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Differential Effects of Right-Wing Authoritarianism and Social Dominance Orientation on Political Candidate Support: The Moderating Role of Message Framing

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Abstract

Employing a dual process motivational (DPM) model perspective, we found that how political messages are framed influences the differential effects of right-wing authoritarianism (RWA) and social dominance orientation (SDO) on political candidate support in the United States. Study 1 ($N = 85$) found that RWA and SDO differentially predicted support for right-wing candidates who used cohesion and group status threats to frame same-sex marriage, respectively. Study 2 ($N = 89$) largely replicated those findings on immigration policy. In Study 3 ($N = 128$), the hypothesis that RWA and SDO negatively predicted support for left-wing candidates who framed same-sex marriage in terms of individual liberty and social equality, respectively, received partial support. Additional analyses indicated that the effects of RWA on candidate support in these studies were driven by specific theoretically-relevant dimensions of RWA. Together, these results indicate that candidates can enhance their appeal by strategically employing value-based political messages targeting different subsets of their constituency.

Keywords: framing effects, politics, candidate evaluation, right-wing authoritarianism, social dominance orientation

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Political parties are often thought to be ideologically monolithic, and for good reason—for example, the U. S. Democratic and Republican Parties generally represent liberal and conservative political interests, respectively, and have become increasingly polarized in recent years (Abramowitz & Saunders, 1998; Layman & Carsey, 2002). That said, differences within parties can become transparent when candidates seek to differentiate themselves from their same-party opponents, such as in primary elections. For example, during the 2008 Democratic presidential primary, it was clear that while Senator Hillary Clinton appealed to the Democratic establishment of older, working-class Whites, Senator Barack Obama appealed to Democrats who were younger and more ethnically diverse and educated (Carter & Cox, 2008). Unsurprisingly then, Clinton’s campaign used anxiety over terrorist attacks to highlight her greater political experience (the famous “3 a.m. crisis call” advertisement), while Obama’s

campaign questioned Clinton's judgment in authorizing the 2003 invasion of Iraq and literally promised a "change" from the establishment she represented (Cillizza, 2008).

In the present series of studies, we examined whether political candidates can wield information about the values of different subsets of their likely constituency to mobilize support among different subsets of their constituency. To do so, we integrate literature on framing effects with the dual process motivational (DPM) model of ideological attitudes (Duckitt, 2001; Duckitt & Sibley, 2010a), an approach which suggests that ideological attitudes are organized along two underlying dimensions.

Framing Effects

According to Chong and Druckman (2007a), framing theory assumes that an individual policy can be construed in multiple ways, and that these various policy interpretations will emphasize different values or considerations that can form or shape voters' beliefs about the policy. Frames are typically utilized by political elites to promote "particular definitions and interpretations of political issues" by making certain values or considerations salient to voters (Shah, Watts, Domke, & Fan, 2002, p. 343). Thus, a *framing effect* occurs when "in the course of describing an issue or event, a speaker's emphasis on a subset of potentially relevant considerations causes individuals to focus on these considerations when constructing their opinions" (Druckman & Nelson, 2003, p. 730).

Most research has examined framing effects within the context of intergroup competition—specifically, when opposing sides of a political issue compete to effectively frame the issue (Chong & Druckman, 2007a; Chong & Druckman, 2007b; Jerit, 2009). Examples include "freedom" vs. "law and order" frames for minority rights (Chong & Druckman, 2007b; Sniderman & Theriault, 2004), "cruel and inhumane" vs. "tough love" frames for welfare reform (Brewer, 2001), and "equality" vs. "morality" frames for same-sex marriage or civil unions (Brewer, 2002). Because most research examines frames used by opposing sides of a policy debate, researchers have controlled for perceivers' prior attitudes to determine framing effects (Chong & Druckman, 2007a; 2007b). In the context of within-party electoral contests, however, voters' specific prior attitudes or values may be an important consideration for examining framing effects. For example, in the only study we are aware of to examine framing effects in a within-party context, Barker (2005) found that Republican primary voters in the 2000 election were more likely to vote for John McCain when an "individualism" frame of school voucher programs was attributed to him than when an "egalitarianism" frame was attributed to him.

