J. A. (2012). *Ideology in America*. New York, NY: Cambridge University Press.
- Esping-Andersen, G., & Myles, J. (2011). Economic inequality and the welfare state. In B. Nolan, W. Salverda, & T. M. Smeeding (Eds.), *The Oxford Handbook of Economic Inequality* (pp. 639-664). Oxford: Oxford University Press. doi:10.1093/oxfordhb/9780199606061.013.0025
- 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. doi:10.3758/BF03193146
- Feinberg, M., & Willer, R. (2013). The moral roots of environmental attitudes. *Psychological Science*, 24(1), 56-62. doi: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. doi:10.1177/0146167215607842
- Feygina, I., Jost, J. T., & Goldsmith, R. E. (2010). System justification, the denial of global warming, and the possibility of "system-sanctioned change". *Personality and Social Psychology Bulletin*, *36*(3), 326-338. doi:10.1177/0146167209351435
- Frank, T. (2004). What's the Matter with Kansas? How Conservatives Won the Heart of America. New York, NY: Henry Holt.and Company.
- Franks, A. S., & Scherr, K. C. (2018). Economic issues are moral issues: The moral underpinnings of the desire to reduce wealth inequality. *Social Psychological and Personality Science*. doi:10.1177/1948550618772821

- Gilens, M., & Page, B. I. (2014). Testing theories of American politics: Elites, interest groups, and average citizens. *Perspectives on Politics*, 12(3), 564-581. doi:10.1017/S1537592714001595
- Goss, K. A. (2016). Policy plutocrats: How America's wealthy seek to influence governance. *PS: Political Science & Politics*, 49(3), 442-448. doi:10.1017/S1049096516000676
- Grossmann, M., & Hopkins, D. A. (2016). Asymmetric Politics: Ideological Republicans and Group Interest Democrats. New York, NY: Oxford University Press.
- Hacker, J. S., & Pierson, P. (2010). Winner-take-all politics: Public policy, political organization, and the precipitous rise of top incomes in the United States. *Politics & Society*, *38*(2), 152-204. doi:10.1177/0032329210365042
- Haidt, J. (2012). *The Righteous Mind: Why Good People Are Divided by Politics and Religion*. New York, NY: Pantheon Books.
- Horowitz, J. M., Parker, K., Graf, N., & Livingston, G. (2017, March 23). Americans widely support paid family and medical leave but differ over specific policies. *Pew Research Center*. Retrieved from https://www.pewsocialtrends.org/2017/03/23/support-for-paid-leave-policies/
- Kalla, J. L., & Broockman, D. E. (2018). The minimal persuasive effects of campaign contact in general elections: Evidence from 49 field experiments. *American Political Science Review*, 112(1), 148-166. doi:10.1017/S0003055417000363
- 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. doi:10.1086/670610

- Lakoff, G. (2004). Don't Think of an Elephant: Progressive Values and the Framing Wars—a Progressive Guide to Action. White River Junction, VT: Chelsea Green Publishing.
- Lawson, M., & Martin, M. (2018). The Commitment to Reducing Inequality Index 2018.

  \*Development Finance International and Oxfam Report.\* Retrieved from https://oxfamilibrary.openrepository.com/bitstream/handle/10546/620553/rr-commitment-reducing-inequality-index-2018-091018-en.pdf
- Levitz, E. (2018, August 24). The left has sold Americans on single payer. But can it get them to pay for installation? *New York*. Retrieved from http://nymag.com/intelligencer/2018/08/new-poll-majority-of-gop-voters-support-medicare-for-all.html
- Lipset, S. M., & Marks, G. (2001). It Didn't Happen Here: Why Socialism Failed in the United States. New York, NY: W. W. Norton & Company.
- Martin, I. W. (2015). Rich People's Movements: Grassroots Campaigns to Untax the One Percent. New York, NY: Oxford University Press.
- McCall, L., Burk, D., Laperrière, M., & Richeson, J. A. (2017). Exposure to rising inequality shapes Americans' opportunity beliefs and policy support. *Proceedings of the National Academy of Sciences*, 114(36), 9593-9598. doi:10.1073/pnas.1706253114
- Moore, P. (2016, April 13). Poll results: Minimum wage. *YouGov*. Retrieved from https://today.yougov.com/topics/politics/articles-reports/2016/04/13/poll-results-minimum-wage
- Nilsen, E. (2018, November 7). Progressive Democrats running in competitive House districts had a bad night on Tuesday. *Vox.* Retrieved from

- https://www.vox.com/2018/11/7/18071700/progressive-democrats-house-midterm-elections-2018
- Norton, M. I., & Ariely, D. (2011). Building a better America—One wealth quintile at a time.

  \*Perspectives on Psychological Science, 6(1), 9-12. doi:10.1177/1745691610393524
- Piketty, T., & Saez, E. (2007). How progressive is the US federal tax system? A historical and international perspective. *Journal of Economic perspectives*, 21(1), 3-24. doi:10.1257/jep.21.1.3
- Reinhart, R. J. (2018, February 12). In the news: Public backs more infrastructure spending. *GALLUP*. Retrieved from https://news.gallup.com/poll/226961/news-public-backs-infrastructure-spending.aspx
- Simmons, A. D., & Bobo, L. D. (2018). Understanding "no special favors": A quantitative and qualitative mapping of the meaning of responses to the Racial Resentment Scale. *Du Bois Review: Social Science Research on Race*, *15*(2), 323-352.

  doi:10.1017/S1742058X18000310
- Voelkel, J. G., & Feinberg, M. (2018). Morally reframed arguments can affect support for political candidates. *Social Psychological and Personality Science*, 9(8), 917-924. doi:10.1177/1948550617729408
- Winship, C., & Radbill, L. (1994). Sampling weights and regression analysis. *Sociological Methods & Research*, 23(2), 230-257. doi:10.1177/0049124194023002004
- 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. doi:10.1016/j.jesp.2016.02.005

# Supplementary Materials

#### **Treatments**

### **Policy Information**

### Moderately progressive policy condition.

Scott Miller says that his highest priorities are these policies:

- 1. Setting up a federal infrastructure program to create 200,000 new jobs
- 2. Maintaining the Affordable Care Act in its current form
- 3. Increasing the federal minimum wage to \$9.50 an hour
- 4. Creating a new federal program that provides 1 month of paid leave for all working mothers

  Highly progressive policy condition.

Scott Miller says that his highest priorities are these policies:

- 1. Setting up a federal infrastructure program to create 5,000,000 new jobs
- 2. Expanding Medicare to cover all uninsured Americans
- 3. Increasing the federal minimum wage to \$12 an hour
- 4. Creating a new federal program that provides 3 months of paid leave for all working mothers and fathers

# **Frame Information**

#### Control frame condition.

## **United States presidential election of 2020**

The United States presidential election of 2020, scheduled for Tuesday, November 3, 2020, will be the 59th quadrennial U.S. presidential election. Voters will select presidential electors who in turn will either elect a new president and vice president through the electoral college or re-elect the incumbents. The series of presidential primary elections and caucuses are

likely to be held during the first six months of 2020. This nominating process is also an indirect election, where voters cast ballots selecting a slate of delegates to a political party's nominating convention, who then in turn elect their party's presidential nominee.

Article 2 of the United States Constitution states that for a person to serve as President of the United States the individual must be a natural-born citizen of the United States, at least 35 years old and a United States resident for at least 14 years. Candidates for the presidency typically seek the nomination of one of the various political parties of the United States. The 22nd Amendment to the Constitution states that an individual can not be elected to the presidency more than twice. Former presidents who have only served one term are eligible to be re-elected in future elections.

The winner of the 2020 presidential election is scheduled to be inaugurated on January 20, 2021.

### Liberal frame condition.

## From speech titled "Economic Justice and Fairness for All"

"My vision for our country is based on principles of economic justice, fairness, and compassion. I think it is wrong for the richest 1% to hold 40% of the country's wealth while millions of people struggle to make ends meet. I don't think it's fair that CEOs make hundreds of times what their workers make. I believe that we need an economy that distributes our wealth more fairly. We should measure our success by how well we support those who need it most. In particular, women, minorities, and immigrants often face economic hardship and deserve a better chance at prosperity in our country.

"I stand for economic policies that are based on justice and care, policies that will stop corporations from exploiting working people, pocketing huge profits while offering their workers substandard wages and benefits. If you are struggling to make ends meet, I will fight for you. If you face discrimination, I will fight for you. My goal will be to ensure that all people from all walks of life can count on decent wages, benefits, and job security.

"I am your candidate if you want someone who is morally committed to making sure that everyone can prosper in this country, not just a wealthy few. A vote for me is a vote to fight for economic justice in our country."

#### Conservative frame condition.

# From speech titled "Loyalty and Respect for America's Middle Class"

"My vision for America is based on respect for the values and traditions that were handed down to us: hard work, loyalty to our country, and the freedom to forge your own path. I believe that we must fight to restore the American Dream. I think that if you work hard and devote yourself to your family and community, you deserve a chance at prosperity. We should measure our success by how well we defend our great American traditions, in particular the principle that if you work hard and contribute to our great nation you deserve respect and a good life for yourself and your family.

"I believe it is patriotic to put American families ahead of big money donors and special interests. Communities, families, and the American work ethic – these things are sacred and must be valued. If you work hard for your family, I will fight for you. If you work hard for our country, I will fight for you. I will do everything to ensure that greed and corruption do not degrade our country.

"I am your candidate if you want someone who will stand on principle. I believe in honor, patriotism, and respect. A vote for me is a vote to promote the dignity and prosperity of hard-working Americans."

#### Technical frame condition.

# From speech titled "Economic Growth for the Middle Class"

"My vision for America is to restore the unique levels of productivity that we have lost.

The American economy was once a success story. But as of last year, our gross domestic product per capita was 11th place in the world. Now we need economic growth and good-paying jobs. I believe that we should invest in small businesses and make sure that we create opportunities for the middle-class. I will create a favorable environment that encourages companies to grow, invest, and hire. We should measure our success by how much our economy grows, how efficiently our economy functions, and how many new jobs we create.

"I stand for well-designed and effective policies that improve the size and well-being of the middle class. The policies I support will attract investors, create jobs, and provide benefits for all. My focus will be on helping working people become more prosperous. If you need a job, I will fight for you. If you need a better wage, I will fight for you. My goal will be to create jobs and make our economy strong and enduring.

"I am your candidate if you want someone who will make smart decisions that improve our country's bottom line for both the present and future. A vote for me is a vote for a country with smart policies, good jobs, and economic prosperity."

# **Policy and Frame Information**

#### Control frame condition.

#### **Nominating Process**

The modern nominating process of U.S. presidential elections consists of two major parts: a series of presidential primary elections and caucuses held in each state and the presidential nominating conventions held by each political party. This process was not included

in the United States Constitution. Instead, it evolved over time as a way for political parties to narrow the field of candidates.

Primary elections are run by state and local governments, while caucuses are organized directly by the political parties. Some states hold only primary elections, some hold only caucuses, and others use a combination of both. These primaries and caucuses are staggered between January and June before the federal election, with Iowa and New Hampshire traditionally holding the first state caucus and primary, respectively.

Like the general election, presidential caucuses or primaries are indirect elections. The major political parties officially vote for their presidential candidate at their nominating conventions, traditionally held in the summer before the federal election. Depending on each state's law and the state's political party rules, when voters cast ballots for a candidate in a presidential caucus or primary, they may be voting to award delegates "bound" to vote for a candidate at the presidential nominating conventions, or they may simply be expressing an opinion that the party considers in selecting delegates to their respective national convention. Unlike the general election, voters in the U.S. territories can also elect delegates to the national conventions. Furthermore, each political party can determine how many delegates to allocate to each state and territory.

Each party's presidential candidate also chooses a vice presidential nominee to run with him or her on the same ticket, and this choice is approved at the convention. If no single candidate has secured a majority of delegates (including both pledged and unpledged), then a "brokered convention" results. All pledged delegates are then "released" and are able to switch their allegiance to a different candidate. Thereafter, the nomination is decided through a process of alternating political horse trading and additional rounds of re-votes. The conventions have

historically been held inside convention centers, but since the late 20th century political parties have favored sports arenas and domed stadiums to accommodate the increasing attendance.

Moderately progressive policy condition + Liberal frame condition.

# From speech titled "Economic Justice and Fairness for All"

"I support these policies because they will help reduce economic inequality and promote economic justice. My federal infrastructure plan will create 200,000 jobs, good jobs with fair pay and benefits. My plan will not only benefit those directly employed. Improving our country's infrastructure – its highways, city roads, quality water systems, and reliable utilities – will drive a growing economy and improve the quality of life in rural and urban areas, benefiting us all.

"Everyone deserves just compensation for their hard work. At present, millions of people work for totally substandard wages, without enough money to pay rent, medical bills, and raise children. Replacing inadequate pay with fair wages will ensure that no full-time worker lives in poverty. Fair wages don't only provide fair pay to workers. Fair wages stimulate the local and national economy because employees use their wages to buy goods from companies, pay rent, and invest in retirement savings, helping small business owners and protecting workers from poverty in old age. It is because of these many benefits to good wages that I propose raising the minimum wage to \$9.50 an hour.

"But jobs and wages are not the only issues that urgently matter in our country. We also must care for and protect our most vulnerable citizens. Access to basic health care should be a fundamental right that everyone can depend on, not only those with great wealth. But at present, millions of Americans cannot afford quality health insurance. Therefore, I support maintaining the Affordable Care Act in its current form so that everyone can get the care they need.

"Finally, we also must support working parents and their children. Right now, many working and middle class people with young children struggle to make ends meet. Many risk losing their jobs or going into poverty after they have kids. We can help our fellow citizens navigate this challenging period of life with a parental leave program that would provide 1 month of paid leave for all working mothers."

**Highly progressive policy condition + Liberal frame condition.** 

# From speech titled "Economic Justice and Fairness for All"

"I support these policies because they will help reduce economic inequality and promote economic justice. My federal infrastructure plan will create 5,000,000 jobs, good jobs with fair pay and benefits. My plan will not only benefit those directly employed. Improving our country's infrastructure – its highways, city roads, quality water systems, and reliable utilities – will drive a growing economy and improve the quality of life in rural and urban areas, benefiting us all. "Everyone deserves just compensation for their hard work. At present, millions of people work for totally substandard wages, without enough money to pay rent, medical bills, and raise children. Replacing inadequate pay with fair wages will ensure that no full-time worker lives in poverty. Fair wages don't only provide fair pay to workers. Fair wages stimulate the local and national economy because employees use their wages to buy goods from companies, pay rent, and invest in retirement savings, helping small business owners and protecting workers from poverty in old age. It is because of these many benefits to good wages that I propose raising the minimum wage to \$12.00 an hour.

"But jobs and wages are not the only issues that urgently matter in our country. We also must care for and protect our most vulnerable citizens. Access to basic health care should be a fundamental right that everyone can depend on, not only those with great wealth. But at present,

millions of Americans cannot afford quality health insurance. Therefore, I support expanding Medicare to cover all currently uninsured Americans so that everyone can get the care they need. "Finally, we also must support working parents and their children. Right now, many working and middle class people with young children struggle to make ends meet. Many risk losing their jobs or going into poverty after they have kids. We can help our fellow citizens navigate this challenging period of life with a parental leave program that would provide 3 months of paid leave for all working mothers and fathers."

**Moderate progressive policy condition + Conservative frame condition.** 

From speech titled "Loyalty and Respect for America's Middle Class"

"I support these policies because showing respect for hard-working Americans is a sacred national tradition that I believe we must honor. My federal infrastructure plan will create 200,000 jobs, good jobs with dignity and respectable wages. My plan will not only benefit those directly employed. Supporting our country's infrastructure – its highways, city roads, quality water systems, and reliable utilities – is patriotic because it benefits all Americans and will help to stimulate the greatest economy in the world.

"Giving workers the opportunity to succeed is patriotic because it helps to restore the American dream, the notion that if you work hard, you can make a decent living in our country. Further, good wages help our community and nation as a whole, because workers use their earnings to buy goods from companies, pay rent, and invest in retirement savings, by doing so helping small business owners and supporting other Americans. It is because of these many benefits to good wages that I propose to raise the minimum wage to \$9.50 an hour. "But jobs and wages are not the only issues that urgently matter in our country. We also must protect and honor America's most sacred institution, the family. We must help to care for our

parents and grandparents as they have cared for us. We must also protect the innocent children of our country. At present, millions of Americans cannot afford quality health insurance. Therefore, I support maintaining the Affordable Care Act in its current form so that everyone can get the care they need.

"Finally, we must support the families of working Americans. It is very difficult to hold down a job when you have a new baby at home. We must show devotion and loyalty to our families by supporting working Americans in this very important time. We can do this, and demonstrate our commitment to family values, by supporting a parental leave program that would provide 1 month of paid leave for all working mothers."

**Highly progressive policy condition + Conservative frame condition.** 

From speech titled "Loyalty and Respect for America's Middle Class"

"I support these policies because showing respect for hard-working Americans is a sacred national tradition that I believe we must honor. My federal infrastructure plan will create 5,000,000 jobs, good jobs with dignity and respectable wages. My plan will not only benefit those directly employed. Supporting our country's infrastructure – its highways, city roads, quality water systems, and reliable utilities – is patriotic because it benefits all Americans and will help to stimulate the greatest economy in the world.

"Giving workers the opportunity to succeed is patriotic because it helps to restore the American dream, the notion that if you work hard, you can make a decent living in our country. Further, good wages help our community and nation as a whole, because workers use their earnings to buy goods from companies, pay rent, and invest in retirement savings, by doing so helping small business owners and supporting other Americans. It is because of these many benefits to good wages that I propose to raise the minimum wage to \$12.00 an hour.

"But jobs and wages are not the only issues that urgently matter in our country. We also must protect and honor America's most sacred institution, the family. We must help to care for our parents and grandparents as they have cared for us. We must also protect the innocent children of our country. At present, millions of Americans cannot afford quality health insurance. Therefore, I support expanding Medicare to cover all currently uninsured Americans so that everyone can get the care they need.

"Finally, we must support the families of working Americans. It is very difficult to hold down a job when you have a new baby at home. We must show devotion and loyalty to our families by supporting working Americans in this very important time. We can do this, and demonstrate our commitment to family values, by supporting a parental leave program that would provide 3 months of paid leave for all working mothers and fathers."

**Moderate progressive policy condition + Technical frame condition.** 

## From speech titled "Economic Growth for America's Middle Class"

"I support these policies because they will help promote economic growth and job creation. My federal infrastructure plan will create 200,000 middle class jobs, jobs with good pay and benefits. My plan will not only benefit those directly employed. Our country's infrastructure – highways, city roads, quality water systems, and reliable utilities – is critical if we are to foster a thriving economy in both the short- and long-term.

"Jobs with good wages don't just benefit employees, they also stimulate the local and national economy because employees use their wages to buy goods from companies, pay rent, and invest in retirement savings. A robust middle class helps everyone do better. It is because of these many benefits to good wages that I propose to raise the minimum wage to \$9.50 an hour.

"But jobs and wages are not the only ways to promote the efficiency and overall functioning in our economy. Programs that extend access to basic health care can increase economic efficiency in a number of ways: by reducing productivity losses from sick workers, by addressing illnesses before they become worse and more expensive, by creating larger insurance pools that help reduce prices and protect individuals against financial risk, by reducing the burden on employers to provide expensive health care benefits to their employees, and by reducing the economic burden of sick relatives. Therefore, I support maintaining the Affordable Care Act in its current form so that everyone can get the care they need.

"Finally, after workers have children they often struggle to keep their jobs and continue to build their careers. It is important that we do not lose these people from the work force as they are important contributors to overall productivity. We can retain these important employees by helping them to navigate this period of life with a parental leave program that would provide 1 month of paid leave for all working mothers."

**Highly progressive policy condition + Technical frame condition.** 

From speech titled "Economic Growth for America's Middle Class"

"I support these policies because they will help promote economic growth and job creation. My federal infrastructure plan will create 5,000,000 middle class jobs, jobs with good pay and benefits. My plan will not only benefit those directly employed. Our country's infrastructure – highways, city roads, quality water systems, and reliable utilities – is critical if we are to foster a thriving economy in both the short- and long-term.

"Jobs with good wages don't just benefit employees, they also stimulate the local and national economy because employees use their wages to buy goods from companies, pay rent, and invest in retirement savings. A robust middle class helps everyone do better. It is because of these many benefits to good wages that I propose to raise the minimum wage to \$12.00 an hour.

"But jobs and wages are not the only ways to promote the efficiency and overall functioning in our economy. Programs that extend access to basic health care can increase economic efficiency in a number of ways: by reducing productivity losses from sick workers, by addressing illnesses before they become worse and more expensive, by creating larger insurance pools that help reduce prices and protect individuals against financial risk, by reducing the burden on employers to provide expensive health care benefits to their employees, and by reducing the economic burden of sick relatives. Therefore, I support expanding Medicare to cover all currently uninsured Americans so that everyone can get the care they need.

"Finally, after workers have children they often struggle to keep their jobs and continue to build their careers. It is important that we do not lose these people from the work force as they are important contributors to overall productivity. We can retain these important employees by helping them to navigate this period of life with a parental leave program that would provide 3 months of paid leave for all working mothers and fathers."

### **Additional Analyses for Manipulation Checks**

# Manipulation check: Perceived conservatism of the candidate's values

Study 1. Additional analyses were conducted to test for interaction effects. The political ideology x policy condition x frame condition interaction and the policy condition x frame condition interaction effect were not significant, ps > .414. However, we found a significant political ideology x frame condition interaction effect, F(3, 2422) = 2.99, p = .030,  $R^2$  increase = .003. Simple effect analyses indicated that conservative participants perceived the candidate's values as significantly more conservative in the conservative frame condition than in the control condition, b = 0.15, SE = 0.02, t(2422) = 7.20, p < .001, 95% CI for b = [0.11, 0.18], and as significantly less conservative (i.e. more liberal) in the liberal frame condition than in the control condition, b = -0.06, SE = 0.02, t(2422) = -2.96, p = .003, 95% CI for b = [-0.10, -0.02]. Parallel analyses for moderate participant yielded similar although somewhat weaker effects. Moderate participants perceived the candidate's values as significantly more conservative in the conservative frame condition than in the control condition, b = 0.11, SE = 0.01, t(2422) = 8.59, p< .001, 95% CI for b = [0.09, 0.14], and as significantly less conservative (i.e. more liberal) in the liberal frame condition than in the control condition, b = -0.06, SE = 0.01, t(2422) = -4.23, p< .001, 95% CI for b = [-0.08, -0.03]. The effects were weaker but still significant among liberal participants. Liberal participants perceived the candidate's values as significantly more conservative in the conservative frame condition than in the control condition, b = 0.08, SE =0.02, t(2422) = 4.02, p < .001, 95% CI for b = [0.04, 0.12], and as significantly less conservative (i.e. more liberal) in the liberal frame condition than in the control condition, b = -0.05, SE =0.02, t(2422) = -2.57, p = .010, 95% CI for b = [-0.09, -0.01].