Of course, Barker intentionally employed one frame consistent with Republican values (individualism) and one frame inconsistent with Republican values (egalitarianism), rather than two frames consistent with Republican values. What we propose is that within a political party, even when candidates adopt the same issue position (e.g., opposing same-sex marriage), they can employ different frames of that issue position with different subsets of their voters' values in mind (Chong, 1996). Thus, for example, while one Republican candidate may increase his or her support among a certain subset of voters by framing an issue in terms of one particular conservative value, another Republican candidate can increase his or her support among another subset of voters by emphasizing a different conservative value on that same issue. The DPM model is a social psychological framework that provides such a distinction between related but distinct ideological attitude dimensions. We review this model next and then integrate its predictions with the framing literature to introduce hypotheses for how political candidates can differentially frame an issue to enhance support among different subsets of their constituency.

Applying the DPM Model to Framing Effects

Although earlier scholars suggested that ideology was best conceived unidimensionally (e.g., Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950; Wilson, 1973), it has become increasingly clear over the last several decades that (at least) two dimensions underlie ideological attitudes. Duckitt (2001) developed the DPM model based on evidence suggesting two dimensions of ideological attitudes: one characterized by social conservatism and traditionalism vs. individual freedom and autonomy, and another characterized by economic conservatism, group dominance and power vs. egalitarianism.

According to the DPM model, right-wing authoritarianism (RWA; Altemeyer, 1998) and social dominance orientation (SDO; Pratto, Sidanius, Stallworth, & Malle, 1994; Sidanius & Pratto, 1999) best represent these two related but distinct ideological attitude dimensions. RWA expresses “beliefs in coercive social control, in obedience and respect for existing authorities, and in conforming to traditional moral and religious norms and values” (Duckitt & Sibley, 2010a, pp. 1863-1864). Recently, Duckitt, Bizumic, Krauss, and Heled (2010) refined the RWA construct and developed a measure of three related but distinct dimensions of RWA: Authoritarianism, which assesses punitiveness vs. leniency; Conservatism, which assesses obedience vs. rebelliousness; and Traditionalism, which assesses conformity vs. nonconformity to social norms, values and morality. SDO expresses the motive to maintain or enhance existing status hierarchies in order to maintain intergroup dominance and superiority (Duckitt & Sibley, 2010a; Sidanius & Pratto, 1999).

RWA and SDO have different social and psychological bases. RWA derives from a belief that the world is a dangerous place, full of threats to both the individual and the group. Such a worldview stems from a predisposition towards social conformity and the experience of threat or danger in the environment. In contrast, SDO derives from a belief that the world is a competitive jungle that creates a constant intergroup struggle for dominance and superiority. This worldview stems from a predisposition towards psychological tough-mindedness and the experience of competition in the environment (Duckitt, 2001; Duckitt, Wagner, du Plessis, & Birum, 2002).

According to the DPM model, RWA more strongly predicts attitudes related to social cohesion concerns whereas SDO more strongly predicts attitudes related to intergroup dominance concerns. This differential prediction hypothesis has been supported by research examining intergroup (Duckitt & Sibley, 2007) as well as political attitudes: generally speaking, RWA more strongly predicts attitudes on socio-cultural political issues whereas SDO more strongly predicts attitudes on economic and status hierarchy-related issues (Altemeyer, 1998; Van Hiel, Pandelaere, & Duriez, 2004). For example, Crawford, Jussim, Cain, and Cohen (2013) found that RWA more strongly predicted people’s evaluations of a newspaper article about same-sex relationships, whereas SDO more strongly predicted people’s evaluations of an article about affirmative action policy.