In addition, we found a significant political ideology x policy condition interaction effect, F(1, 2422) = 11.50, p < .001,  $R^2$  increase = .004. Simple effect analyses indicated that conservative participants perceived the candidate's values to be significantly more conservative in the highly progressive policy condition than in the moderately progressive policy condition, b = 0.04, SE = 0.01, t(2422) = 2.61, p = .009, 95% CI for b = [0.01, 0.07]. Among moderate participants, the difference between the highly progressive policy condition and the moderately progressive policy condition was not significant, b = 0.00, SE = 0.01, t(2422) = 0.12, p = .905, 95% CI for b = [-0.02, 0.02]. Liberal participants perceived the candidate's values as significantly less conservative in the highly progressive policy condition than in the moderately progressive policy condition, b = -0.04, SE = 0.01, t(2422) = -2.52, p = .012, 95% CI for b = [-0.06, -0.01].

# Manipulation check: Perceived value similarity

**Study 1.** As intended, the political ideology x frame condition interaction effect was significant, F(3, 2423) = 18.99, p < .001,  $R^2$  increase = .02. Simple effect analyses indicated that conservative participants perceived the candidate's value as significantly more similar to their own in the conservative frame condition than in either the liberal frame condition, b = 0.15, SE = 0.02, t(2423) = 7.14, p < .001, 95% CI for b = [0.11, 0.19], or the control frame condition, b = 0.18, SE = 0.02, t(2423) = 8.71, p < .001, 95% CI for b = [0.14, 0.22]. There was no significant difference between the liberal frame condition and the control frame condition among conservatives, b = 0.03, SE = 0.02, t(2423) = 1.52, p = .130, 95% CI for b = [-0.01, 0.07].

Parallel analyses for moderates yielded similar although somewhat weaker effects. Moderate participants perceived the candidate's value as significantly more similar to their own in the conservative frame condition than in either the liberal frame condition, b = 0.04, SE =

0.01, t(2423) = 2.80, p = .005, 95% CI for b = [0.01, 0.06], and the control frame condition, b = 0.10, SE = 0.01, t(2423) = 7.00, p < .001, 95% CI for b = [0.07, 0.12]. Moderate participants also perceived the candidate's value as significantly more similar to their own in the liberal frame condition than in the control frame condition, b = 0.06, SE = 0.01, t(2423) = 4.22, p < .001, 95% CI for b = [0.03, 0.08].

Analogous analyses among liberal participants positive effects for liberal framing. Liberal participants perceived the candidate's value as significantly more similar to their own in the liberal frame condition than in either the conservative frame condition, b = 0.07, SE = 0.02, t(2423) = 3.62, p < .001, 95% CI for b = [0.03, 0.11], or the control frame condition, b = 0.08, SE = 0.02, t(2423) = 4.04, p < .001, 95% CI for b = [0.04, 0.12]. There was no significant difference between the conservative frame condition and the control frame condition among liberals, b = 0.01, SE = 0.02, t(2423) = 0.41, p = .679, 95% CI for b = [-0.03, 0.05].

While the political ideology x frame condition x policy condition interaction effect and the political ideology x policy condition interaction effect were non-significant, ps > .573, the policy condition x frame condition interaction effect was significant, F(3, 2420) = 2.94, p = .032,  $R^2$  increase = .002. Simple effect analyses indicated that, among participants in the control frame condition, those in the highly progressive policy condition perceived the candidate's value as significantly more similar to their own than those in the moderately progressive policy condition, b = 0.05, SE = 0.02, t(2420) = 2.63, p = .009, 95% CI for b = [0.01, 0.09]. Among participants in the conservative frame condition, those in the highly progressive policy condition also perceived the candidate's value as significantly more similar to their own than those in the moderately progressive policy condition, b = 0.07, SE = 0.02, t(2420) = 3.84, p < .001, 95% CI for b = [0.04, 0.11]. Among participants in the liberal frame condition, there was no significant difference

between the highly progressive policy condition and the moderately progressive policy condition, b = -0.00, SE = 0.02, t(2420) = -0.10, p = .922, 95% CI for b = [-0.04, 0.04].

Overall, these results indicate that our manipulations of liberal and conservative value frames were successful. We do not discuss the policy condition x frame condition interaction effect further because it did not replicate in Study 2.

**Study 2.** As intended, the political ideology x frame condition interaction effect was significant, F(2, 1677) = 18.18, p < .001,  $R^2$  increase = .02. Simple effect analyses indicated that conservative participants perceived the candidate's value as significantly more similar to their own in the conservative frame condition than in the liberal frame condition, b = 0.18, SE = 0.02, t(1677) = 7.50, p < .001, 95% CI for b = [0.13, 0.23]. Moderate participants perceived the candidate's value as significantly more similar to their own in the conservative frame condition than in the liberal frame condition, b = 0.07, SE = 0.02, t(1677) = 4.55, p < .001, 95% CI for b = [0.04, 0.10]. Among liberal participants, the difference between the conservative frame condition and the liberal frame condition was not significant, b = -0.04, SE = 0.02, t(1677) = -1.66, p = .096, 95% CI for b = [-0.09, 0.01]. All other interaction effects involving policy condition and frame condition as well as the main effect of policy condition were non-significant, ps > .266. Overall, these results indicate that our manipulations of liberal and conservative value frames were successful.

# **Robustness Checks for Main Dependent Variable**

# **Tests for Violations of Standard Regression Assumptions**

**Study 1.** There was no evidence that the assumption of normally distributed residuals was violated. Inspections of QQ plots and histograms of the distribution of studentized residuals suggested no significant deviation from normal distributions. There was evidence that the assumption of homoscedasticity was violated. Inspections of plotting fitted values versus (standardized) residuals as well as the NCV test and the Breusch-Pagan test suggested significant deviations from homoscedasticity.

Therefore, we run a robustness check, using bias-corrected bootstrapping with 5000 samples to test the moral reframing hypothesis. Conservative participants supported the candidate significantly more in the conservative frame condition than in the liberal frame condition, b = 0.13, SE = 0.03, 95% CI for b = [0.08, 0.18]. Additionally, conservative framing increased support for the candidate significantly relative to the control frame among conservatives, b = 0.13, SE = 0.02, 95% CI for b = [0.08, 0.17], whereas liberal framing did not result in significant changes in candidate support among conservatives, b = -0.00, SE = 0.02, 95% CI for b = [-0.05, 0.04].

Moderate participants supported the candidate significantly more in the conservative frame condition than in either the liberal frame condition, b = 0.05, SE = 0.01, 95% CI for b = [0.02, 0.08], or the control frame condition, b = 0.06, SE = 0.01, 95% CI for b = [0.04, 0.09]. There was no significant difference between the liberal frame condition and the control frame condition, b = 0.02, SE = 0.01, 95% CI for b = [-0.01, 0.04]. Analogous analyses among liberal participants yielded no significant differences between the three conditions, all |b|s < 0.04, all SEs = 0.02, all 95% confidence intervals included zero. The main effect of policy condition was

significant indicating that participants in the highly progressive policy condition supported the candidate more than participants in the moderately progressive policy condition, b = 0.04, SE = 0.01, 95% CI for b = [0.02, 0.06].

We also tested for the robustness of the main effects of the different frames. In a maineffects-only model, participants supported the candidate significantly more in the conservative
frame condition than in either the liberal frame condition, b = 0.05, SE = 0.01, 95% CI for b = [0.02, 0.07], or the control frame condition, b = 0.06, SE = 0.01, 95% CI for b = [0.04, 0.09].

There was no significant difference between the liberal frame condition and the control frame
condition, b = 0.02, SE = 0.01, 95% CI for b = [-0.01, 0.05]. Overall, these results are very
similar to those reported in the manuscript and suggest that our findings hold when taking
violations of standard regression assumptions into account.

**Study 2.** There was slight evidence that the assumption of normally distributed residuals was violated. Inspections of QQ plots and histograms of the distribution of studentized residuals suggested slight deviations from normal distributions. There was also evidence that the assumption of homoscedasticity was violated. Inspections of plotting fitted values versus (standardized) residuals as well as the NCV test and the Breusch-Pagan test suggested significant deviations from homoscedasticity.

Therefore, we run a robustness check, using bias-corrected bootstrapping with 5000 samples to test the moral reframing hypothesis. Conservative participants supported the candidate significantly more in the conservative frame condition than in the liberal frame condition, b = 0.10, SE = 0.03, 95% CI for b = [0.05, 0.16]. Similarly, moderate participants supported the candidate significantly more in the conservative frame condition than in either the liberal frame condition, b = 0.04, SE = 0.02, 95% CI for b = [0.01, 0.07]. Among liberal

participants, there was no significant difference between the conservative frame condition and the liberal frame condition, b = -0.03, SE = 0.02, 95% CI for b = [-0.07, 0.01]. The main effect of policy condition was not significant, b = 0.01, SE = 0.01, 95% CI for b = [-0.01, 0.04]. We also tested for the robustness of the main effects of the different frames. In a main-effects-only model, participants supported the candidate significantly more in the conservative frame condition than in the liberal frame condition, b = 0.04, SE = 0.02, 95% CI for b = [0.01, 0.07]. Overall, these results are very similar to those reported in the manuscript and suggest that our findings hold when taking violations of standard regression assumptions into account.

#### **Exclusion of Technical Frame Condition**

The results reported in the manuscript are based on statistical models that include the technical frame condition because this was the model we specified before we run the study (and preregistered for Study 2). In order to demonstrate that the results for the moral reframing effect are not contingent, we rerun all models while excluding participants in the technical frame condition. This resulted in n = 1827 participants in Study 1 and n = 1136 participants in Study 2.

**Study 1.** The predicted political ideology x frame condition interaction effect was significant, F(2, 1809) = 14.45, p < .001,  $R^2$  increase = .01. Simple effect indicated that conservative participants supported the candidate significantly more in the conservative frame condition than in the liberal frame condition, b = 0.13, SE = 0.02, t(1809) = 6.02, p < .001, 95% CI for b = [0.09, 0.17]. Additionally, conservative framing increased support for the candidate significantly relative to the control frame among conservatives, b = 0.13, SE = 0.02, t(1809) = 5.96, p < .001, 95% CI for b = [0.09, 0.17], whereas liberal framing did not result in significant changes in candidate support among conservatives, b = -0.00, SE = 0.02, t(1809) = -0.11, p = .915, 95% CI for b = [-0.04, 0.04].

Moderate participants supported the candidate significantly more in the conservative frame condition than in either the liberal frame condition, b = 0.05, SE = 0.01, t(1809) = 3.40, p < .001, 95% CI for b = [0.02, 0.08], or the control frame condition, b = 0.06, SE = 0.01, t(1809) = 4.55, p < .001, 95% CI for b = [0.04, 0.09]. There was no significant difference between the liberal frame condition and the control frame condition, b = 0.02, SE = 0.01, t(1809) = 1.15, p = .250, 95% CI for b = [-0.01, 0.04]. Analogous analyses among liberal participants yielded no significant differences between the three conditions, all |b|s < 0.04, all SEs = 0.02, all |t(1809)|s < 1.67, all ps > .096. We found no evidence that the frame condition interacted with the policy manipulation. All interaction effects involving policy condition were non-significant, ps > .122. However, we found a significant main effect of policy condition indicating that participants in the highly progressive policy condition, b = 0.04, SE = 0.01, t(1809) = 3.85, p < .001, 95% CI for b = [0.02, 0.07].

We also tested for the robustness of the main effects of the different frames. In a main-effects-only model, participants supported the candidate significantly more in the conservative frame condition than in either the liberal frame condition, b = 0.05, SE = 0.01, t(1811) = 3.26, p = .001, 95% CI for b = [0.02, 0.07], or the control frame condition, b = 0.06, SE = 0.01, t(1811) = 4.48, p < .001, 95% CI for b = [0.04, 0.09]. There was no significant difference between the liberal frame condition and the control frame condition, b = 0.02, SE = 0.01, t(1811) = 1.23, p = .218, 95% CI for b = [-0.01, 0.05]. Overall, these results are very similar to those reported in the manuscript and suggest that our findings hold when participants from the technical frame are excluded.

Study 2. The predicted political ideology x frame condition interaction effect was significant, F(1, 1120) = 12.42, p < .001,  $R^2$  increase = .01. Simple effect indicated that conservative participants supported the candidate significantly more in the conservative frame condition than in the liberal frame condition, b = 0.10, SE = 0.02, t(1120) = 4.31, p < .001, 95% CI for b = [0.06, 0.15]. Similarly, moderate participants supported the candidate significantly more in the conservative frame condition than in the liberal frame condition, b = 0.04, SE = 0.02, t(1120) = 2.50, p = .013, 95% CI for b = [0.01, 0.07]. Among liberals, there was no significant difference between the conservative frame condition and the liberal frame condition, b = -0.03, SE = 0.02, t(1120) = -1.11, p = .267, 95% CI for b = [-0.07, 0.02]. We found no evidence that the frame condition interacted with the policy manipulation. All interaction effects involving policy condition were non-significant, ps > .817. The main effect of policy condition was nonsignificant, b = 0.01, SE = 0.02, t(1120) = 0.70, p = .481, 95% CI for b = [-0.02, 0.04]. We also tested for the robustness of the main effects of the different frames. In a main-effects-only model, participants supported the candidate significantly more in the conservative frame condition than in the liberal frame condition, b = 0.04, SE = 0.02, t(1121) = 2.50, p = .013, 95%CI for b = [0.01, 0.07]. Overall, these results are very similar to those reported in the manuscript and suggest that our findings hold when participants from the technical frame are excluded.

## **Moderator from Prescreen Survey (Study 1)**

Our measure of political ideology, the hypothesized moderator, was assessed after the treatment. Although we did not find evidence that the policy condition or the frame condition significantly influenced participants' political ideology, we run an additional robustness check in which we used the response participants gave to the same political ideology item in the prescreen survey that all members who are part of the MTurk panel need to complete. Although this

measure of political ideology is not optimal because participants' responses might be outdated and the date when it was collected differs across participants, it circumvents the problem of measuring the moderator post-manipulation.

Using this pre-screen measure of political ideology, the political ideology x frame condition interaction effect was significant, F(3, 2419) = 5.28, p = .001,  $R^2$  increase = .004. Simple effect indicated that conservative participants supported the candidate significantly more in the conservative frame condition than in either the liberal frame condition, b = 0.10, SE = 0.02, t(2419) = 4.66, p < .001, 95% CI for b = [0.06, 0.15], or the control frame condition, b = 0.12, SE = 0.02, t(2419) = 5.30, p < .001, 95% CI for b = [0.07, 0.16]. There was no significant difference between the liberal frame condition and the control frame condition among conservatives, b = 0.01, SE = 0.02, t(2419) = 0.64, p = .520, 95% CI for b = [-0.03, 0.06].

Moderate participants supported the candidate significantly more in the conservative frame condition than in either the liberal frame condition, b = 0.04, SE = 0.01, t(2419) = 2.62, p = .009, 95% CI for b = [0.01, 0.07], or the control frame condition, b = 0.07, SE = 0.01, t(2419) = 4.51, p < .001, 95% CI for b = [0.04, 0.09]. There was no significant difference between the liberal frame condition and the control frame condition among moderates, b = 0.03, SE = 0.01, t(2419) = 1.90, p = .057, 95% CI for b = [-0.00, 0.06].

Analogous analyses among liberal participants yielded no significant differences between the three conditions, all |b|s < 0.05, all SEs = 0.02, all |t(2419)|s < 1.81, all ps > .071. We found no evidence that the frame condition interacted with the policy manipulation. All interaction effects involving policy condition were non-significant, ps > .311. However, we found a significant main effect of policy condition indicating that participants in the highly progressive

policy condition supported the candidate more than participants in the moderately progressive policy condition, b = 0.05, SE = 0.01, t(2419) = 4.65, p < .001, 95% CI for b = [0.03, 0.07].

We also tested for the robustness of the main effects of the different frames. In a main-effects-only model, participants supported the candidate significantly more in the conservative frame condition than in either the liberal frame condition, b = 0.04, SE = 0.01, t(2422) = 2.76, p = .006, 95% CI for b = [0.01, 0.07], or the control frame condition, b = 0.07, SE = 0.01, t(2422) = 4.62, p < .001, 95% CI for b = [0.04, 0.10]. There was no significant difference between the liberal frame condition and the control frame condition, b = 0.03, SE = 0.01, t(2422) = 1.87, p = .062, 95% CI for b = [-0.00, 0.06]. Overall, these results are very similar to those reported in the manuscript and suggest that our findings hold when using a measure of political ideology that was collected pre-treatment.

# **Exclusion of Pretest Participants (Study 2)**

In the analysis reported in the manuscript, we included the participants from the pretest in the sample for Study 2. This was the procedure we specified in our preregistration. However, as we looked at the results for our two manipulation checks before running the full study, we conducted an additional robustness check in which we excluded all participants from the pretest (final N = 1597). The predicted political ideology x frame condition interaction effect was significant, F(2, 1579) = 8.29, p < .001,  $R^2$  increase = .01. Simple effect analyses indicated that conservative participants supported the candidate significantly more in the conservative frame condition than in the liberal frame condition, b = 0.11, SE = 0.02, t(1579) = 4.41, p < .001, 95% CI for b = [0.06, 0.16]. Similarly, moderate participants supported the candidate significantly more in the conservative frame condition than in the liberal frame condition, b = 0.03, SE = 0.02, t(1579) = 2.20, p = .028, 95% CI for b = [0.00, 0.07]. Among liberals, there was no significant

difference between the conservative frame condition and the liberal frame condition, b = -0.04, SE = 0.02, t(1579) = -1.56, p = .118, 95% CI for b = [-0.09, 0.01]. We found no evidence that the frame condition interacted with the policy manipulation. All interaction effects involving policy condition were non-significant, ps > .850. The main effect of policy condition was non-significant, b = 0.01, SE = 0.01, t(1579) = 0.80, p = .425, 95% CI for b = [-0.02, 0.04]. We also tested for the robustness of the main effects of the different frames. Although the main effect of frame condition was not significant in a model with the technical frame, F(2, 1581) = 2.57, p = .077,  $R^2$  increase = .002, participants did support the candidate significantly more in the conservative frame condition than in the liberal frame condition, b = 0.04, SE = 0.02, t(1581) = 2.24, p = .025, 95% CI for b = [0.00, 0.07]. Overall, these results are very similar to those reported in the manuscript and suggest that our findings hold when participants from the pretest were excluded.

### Weighted Analysis (Study 2)

Although weights are necessary to derive representative estimates for descriptive statistics, unweighted regression analyses usually provide statistically superior estimates than weighted regression analyses (Winship & Radbill, 1994). Therefore, as specified in our preregistration, we used unweighted analyses for significance testing. However, we conducted robustness checks using weighted analyses. Since the range in the weights initially provided by NORC was large, we used straight calibration weighting that ignore base weights and nonresponse adjustments. First, we run the weighted analysis on our preregistered measure of candidate support. In addition, we run the weighted analysis on a composite in which we combined all five dependent variables (support for the Democratic candidate, likelihood to vote for Democratic candidate, willingness to help the Democratic candidate campaigning, support

for the candidate's economic platform, and shared identity with the candidate; Cronbach's  $\alpha$  = .94), allowing us to make more precise estimates due the reduced measurement error of the composite compared to the preregistered measure of candidate support.

**Preregistered DV.** The political ideology x frame condition interaction effect was not significant, F(2, 1677) = 2.40, p = .091,  $R^2$  increase = .002. Nonetheless, we probed the simple effects for conservatives, moderates, and liberals. We found that conservative participants supported the candidate significantly more in the conservative frame condition than in the liberal frame condition, b = 0.07, SE = 0.02, t(1677) = 3.04, p = .002, 95% CI for b = [0.03, 0.12]. Similarly, moderate participants supported the candidate significantly more in the conservative frame condition than in the liberal frame condition, b = 0.03, SE = 0.02, t(1677) = 2.16, p = .031, 95% CI for b = [0.00, 0.06]. Among liberals, there was no significant difference between the conservative frame condition and the liberal frame condition, b = -0.01, SE = 0.02, t(1677) = -0.010.21, p = .832, 95% CI for b = [-0.05, 0.04]. We found no evidence that the frame condition interacted with the policy manipulation. All interaction effects involving policy condition were non-significant, ps > .226. The main effect of policy condition was non-significant, b = 0.01, SE = 0.01, t(1677) = 0.41, p = .685, 95% CI for b = [-0.02, 0.03]. We also tested for the robustness of the main effects of the different frames. Although the main effect of frame condition was not significant in a model with the technical frame, F(2, 1679) = 2.46, p = .086,  $R^2$  increase = .002, participants did support the candidate significantly more in the conservative frame condition than in the liberal frame condition, b = 0.03, SE = 0.02, t(1679) = 2.22, p = .027, 95% CI for b =[0.00, 0.06].

**Composite DV.** The political ideology x frame condition interaction effect was not significant, F(2, 1677) = 3.69, p = .025,  $R^2$  increase = .003. Simple effect analyses indicated that

conservative participants supported the candidate significantly more in the conservative frame condition than in the liberal frame condition, b = 0.08, SE = 0.02, t(1677) = 3.79, p < .001, 95% CI for b = [0.04, 0.12]. Similarly, moderate participants supported the candidate significantly more in the conservative frame condition than in the liberal frame condition, b = 0.04, SE = 0.01, t(1677) = 2.61, p = .009, 95% CI for b = [0.01, 0.06]. Among liberals, there was no significant difference between the conservative frame condition and the liberal frame condition, b = -0.01, SE = 0.02, t(1677) = -0.36, p = .719, 95% CI for b = [-0.05, 0.04]. We found no evidence that the frame condition interacted with the policy manipulation. All interaction effects involving policy condition were non-significant, ps > .220. The main effect of policy condition was non-significant, b = 0.00, SE = 0.01, t(1677) = 0.36, p = .721, 95% CI for b = [-0.02, 0.03]. We also tested for the robustness of the main effects of the different frames. The main effect of frame condition was significant, F(2, 1679) = 3.63, p = .027,  $R^2$  increase = .003. Participants supported the candidate significantly more in the conservative frame condition than in the liberal frame condition, b = 0.04, SE = 0.01, t(1679) = 2.69, p = .007, 95% CI for b = [0.01, 0.06].