While within-party opponents may agree on issue positions in substance, they may differentiate themselves in style by using language or themes that make certain value considerations more salient than others. From a DPM model perspective, we hypothesize that when people are presented with candidates who take the same issue position but make different values salient through their arguments, support for the candidate who frames the issue by making social cohesion considerations salient will be more strongly predicted by RWA than SDO, whereas support for the candidate who frames the issue by making group status considerations salient will be more strongly predicted by SDO than RWA.

The Current Research

In three studies, we tested the differential prediction hypothesis as applied to political candidate support. In Study 1, we used a within-participants design to examine whether RWA and SDO differentially predict support for Republican primary candidates who frame same-sex marriage by making either social cohesion or group status threats salient, respectively. In Study 2, we extended Study 1's findings to immigration policy using a between-participants design. Finally, in Study 3, we looked to generalize support for our hypotheses by examining in a within-participants design whether support for *Democratic* primary candidates who employed *pro*-same-sex marriage frames emphasizing individual liberty and social equality would be differentially (and in this case, negatively) predicted by RWA and SDO, respectively.

Study 1

A frame generally does not occur within a vacuum; rather, voters often face *competing frames*—that is, two or more frames that offer opposing considerations of a particular issue (e.g., Social Security privatization; Jerit, 2009) from competing parties or interest groups (Chong & Druckman, 2007a; Jerit, 2009; Sniderman & Theriault, 2004). However, as previously noted, competing frames in extant studies present opposing sides of an issue. For example, the “morality” frame used by Brewer (2002) was an anti-same sex marriage frame, while the “equality” frame was a pro-same-sex marriage frame. Our primary interest however is whether the effectiveness of distinct frames of the *same issue position* depends on the perceiver's levels of RWA and SDO.

In Study 1 we therefore examined the effectiveness of cohesion and status threat frames on support for two right-wing candidates engaged in a primary debate over same-sex marriage. While both candidates opposed legalizing same-sex marriage, they provided different reasons for their opposition, thereby making different values salient to the audience. Drawing on the DPM model, we predicted that RWA would more strongly predict support for the candidate who used the cohesion threat frame than would SDO, whereas SDO would more strongly predict support for the candidate who used the status threat frame than would RWA. In addition, because the issue of same-sex marriage involves conformity or non-conformity to normative definitions of sexuality and family, we hypothesized that the Traditionalism dimension of RWA would most strongly predict support for the candidate who used the cohesion threat frame.¹

Method

Participants

We recruited 100 current U.S. residents through Amazon.com's Mechanical Turk (MTurk), an online labor market. Samples obtained from MTurk possess greater demographic diversity and representativeness than student samples (Buhrmester, Kwang, & Gosling, 2011), and well-established findings in social psychology and political science have been replicated in MTurk samples (Berinsky, Huber, & Lenz, 2012; Horton, Rand, & Zeckhauser, 2011). Interested individuals selected a link to the online survey and were compensated with 50 cents for their participation. As an attention check, following their evaluations of both candidates, participants indicated whether each candidate supported or opposed legalizing same-sex marriage. Fifteen participants failed to correctly note that both candidates opposed legalizing same-sex marriage and were removed, leaving 85 participants (79% White; 53% female; $M_{age} = 35$ years; 60% liberal, 20% conservative; 60% Democratic, 21% Republican) in the final analysis.

Materials and Procedure

RWA and SDO — Participants first completed the RWA and SDO scales. We used an 18-item version of Duckitt et al.'s (2010) 36-item RWA scale, selecting six items from each of the three dimensions (i.e., Authoritarianism, Conservatism, and Traditionalism). However, because one item on the Traditionalism dimension assessed attitudes towards gays and lesbians ("Everyone should have their own lifestyle, religious beliefs, and sexual preferences, even if it makes them different from everyone else"), we excluded this item and computed a 17-item RWA scale for Study 1. Participants also completed a 10-item SDO scale (Sidanius & Pratto, 1999). All scales were balanced for protrait and contrait items. Scale presentation order and scale item order were randomized across participants. Items were measured on 7-point scales (1 = *Strongly Disagree*; 7 = *Strongly Agree*), and average scores were computed for RWA, its three dimensions, and SDO.ⁱⁱ Appendices A and B present the items for the RWA and SDO scales used in these studies.