Conclusion for weighted analyses. Overall, these weighted analyses indicate results in the same direction though with lower effect sizes. We interpret the lower effect sizes for the weighted analyses as suggesting that the moral reframing effect in the study is stronger for some conservative groups and weaker for others, and that the latter are underrepresented in our sample relative to the general population. We conducted exploratory analyses, probing for demographic variables that might moderate the moral reframing effect, but did not indicate significant three-way interaction effects. An interesting avenue for future research would be to examine which variables interact with political ideology to predict susceptibility to framing effects such as these.

# Measures and Results for Other Dependent Variables

# Willingness to Help Candidate Campaign

Measure – Studies 1 and 2. Participants' willingness to help the candidate campaigning was assessed with the item: "How likely would you be to engage in campaign activities to support Scott Miller's candidacy for president in 2020 (for example, going door to door, making phone calls, etc.)?", answered on a slider scale from 0 ("very unlikely") to 100 ("very likely").

**Results** – **Study 1.** The political ideology x frame condition interaction effect was significant, F(3, 2420) = 3.44, p = .016,  $R^2$  increase = .003. Simple effect analyses indicated that conservative participants were significantly more willing to help the candidate campaigning in the conservative frame condition than in either the liberal frame condition, b = 0.06, SE = 0.02, t(2420) = 2.60, p = .009, 95% CI for b = [0.02, 0.11], or the control frame condition, b = 0.08, SE = 0.02, t(2420) = 3.41, p < .001, 95% CI for b = [0.03, 0.13]. There was no significant difference between the liberal frame condition and the control frame condition among conservatives, b = 0.02, SE = 0.02, t(2420) = 0.79, p = .429, 95% CI for b = [-0.03, 0.06].

Parallel analyses for moderates yielded positive effects for both conservative and liberal framing. Moderate participants were significantly more willing to help the candidate campaigning in the conservative frame condition than in the control frame condition, b = 0.05, SE = 0.02, t(2420) = 3.18, p = .002, 95% CI for b = [0.02, 0.08]. Moderate participants were also significantly more willing to help the candidate campaigning in the liberal frame condition than in the control frame condition, b = 0.04, SE = 0.02, t(2420) = 2.68, p = .008, 95% CI for b = [0.01, 0.07]. There was no significant difference between the conservative frame condition and the liberal frame condition among moderates, b = 0.01, SE = 0.02, t(2420) = 0.51, p = .610, 95% CI for b = [-0.02, 0.04].

Analogous analyses among liberals yielded positive effects of the liberal frame condition. Liberal participants were significantly more willing to help the candidate campaigning in the liberal frame condition than in either the conservative frame condition, b = 0.05, SE = 0.02, t(2420) = 2.00, p = .046, 95% CI for b = [0.00, 0.09], or the control frame condition, b = 0.06, SE = 0.02, t(2420) = 2.74, p = .006, 95% CI for b = [0.02, 0.11]. There was no significant difference between the conservative frame condition and the control frame condition among liberals, b = 0.02, t(2420) = 0.73, p = .464, 95% CI for b = [-0.03, 0.06].

We found no evidence that the frame condition interacted with the policy manipulation. All interaction effects involving policy condition were non-significant, ps > .155. However, we found a significant main effect of policy condition indicating that participants in the highly progressive policy condition were more willing to help the candidate campaigning than participants in the moderately progressive policy condition, b = 0.04, SE = 0.01, t(2420) = 3.39, p < .001, 95% CI for b = [0.02, 0.06].

**Results – Study 2.** The political ideology x frame condition interaction effect was significant, F(2, 1673) = 3.34, p = .036,  $R^2$  increase = .003. Simple effect analyses indicated that conservative participants were significantly more willing to help the candidate campaigning in the conservative frame condition than in the liberal frame condition, b = 0.09, SE = 0.03, t(1673) = 3.72, p < .001, 95% CI for b = [0.04, 0.14]. Similarly, moderate participants were significantly more willing to help the candidate campaigning in the conservative frame condition than in the liberal frame condition, b = 0.04, SE = 0.02, t(1673) = 2.72, p = .007, 95% CI for b = [0.01, 0.08]. Among liberal participants, there was no significant difference between the conservative frame condition and the liberal frame condition, b = -0.01, SE = 0.03, t(1673) = -0.24, p = .810, 95% CI for b = [-0.06, 0.04].

We found no evidence that the frame condition interacted with the policy manipulation. All interaction effects involving policy condition were non-significant, ps > .415. The main effect of policy condition was also not significant, b = -0.00, SE = 0.01, t(1673) = -0.14, p = .891, 95% CI for b = [-0.03, 0.02].

### **Liking for the Candidate**

**Measure – Study 1.** Participants' *liking for the candidate* was assessed with the item: "How much do you like or dislike Scott Miller?", answered on a slider scale from 0 ("dislike him a lot") to 100 ("like him a lot").

**Results – Study 1.** The political ideology x frame condition interaction effect was significant, F(3, 2422) = 13.13, p < .001,  $R^2$  increase = .01. Simple effect analyses indicated that conservative participants liked the candidate significantly more in the conservative frame condition than in either the liberal frame condition, b = 0.12, SE = 0.02, t(2422) = 6.48, p < .001, 95% CI for b = [0.08, 0.16], or the control frame condition, b = 0.10, SE = 0.02, t(2422) = 5.36, p < .001, 95% CI for b = [0.06, 0.14]. There was no significant difference between the liberal frame condition and the control frame condition among conservatives, b = -0.02, SE = 0.02, t(2422) = -1.16, p = .244, 95% CI for b = [-0.06, 0.01].

Parallel analyses for moderates yielded similar although somewhat weaker effects. Moderate participants liked the candidate significantly more in the conservative frame condition than in either the liberal frame condition, b = 0.03, SE = 0.01, t(2422) = 2.81, p = .005, 95% CI for b = [0.01, 0.06], or the control frame condition, b = 0.05, SE = 0.01, t(2422) = 4.37, p < .001, 95% CI for b = [0.03, 0.08]. There was no significant difference between the liberal frame condition and the control frame condition among moderates, b = 0.02, SE = 0.01, t(2422) = 1.57, p = .118, 95% CI for b = [-0.00, 0.04].

Analogous analyses among liberals yielded positive effects of the liberal frame condition. Liberal participants liked the candidate significantly more in the liberal frame condition than in either the conservative frame condition, b = 0.05, SE = 0.02, t(2422) = 2.93, p = .003, 95% CI for b = [0.02, 0.09], or the control frame condition, b = 0.06, SE = 0.02, t(2422) = 3.27, p = .001, 95% CI for b = [0.02, 0.10]. There was no significant difference between the conservative frame condition and the control frame condition among liberals, b = 0.01, SE = 0.02, t(2422) = 0.33, p = .739, 95% CI for b = [-0.03, 0.04].

While the political ideology x frame condition x policy condition interaction effect and the political ideology x policy condition interaction effect were non-significant, ps > .482, the policy condition x frame condition interaction effect was significant, F(3, 2419) = 3.21, p = .022,  $R^2$  increase = .003. Simple effect analyses indicated that, among participants in the control frame condition, those in the highly progressive policy condition liked the candidate significantly more than those in the moderately progressive policy condition, b = 0.06, SE = 0.02, t(2419) = 3.43, p < .001, 95% CI for b = [0.03, 0.09]. Among participants in the conservative frame condition, those in the highly progressive policy condition also liked the candidate significantly more than those in the moderately progressive policy condition, b = 0.07, SE = 0.02, t(2419) = 3.85, p < .001, 95% CI for b = [0.03, 0.10]. Among participants in the liberal frame condition, there was no significant difference between the highly progressive policy condition and the moderately progressive policy condition, b = -0.00, SE = 0.02, t(2419) = -0.04, p = .970, 95% CI for b = [-0.03, 0.03].

#### **Perceived Competence of the Candidate**

**Measure – Study 1.** Participants' *perceived competence of the candidate* was assessed with the item: "How competent or incompetent is Scott Miller?", answered on a slider scale from 0 ("very incompetent") to 100 ("very competent").

**Results – Study 1.** The political ideology x frame condition interaction effect was significant, F(3, 2422) = 9.02, p < .001,  $R^2$  increase = .01. Simple effect analyses indicated that conservative participants perceived the candidate as significantly more competent in the conservative frame condition than in either the liberal frame condition, b = 0.11, SE = 0.02, t(2422) = 5.82, p < .001, 95% CI for b = [0.07, 0.15], or the control frame condition, b = 0.05, SE = 0.02, t(2422) = 2.79, p = .005, 95% CI for b = [0.02, 0.09]. Conservative participants perceived the candidate as significantly less competent in the liberal frame condition than in the control frame condition, b = -0.06, SE = 0.02, t(2422) = -3.06, p = .002, 95% CI for b = [-0.09, -0.02].

Parallel analyses for moderates yielded similar although somewhat weaker effects. Moderate participants perceived the candidate as significantly more competent in the conservative frame condition than in either the liberal frame condition, b = 0.04, SE = 0.01, t(2422) = 3.32, p < .001, 95% CI for b = [0.02, 0.06], or the control frame condition, b = 0.03, SE = 0.01, t(2422) = 2.88, p = .004, 95% CI for b = [0.01, 0.06]. There was no significant difference between the liberal frame condition and the control frame condition among moderates, b = -0.01, SE = 0.01, t(2422) = -0.44, p = .658, 95% CI for b = [-0.03, 0.02].

Analogous analyses among liberals yielded a positive effect of the liberal frame condition. Liberal participants perceived the candidate as significantly more competent in the liberal frame condition than the control frame condition, b = 0.05, SE = 0.02, t(2422) = 2.55, p = .011, 95% CI for b = [0.01, 0.08]. There were no significant differences between the liberal frame condition and the conservative frame condition, b = 0.03, SE = 0.02, t(2422) = 1.57, p = .002

.117, 95% CI for b = [-0.01, 0.06], and between the conservative frame condition and the control frame condition among liberals, b = 0.02, SE = 0.02, t(2422) = 0.97, p = .333, 95% CI for b = [-0.02, 0.05].

We found no evidence that the frame condition interacted with the policy manipulation. All interaction effects involving policy condition were non-significant, ps > .094. However, we found a significant main effect of policy condition indicating that participants in the highly progressive policy condition perceived the candidate as more competent than participants in the moderately progressive policy condition, b = 0.02, SE = 0.01, t(2422) = 2.19, p = .029, 95% CI for b = [0.00, 0.04].

### **Perceived Principledness of the Candidate**

**Measure – Study 1.** Participants' *perceived principledness of the candidate* was assessed with the item: "How principled or unprincipled is Scott Miller?", answered on a slider scale from 0 ("very unprincipled") to 100 ("very principled").

**Results** – **Study 1.** The political ideology x frame condition interaction effect was significant, F(3, 2423) = 3.24, p = .021,  $R^2$  increase = .003. Simple effect analyses indicated that conservative participants perceived the candidate as significantly more principled in the conservative frame condition than in either the liberal frame condition, b = 0.04, SE = 0.02, t(2423) = 2.50, p = .012, 95% CI for b = [0.01, 0.08], or the control frame condition, b = 0.09, SE = 0.02, t(2423) = 5.37, p < .001, 95% CI for b = [0.06, 0.13]. Conservative participants perceived the candidate as significantly more principled in the liberal frame condition than in the control frame condition, b = 0.05, SE = 0.02, t(2423) = 2.84, p = .005, 95% CI for b = [0.02, 0.08].

Parallel analyses for moderates yielded positive effects for both conservative and liberal framing. Moderate participants perceived the candidate as significantly more principled in the

conservative frame condition than in the control frame condition, b = 0.07, SE = 0.01, t(2423) = 5.83, p < .001, 95% CI for b = [0.04, 0.09]. Moderate participants also perceived the candidate as significantly more principled in the liberal frame condition than in either the control frame condition, b = 0.06, SE = 0.01, t(2423) = 5.35, p < .001, 95% CI for b = [0.04, 0.08]. There was no significant difference between the conservative frame condition and the liberal frame condition among moderates, b = 0.01, SE = 0.01, t(2423) = 0.50, p = .620, 95% CI for b = [-0.02, 0.03].

Analogous analyses among liberals also yielded positive effects for both conservative and liberal framing. Liberal participants perceived the candidate as significantly more principled in the liberal frame condition than in the control frame condition, b = 0.07, SE = 0.02, t(2423) = 4.19, p < .001, 95% CI for b = [0.04, 0.11]. Liberal participants perceived the candidate also as significantly more principled in the conservative frame condition than in the control frame condition, b = 0.04, SE = 0.02, t(2423) = 2.25, p = .024, 95% CI for b = [0.01, 0.07]. There was no significant difference between the liberal frame condition and the conservative frame condition among liberals, b = 0.03, SE = 0.02, t(2423) = 1.91, p = .056, 95% CI for b = [-0.00, 0.07].

We found no evidence that the frame condition interacted with the policy manipulation. All interaction effects involving policy condition were non-significant, ps > .209. However, we found a significant main effect of policy condition indicating that participants in the highly progressive policy condition perceived the candidate as more principled than participants in the moderately progressive policy condition, b = 0.02, SE = 0.01, t(2423) = 2.83, p = .005, 95% CI for b = [0.01, 0.04].

#### **Perceived Consistency of the Candidate**

**Measure – Study 1.** Participants' *perceived consistency of the candidate* was assessed with the item: "How consistent or inconsistent is Scott Miller?", answered on a slider scale from 0 ("very inconsistent") to 100 ("very consistent").

**Results – Study 1.** The political ideology x frame condition interaction effect was not significant, F(3, 2423) = 2.15, p = .092,  $R^2$  increase = .002. Furthermore, we found no evidence that the frame condition interacted with the policy manipulation. All interaction effects involving policy condition were non-significant, ps > .262. However, we found a significant main effect of frame condition, F(3, 2426) = 26.63, p < .001,  $R^2$  increase = .03. Participants in the conservative frame condition perceived the candidate as significantly more consistent than participants in the control frame condition, b = 0.08, SE = 0.01, t(2426) = 7.18, p < .001, 95% CI for b = [0.06]0.11]. Participants in the liberal frame condition also perceived the candidate as significantly more consistent than participants in the control frame condition, b = 0.09, SE = 0.01, t(2426) =8.05, p < .001, 95% CI for b = [0.07, 0.11]. There was no significant difference between participants in the conservative frame condition and participants in the liberal frame condition, b = -0.01, SE = 0.01, t(2426) = -0.85, p = .396, 95% CI for b = [-0.03, 0.01]. In addition, there was a significant main effect of policy condition indicating that participants in the highly progressive policy condition perceived the candidate as more consistent than participants in the moderately progressive policy condition, b = 0.03, SE = 0.01, t(2426) = 3.33, p < .001, 95% CI for b = [0.01], 0.04].

#### **Shared Identity with the Candidate**

**Measure – Study 1.** Participants' *shared identity with the candidate* was assessed with their disagreement or agreement with three items: (1) "I identify with Scott Miller", (2) "I feel that Scott Miller and I are on the same team", and (3) "Scott Miller will look out for people like

me." All items were answered on slider scales from 0 ("strongly disagree") to 100 ("strongly agree"). The three items were averaged to form the *candidate support* composite (Cronbach's  $\alpha = .97$ ).

**Results** – **Study 1.** The political ideology x frame condition interaction effect was significant, F(3, 2423) = 10.34, p < .001,  $R^2$  increase = .01. Simple effect analyses indicated that conservative participants identified significantly more with the candidate in the conservative frame condition than in either the liberal frame condition, b = 0.13, SE = 0.02, t(2423) = 5.62, p < .001, 95% CI for b = [0.08, 0.17], or the control frame condition, b = 0.12, SE = 0.02, t(2423) = 5.50, p < .001, 95% CI for b = [0.08, 0.17]. There was no significant difference between the liberal frame condition and the control frame condition among conservatives, b = -0.00, SE = 0.02, t(2423) = -0.15, p = .878, 95% CI for b = [-0.05, 0.04].

Parallel analyses for moderates yielded similar although somewhat weaker effects. Moderate participants identified significantly more with the candidate in the conservative frame condition than in either the liberal frame condition, b = 0.03, SE = 0.01, t(2423) = 2.31, p = .021, 95% CI for b = [0.01, 0.06], or the control frame condition, b = 0.07, SE = 0.01, t(2423) = 4.62, p < .001, 95% CI for b = [0.04, 0.10]. Moderate participants also identified significantly more with the candidate in the liberal frame condition than in the control frame condition, b = 0.03, SE = 0.01, t(2423) = 2.32, p = .021, 95% CI for b = [0.01, 0.06].

Analogous analyses among liberals yielded positive effects for liberal framing. Liberal participants identified significantly more with the candidate in the liberal frame condition than in either the conservative frame condition, b = 0.06, SE = 0.02, t(2423) = 2.70, p = .007, 95% CI for b = [0.02, 0.10], or the control frame condition, b = 0.07, SE = 0.02, t(2423) = 3.23, p = .001, 95% CI for b = [0.03, 0.11]. There was no significant difference between the conservative frame

condition and the control frame condition among liberals, b = 0.01, SE = 0.02, t(2423) = 0.52, p = .604, 95% CI for b = [-0.03, 0.06].

We found no evidence that the frame condition interacted with the policy manipulation. All interaction effects involving policy condition were non-significant, ps > .226. However, we found a significant main effect of policy condition indicating that participants in the highly progressive policy condition identified more with the candidate than participants in the moderately progressive policy condition, b = 0.06, SE = 0.01, t(2423) = 5.52, p < .001, 95% CI for b = [0.04, 0.08].

**Measure – Study 2.** Participants' *shared identity with the candidate* was assessed with their disagreement or agreement with one item: "I identify with Scott Miller", answered on a slider scale from 0 ("strongly disagree") to 100 ("strongly agree").

**Results – Study 2.** The political ideology x frame condition interaction effect was significant, F(2, 1673) = 11.92, p < .001,  $R^2$  increase = .01. Simple effect analyses indicated that conservative participants identified significantly more with the candidate in the conservative frame condition than in the liberal frame condition, b = 0.15, SE = 0.03, t(1673) = 5.70, p < .001, 95% CI for b = [0.10, 0.20]. Similarly, moderate participants identified significantly more with the candidate in the conservative frame condition than in the liberal frame condition, b = 0.05, SE = 0.02, t(1673) = 3.21, p = .001, 95% CI for b = [0.02, 0.08]. Among liberal participants, there was no significant difference between the conservative frame condition and the liberal frame condition, b = -0.04, SE = 0.03, t(1673) = -1.58, p = .114, 95% CI for b = [-0.09, 0.01].

We found no evidence that the frame condition interacted with the policy manipulation. All interaction effects involving policy condition were non-significant, ps > .421. The main

effect of policy condition was also not significant, b = 0.02, SE = 0.01, t(1673) = 1.83, p = .067, 95% CI for b = [-0.00, 0.05].

## **Support for Candidate's Economic Platform**

**Measure – Studies 1 and 2.** Participants' *support for the candidate's economic platform* was assessed with the item: "Overall, how much do you support Scott Miller's economic policies?", answered on a slider scale from 0 ("not at all") to 100 ("a great deal").

**Results – Study 1.** The political ideology x frame condition interaction effect was significant, F(3, 2423) = 8.88, p < .001,  $R^2$  increase = .01. Simple effect analyses indicated that conservative participants supported the candidate's economic platform significantly more in the conservative frame condition than in either the liberal frame condition, b = 0.13, SE = 0.02, t(2423) = 5.82, p < .001, 95% CI for b = [0.08, 0.17], or the control frame condition, b = 0.08, SE = 0.02, t(2423) = 3.77, p < .001, 95% CI for b = [0.04, 0.13]. Conservative participants also supported the candidate's economic platform significantly less in the liberal frame condition than in the control frame condition, b = -0.05, SE = 0.02, t(2423) = -2.08, p = .037, 95% CI for b = [-0.09, -0.00].

Parallel analyses for moderates yielded similar although somewhat weaker effects. Moderate participants supported the candidate's economic platform significantly more in the conservative frame condition than in either the liberal frame condition, b = 0.05, SE = 0.01, t(2423) = 3.38, p < .001, 95% CI for b = [0.02, 0.08], or the control frame condition, b = 0.05, SE = 0.01, t(2423) = 3.42, p < .001, 95% CI for b = [0.02, 0.08], or. There was no significant difference between the liberal frame condition and the control frame condition among moderates, b = 0.00, SE = 0.01, t(2423) = 0.04, p = .971, 95% CI for b = [-0.03, 0.03].

Analogous analyses among liberals yielded a positive effect for liberal framing. Liberal participants supported the candidate's economic platform significantly more in the liberal frame condition than in the control frame condition, b = 0.05, SE = 0.02, t(2423) = 2.18, p = .029, 95% CI for b = [0.00, 0.09]. There were no significant differences between the liberal frame condition and the conservative frame condition, b = 0.03, SE = 0.02, t(2423) = 1.49, p = .137, 95% CI for b = [-0.01, 0.07], and between the conservative frame condition and the control frame condition among liberals, b = 0.01, SE = 0.02, t(2423) = 0.69, p = .491, 95% CI for b = [-0.03, 0.06].

We found no evidence that the frame condition interacted with the policy manipulation. All interaction effects involving policy condition were non-significant, ps > .264. However, we found a significant main effect of policy condition indicating that participants in the highly progressive policy condition supported the candidate's economic platform more than participants in the moderately progressive policy condition, b = 0.04, SE = 0.01, t(2423) = 3.91, p < .001, 95% CI for b = [0.02, 0.06].

**Results** – **Study 2.** The political ideology x frame condition interaction effect was significant, F(2, 1675) = 8.93, p < .001,  $R^2$  increase = .01. Simple effect analyses indicated that conservative participants supported the candidate's economic platform significantly more in the conservative frame condition than in the liberal frame condition, b = 0.13, SE = 0.02, t(1675) = 5.19, p < .001, 95% CI for b = [0.08, 0.18]. Similarly, moderate participants supported the candidate's economic platform significantly more in the conservative frame condition than in the liberal frame condition, b = 0.05, SE = 0.02, t(1675) = 3.31, p < .001, 95% CI for b = [0.02, 0.08]. Among liberal participants, there was no significant difference between the conservative frame condition and the liberal frame condition, b = -0.02, SE = 0.02, t(1675) = -0.95, p = .341, 95% CI for b = [-0.07, 0.02].

We found no evidence that the frame condition interacted with the policy manipulation. The political ideology x frame condition x policy condition interaction effect and the policy condition x frame condition interaction effect were non-significant, ps > .757. Although we found a significant interaction effect of political ideology x policy condition, F(1, 1674) = 4.21, p = .040,  $R^2$  increase = .002, none of the simple effects for conservatives, moderates, or liberals was significant, ps > .101. The main effect of policy condition was also not significant, b = 0.00, SE = 0.01, t(1675) = 0.08, p = .934, 95% CI for b = [-0.02, 0.03].

#### **Support for Candidate's Specific Policies**

Measures – Study 1. Participants' were asked to indicate their support for each of the four policies of the candidate's platform they were introduced to earlier in the study. That is, participants in the moderately progressive policy condition rater their support for "Policy 1: Setting up a federal infrastructure program to create 200,000 new jobs", "Policy 2: Maintaining the Affordable Care Act in its current form", "Policy 3: Increasing the federal minimum wage to \$9.50 an hour", and "Policy 4: Creating a new federal program that provides 1 month of paid leave for working mothers". Participants in the highly progressive policy condition rater their support for "Policy 1: Setting up a federal infrastructure program to create 5,000,000 new jobs", "Policy 2: Expanding Medicare to cover all uninsured Americans", "Policy 3: Increasing the federal minimum wage to \$12 an hour", and "Policy 4: Creating a new federal program that provides 3 months of paid leave for working mothers and fathers". All items were answered on slider scales from 0 ("not at all") to 100 ("a great deal").

**Results – Study 1 – Policy 1.** The political ideology x frame condition interaction effect was significant, F(3, 2423) = 5.56, p < .001,  $R^2$  increase = .01. Simple effect analyses indicated that conservative participants supported the infrastructure policies significantly more in the

conservative frame condition than in either the liberal frame condition, b = 0.10, SE = 0.02, t(2423) = 4.82, p < .001, 95% CI for b = [0.06, 0.14], or the control frame condition, b = 0.06, SE = 0.02, t(2423) = 2.89, p = .004, 95% CI for b = [0.02, 0.10]. There was no significant difference between the liberal frame condition and the control frame condition among conservatives, b = -0.04, SE = 0.02, t(2423) = -1.96, p = .050, 95% CI for b = [-0.08, 0.00].

Parallel analyses for moderates yielded positive effects for conservative framing. Moderate participants supported the infrastructure policies significantly more in the conservative frame condition than in either the liberal frame condition, b = 0.04, SE = 0.01, t(2423) = 2.90, p = .004, 95% CI for b = [0.01, 0.07], or the control frame condition, b = 0.03, SE = 0.01, t(2423) = 2.06, p = .040, 95% CI for b = [0.00, 0.06]. There was no significant difference between the liberal frame condition and the control frame condition among moderates, b = -0.01, SE = 0.01, t(2423) = -0.84, p = .400, 95% CI for b = [-0.04, 0.02].

Analogous analyses among liberal participants yielded no significant differences between the three conditions, all |b|s < 0.03, all SEs = 0.02, all |t(2423)|s < 1.11, all ps > .270.

While the political ideology x frame condition x policy condition interaction effect and the political ideology x policy condition interaction effect were non-significant, ps > .426, the policy condition x frame condition interaction effect was significant, F(3, 2420) = 3.22, p = .022,  $R^2$  increase = .003. Simple effect analyses indicated that, among participants in the control frame condition, there was no significant differences between the highly progressive policy condition and the moderately progressive policy condition, b = 0.02, SE = 0.02, t(2420) = 1.11, p = .266, 95% CI for b = [-0.02, 0.06]. Among participants in the conservative frame condition, those in the highly progressive policy condition supported the infrastructure policy significantly more than those in the moderately progressive policy condition, b = 0.05, SE = 0.02, t(2420) = 2.63, p = 0.02

= .009, 95% CI for b = [0.01, 0.09]. Among participants in the liberal frame condition, there was no significant differences between the highly progressive policy condition and the moderately progressive policy condition, b = -0.03, SE = 0.02, t(2420) = -1.70, p = .089, 95% CI for b = [-0.07, 0.01].

**Results – Study 1 – Policy 2.** The political ideology x frame condition interaction effect was not significant, F(3, 2423) = 1.93, p = .123,  $R^2$  increase = .001. All other interaction effects involving policy condition and frame condition were also non-significant, ps > .578. However, the main effect of frame condition was significant, F(3, 2426) = 4.85, p = .002,  $R^2$  increase = .003. Participants in the conservative frame condition supported the health care policies significantly more than participants in the liberal frame condition, b = 0.05, SE = 0.02, t(2426) =2.94, p = .003, 95% CI for b = [0.02, 0.08]. There were no significant difference between the conservative frame condition and the control frame condition, b = 0.03, SE = 0.02, t(2426) =1.60, p = .109, 95% CI for b = [-0.01, 0.06], and between the liberal frame condition and the control frame condition, b = -0.02, SE = 0.02, t(2426) = -1.34, p = .181, 95% CI for b = [-0.05]0.01]. In addition, there was a significant main effect of policy condition: Participants in the highly progressive policy condition supported the highly progressive health care policy significantly more than participants in the moderately progressive policy condition supported the moderately progressive health care policy, b = 0.16, SE = 0.01, t(2426) = 14.71, p < .001, 95% CI for b = [0.14, 0.19].

**Results – Study 1 – Policy 3.** The political ideology x frame condition interaction effect was not significant, F(3, 2423) = 1.19, p = .310,  $R^2$  increase = .001. All other interaction effects involving frame condition were also non-significant, ps > .191. Although the main effect of frame condition was significant, F(3, 2425) = 4.01, p = .007,  $R^2$  increase = .003, there were no

significant differences between the conservative frame condition, the liberal frame condition, and the control frame condition, all |b|s < 0.03, all SEs = 0.02, all |t(2425)|s < 1.56, all ps > .119.

In addition, the political ideology x policy condition interaction effect of frame condition was significant, F(1, 2425) = 14.03, p < .001,  $R^2$  increase = .004. Simple effect analyses indicated that conservative participants supported the candidate's position on minimum wage policies significantly less in the highly progressive policy condition than in the moderately progressive policy condition, b = -0.05, SE = 0.02, t(2425) = -2.83, p = .005, 95% CI for b = [-0.08, -0.01]. There was no significant difference between the highly progressive policy condition and the moderately progressive policy condition among moderates, b = -0.00, SE = 0.01, t(2425) = -0.06, p = .955, 95% CI for b = [-0.02, 0.02]. Liberal participants supported the candidate's position on minimum wage policies significantly more in the highly progressive policy condition than in the moderately progressive policy condition, b = 0.05, SE = 0.02, t(2425) = 2.83, p = .005, 95% CI for b = [0.01, 0.08].

**Results – Study 1 – Policy 4.** The political ideology x frame condition interaction effect was not significant, F(3, 2423) = 1.93, p = .123,  $R^2$  increase = .002. All other interaction effects involving policy condition and frame condition were also non-significant, ps > .085. The main effect of policy condition was also not significant, F(1, 2426) = 0.62, p = .432,  $R^2$  increase = .0002. However, the main effect of frame condition was significant, F(3, 2426) = 4.19, p = .006,  $R^2$  increase = .004. Participants in the conservative frame condition supported the parental leave policies significantly more than participants in either the liberal frame condition, b = 0.05, SE = 0.02, t(2426) = 3.02, p = .003, 95% CI for b = [0.02, 0.08], or the control frame condition, b = 0.04, SE = 0.02, t(2426) = 2.34, p = .020, 95% CI for b = [0.01, 0.07]. There was no significant

difference between the liberal frame condition and the control frame condition, b = -0.01, SE = 0.02, t(2426) = -0.69, p = .493, 95% CI for b = [-0.04, 0.02].

## **Support for Donald Trump**

**Measure – Study 1.** Participants' *support for Donald Trump* was measured with two items ("How much would you support or oppose Donald Trump's candidacy for president in 2020?", answered on a scale from 0 (strongly oppose) to 100 (strongly support), and "How likely would you be to vote for Donald Trump for president in 2020?", answered on a scale from 0 (very unlikely) to 100 (very likely). The two items were averaged to form the *support for Donald Trump* composite (r = .96).

**Results** – **Study 1.** All main and interaction effects involving policy condition and frame condition were non-significant, ps > .128.

## Willingness to Help Donald Trump Campaign

**Measure – Study 1.** Participants' willingness to help Donald Trump campaigning was assessed with the item: "How likely would you be to engage in campaign activities to support Donald Trump's candidacy for president in 2020 (for example, going door to door, making phone calls, etc.)?", answered on a slider scale from 0 ("very unlikely") to 100 ("very likely").

**Results** – **Study 1.** All main and interaction effects involving policy condition and frame condition were non-significant, ps > .109.

# **Liking for Donald Trump**

**Measure – Study 1.** Participants' *liking for Donald Trump* was assessed with the item: "How much do you like or dislike Donald Trump?", answered on a slider scale from 0 ("dislike him a lot") to 100 ("like him a lot").

**Results – Study 1.** All main and interaction effects involving policy condition and frame condition were non-significant, ps > .302. The only exception was a significant main effect of policy condition indicating that participants in the highly progressive policy condition liked Donald Trump more than participants in the moderately progressive policy condition, b = 0.03, SE = 0.01, t(2426) = 2.70, p = .007, 95% CI for b = [0.01, 0.05].

# **Perceived Competence of Donald Trump**

**Measure – Study 1.** Participants' *perceived competence of Donald Trump* was assessed with the item: "How competent or incompetent is Donald Trump?", answered on a slider scale from 0 ("very incompetent") to 100 ("very competent").

**Results – Study 1.** All main and interaction effects involving policy condition and frame condition were non-significant, ps > .257. The only exception was a significant main effect of policy condition indicating that participants in the highly progressive policy condition perceived Donald Trump as more competent than participants in the moderately progressive policy condition, b = 0.03, SE = 0.01, t(2426) = 2.70, p = .007, 95% CI for b = [0.01, 0.05].

## **Perceived Principledness of Donald Trump**

**Measure – Study 1.** Participants' *perceived principledness of Donald Trump* was assessed with the item: "How principled or unprincipled is Donald Trump?", answered on a slider scale from 0 ("very unprincipled") to 100 ("very principled").

**Results – Study 1.** All main and interaction effects involving policy condition and frame condition were non-significant, ps > .109. The only exception was a significant main effect of policy condition indicating that participants in the highly progressive policy condition perceived Donald Trump as more principled than participants in the moderately progressive policy condition, b = 0.02, SE = 0.01, t(2425) = 2.21, p = .027, 95% CI for b = [0.00, 0.04].

#### **Shared Identity with Donald Trump.**

**Measure – Study 1.** Participants' *shared identity with Donald Trump* was assessed with their disagreement or agreement with three items: (1) "I identify with Donald Trump", (2) "I feel that Donald Trump and I are on the same team", and (3) "Donald Trump will look out for people like me." All items were answered on slider scales from 0 ("strongly disagree") to 100 ("strongly agree"). The three items were averaged to form the *candidate support* composite (Cronbach's  $\alpha = .97$ ).

**Results** – **Study 1.** All main and interaction effects involving policy condition and frame condition were non-significant, ps > .186.

#### Intention to vote for Candidate in the 2020 Election against Donald Trump

Measure – Study 1. Participants' intention to vote in the 2020 election was assessed with the items: "If Scott Miller were the Democratic Party's candidate and Donald Trump were the Republican Party's candidate, who would you vote for?", answered on a scale with four response options: (1) "I would vote for Scott Miller", (2) "I would vote for Donald Trump", (3) "I would vote for another candidate (either an Independent or the nominee of a third party)", (4) "I would not vote". This measure was recoded to form the dummy variable, *intention to vote for the Democratic candidate in the 2020 election against Donald Trump*: (1) "I would vote for Scott Miller", (0) the three other categories.

**Results – Study 1.** We used a binomial logistic regression analysis. A likelihood ration test showed that the political ideology x frame condition interaction effect was significant,  $\chi 2(3)$  = 12.91, p = .005. Simple effect analyses indicated that conservative participants were significantly more likely to intend to vote for the Democratic candidate in the conservative frame condition than in either the liberal frame condition, b = 0.55, SE = 0.24, z = 2.24, p = .025, OR =

1.73, 95% CI for OR = [1.07, 2.80], or the control frame condition, b = 0.97, SE = 0.26, z = 3.71, p < .001, OR = 2.63, 95% CI for OR = [1.59, 4.43]. There was no significant difference between the liberal frame condition and the control frame condition among conservatives, b = 0.42, SE = 0.28, z = 1.51, p = .131, OR = 1.52, 95% CI for OR = [0.88, 2.65].

Analogous analyses among moderate and liberal participants yielded no significant differences between the three conditions, all |b|s < 0.59, all SEs < 0.32, all |z|s < 1.96, all ps > .050. We found no evidence that the frame condition interacted with the policy manipulation. All interaction effects involving policy condition were non-significant, ps > .519. The main effect of policy condition was also non-significant, b = 0.20, SE = 0.11, z = 1.87, p = .062, OR = 1.22, 95% CI for OR = [0.99, 1.51].

Measure – Study 2. In Study 2, participants' intention to vote for the Democratic candidate in the 2020 election against Donald Trump was measured with the same item: "If Scott Miller were the Democratic Party's candidate and Donald Trump were the Republican Party's candidate, who would you vote for?". However, this time, we used a 7-point scale from 1 ("I would definitely vote for Scott Miller") to 7 ("I would definitely vote for Donald Trump") with an additional option ("I would not vote / I would vote for another candidate"). The variable was reversely coded such that higher values indicate a stronger intention to vote for the Democratic candidate.

**Results – Study 2.** Participants who indicated that they would not vote or would vote for another candidate were excluded from analyses (remaining n = 1613). The political ideology x frame condition interaction effect was non-significant, F(2, 1595) = 0.24, p = .784,  $R^2$  increase = .0002. We also found no evidence that the frame condition interacted with the policy manipulation. All interaction effects involving frame condition and/or policy condition were

non-significant, ps > .506. However, the main effect of frame condition was significant, F(2, 1597) = 3.88, p = .021,  $R^2$  increase = .003. Participants in the conservative frame condition were significantly more likely to intend to vote for the Democratic candidate than participants in the liberal frame condition, b = 0.04, SE = 0.02, t(1597) = 2.07, p = .039, 95% CI for b = [0.00, 0.07]. The main effect of policy condition was non-significant, b = -0.00, SE = 0.01, t(1597) = -0.22, p = .829, 95% CI for b = [-0.03, 0.03].

#### **Moral Reframing and Racial Resentment**

We also tested the idea that moral reframing could reduce the effect of racial resentment on support for progressive candidates. That is, we tested the hypothesis that there is an interaction effect of racial resentment and conservative framing such that the effect of racial resentment on candidate support is smaller in the conservative frame condition than in the liberal frame condition. This hypothesis was preregistered in Study 2.

Measure – Study 1. Participants' racial resentment was assessed with six items: (1) "It's really a matter of some people not trying hard enough; if blacks would only try harder they could be just as well off as whites", (2) "Irish, Italian, Jewish and many other minorities overcame prejudice and worked their way up. Blacks should do the same", (3) "Black people still face discrimination in the United States today, limiting their chances to get ahead", (4) "Over the past few years, blacks have gotten more economically than they deserve", (5) "Some say that black leaders have been trying to push too fast. Others feel that they haven't pushed fast enough. What do you think?", (6) "How much of the racial tension that exists in the United States today do you think blacks are responsible for creating?". The first four items were answered on scales from 1 ("strongly disagree") to 7 ("strongly agree"). The fifth item was answered on a scale from 1 ("trying to push very much too fast") to 7 ("going too slowly"). The sixth item was answered on a scale from 1 ("all of it") to 7 ("not much at all"). The six items were averaged to form the racial resentment composite (Cronbach's  $\alpha = .89$ ).

**Results – Study 1.** The racial resentment x frame condition interaction effect was significant, F(3, 2423) = 11.32, p < .001,  $R^2$  increase = .01. The relationship between racial resentment and candidate support was significantly weaker in the conservative frame condition than in the liberal frame condition, interaction b = 0.05, SE = 0.01, t(2423) = 4.90, p < .001, 95%

CI for b = [0.03, 0.07]. The relationship between racial resentment and candidate support was also significantly weaker in the conservative frame condition than in the control frame condition, interaction b = 0.03, SE = 0.01, t(2423) = 3.03, p = .002, 95% CI for b = [0.01, 0.05]. In addition, the relationship between racial resentment and candidate support was significantly stronger in the liberal frame condition than in the control frame condition, interaction b = -0.02, SE = 0.01, t(2423) = -1.99, p = .047, 95% CI for b = [-0.04, -0.00]. The simple effect of racial resentment was negative and significant in the liberal frame condition, b = -0.13, SE = 0.01, t(2423) = -17.92, p < .001, 95% CI for b = [-0.15, -0.12], somewhat weaker in the control frame condition, b = -0.11, SE = 0.01, t(2423) = -15.99, p < .001, 95% CI for b = [-0.13, -0.10], and weakest but still highly significant in the conservative frame condition, b = -0.08, SE = 0.01, t(2423) = -11.25, p < .001, 95% CI for b = [-0.10, -0.07]. Taken together, these results support the moral reframing and racial resentment hypothesis: Conservative value framing reduced the size of the negative effect of racial resentment on candidate support.

Measure – Study 2. Participants' racial resentment was assessed with three items: (1) "It's really a matter of some people not trying hard enough; if blacks would only try harder they could be just as well off as whites", (2) "Irish, Italian, Jewish and many other minorities overcame prejudice and worked their way up. Blacks should do the same", (3) "Over the past few years, blacks have gotten more economically than they deserve". All items were answered on scales from 1 ("strongly disagree") to 7 ("strongly agree"). The six items were averaged to form the *racial resentment* composite (Cronbach's  $\alpha = .85$ ).

**Results** – **Study 2.** The racial resentment x frame condition interaction effect was significant, F(2, 1677) = 2.23, p = .108,  $R^2$  increase = .002. We nonetheless conducted the simple effects analyses. Although the relationship between racial resentment and candidate support was

weaker in the conservative frame condition than in the liberal frame condition, this difference was not significant, interaction b = 0.02, SE = 0.01, t(1677) = 1.82, p = .070, 95% CI for b = [-0.00, 0.04]. The simple effect of racial resentment was negative and significant in both the liberal frame condition, b = -0.07, SE = 0.01, t(1677) = -9.94, p < .001, 95% CI for b = [-0.09, -0.06], and the conservative frame condition, b = -0.05, SE = 0.01, t(1677) = -7.27, p < .001, 95% CI for b = [-0.07, -0.04]. Weighted analyses showed smaller effect sizes for the racial resentment x frame condition interaction effect. This suggests that if frame condition moderates the effect of racial resentment, it might be contingent on another variable. Taken together, these results do not support the moral reframing and racial resentment hypothesis. The results are inconclusive. Future research is needed to determine whether conservative value framing reduces the effect of racial resentment on candidate support and whether this effect might be further moderated by another variable.

**Additional exploratory analyses.** We conducted similar analyses to explore whether conservative value framing would decrease the influence of pro-white bias (Study 1), a more explicit measure of racism, and xenophobia, the fear of immigrants (Study 2).

**Pro-white bias** – **Measure** – **Study 1.** Participants' *pro-white bias* was assessed as the difference score between the feeling thermometer score for Whites and the mean of the feeling thermometer scores for Blacks and Hispanics.

**Pro-white bias** – **Results** – **Study 1.** The pro-white bias x frame condition interaction effect was significant, F(3, 2421) = 2.30, p = .076,  $R^2$  increase = .002. We nonetheless conducted the simple effects analyses. The relationship between pro-white bias and candidate support was significantly weaker in the conservative frame condition than in the liberal frame condition, interaction b = 0.17, SE = 0.07, t(2421) = 2.38, p = .017, 95% CI for b = [0.03, 0.31]. The

differences in the relationship between pro-white bias and candidate support in the control frame condition versus the other two frame conditions were not significant, interaction |b|s < 0.11, SEs = 0.07, |t(2421)|s < 1.41, ps > .160. The simple effect of pro-white bias was negative and significant in the liberal frame condition, b = -0.33, SE = 0.05, t(2421) = -6.49, p < .001, 95% CI for b = [-0.43, -0.23], somewhat weaker in the control frame condition, b = -0.26, SE = 0.05, t(2421) = -5.13, p < .001, 95% CI for b = [-0.36, -0.16], and weakest but still highly significant in the conservative frame condition, b = -0.16, SE = 0.05, t(2421) = -2.97, p = .003, 95% CI for b = [-0.27, -0.05]. Taken together, the evidence for a moderating role for this more explicit measure of racism is somewhat weaker than for racial resentment in Study 1. We did not find conclusive evidence. There is some evidence that the strength of the influence of pro-white bias on candidate support is reduced by conservative framing, but future research is needed to get further examine this effect.

**Xenophobia** – **Measure** – **Study 2.** Participants' *xenophobia* was assessed with their disagreement or agreement with two items: (1) "We should welcome immigrants to our country" and (2) "In general, my views of illegal immigrants are positive." Both items were answered on slider scales from 1 ("strongly disagree") to 7 ("strongly agree"). Both items were reversely scored and averaged to form the *xenophobia* composite (r = .49).

**Xenophobia** – **Results** – **Study 2.** The xenophobia x frame condition interaction effect was significant, F(2, 1677) = 5.75, p = .003,  $R^2$  increase = .01. The relationship between xenophobia and candidate support was significantly weaker in the conservative frame condition than in the liberal frame condition, interaction b = 0.03, SE = 0.01, t(1677) = 2.63, p = .009, 95% CI for b = [0.01, 0.05]. The simple effect of xenophobia was negative and significant in both the liberal frame condition, b = -0.09, SE = 0.01, t(1677) = -13.19, p < .001, 95% CI for b = [-0.11, -1.05]

0.08], and the conservative frame condition, b = -0.07, SE = 0.01, t(1677) = -9.35, p < .001, 95% CI for b = [-0.08, -0.05]. Weighted analyses showed smaller effect sizes for the xenophobia x frame condition interaction effect. This suggests that if frame condition moderates the effect of xenophobia, it might be contingent on another variable. Future research is needed to determine whether conservative value framing reduces the effect of xenophobia on candidate support and whether this effect might be further moderated by another variable.

# References

Winship, C., & Radbill, L. (1994). Sampling weights and regression analysis. *Sociological Methods & Research*, 23(2), 230-257. doi:10.1177/0049124194023002004