Candidate arguments and candidate support measures — Participants then read the transcript of an ostensible debate over same-sex marriage between two Republican Party primary candidates. The *Cohesion Threat* candidate argued that legalizing same-sex marriage would erode the American family, harm children, and destroy the moral fabric of society. This frame is broadly consistent with the "morality" frame that dominates conservative activists' and newspaper editorialists' framing for their opposition to same-sex marriage (Tadlock, Gordon, & Popp, 2007). The *Status Threat* candidate argued that legalizing same-sex marriage would not only be fiscally irresponsible, but would give benefits to same-sex couples at the expense of heterosexual couples (see Appendix C).ⁱⁱⁱ

The order of these arguments was counterbalanced. Regardless of argument order, the first candidate (labeled "Republican A") always began with the statement, "A constitutional amendment is needed to protect the traditional definition of marriage as the union of one man and one woman", and ended with the statement, "Congress needs to take action on instituting a Constitutional amendment to defend marriage now". The second candidate (labeled "Republican B") always began with the statement, "I also agree that Congress needs to take immediate action and adopt a Constitutional amendment to protect the definition of marriage, but for different reasons than those offered by my fellow candidate". This language conveyed that while both candidates opposed same-sex marriage, their reasons differed.

Following these two arguments, candidate support was measured with a 4-item scale for each candidate. Participants indicated the likelihood that they would a) vote for the candidate, b) wear a campaign button with the candidate's name and image, c) attend a rally in support of the candidate, and d) encourage family and friends to vote for the candidate (1 = *Very Unlikely*; 7 = *Very Likely*). Participants completed these items first for Republican A and then Republican B, all on the same page. Average candidate support scales were computed for each candidate. On a separate page, participants then completed the attention check (i.e., whether each candidate supported or opposed legalizing same-sex marriage).

Political affiliation, political knowledge, and demographics — We then assessed ideological self-placement (1 = *Extremely Liberal*; 7 = *Extremely Conservative*) and party affiliation (1 = *Strong Democrat*; 7 = *Strong Republican*). Participants then indicated whether Democrats or Republicans support or oppose six specific social policies (e.g., same-sex marriage, affirmative action programs). Correct and incorrect answers were coded as 1 and 0 respectively, and correct scores were summed to form a political knowledge measure.^{iv} Lastly, participants provided demographic information such as age, gender, and race/ethnicity.

Results

Preliminary Analyses

Table 1 reports the descriptive statistics for RWA and its three dimensions, SDO, and measures of candidate support. All measures were reliable. RWA and its three dimensions were positively correlated with SDO, and the two candidate support measures were positively correlated with one another. Cohesion Threat candidate support was most strongly correlated with the Traditionalism dimension of RWA. Status Threat candidate support was most strongly correlated with SDO.

Table 1

Study 1: Descriptive statistics for study variables

	1	2	3	4	5	6	7
1. RWA							
2. Authoritarianism	.79***						
3. Conservatism	.87***	.59***					
4. Traditionalism	.84***	.44***	.62***				
5. SDO	.41***	.46***	.37**	.35**			
6. Cohesion candidate support	.44***	.21 [†]	.38***	.59***	.41***		
7. Status candidate support	.34**	.31**	.31***	.34**	.61***	.58***	
<i>M</i>	3.65	3.89	3.42	3.74	2.34	1.96	1.80
<i>SD</i>	.99	1.07	1.17	1.42	1.28	1.53	1.24
α	.89	.71	.86	.87	.94	.95	.93

Note. *N*s ranged from 79 to 84 for the correlational analyses.

[†] $p < .10$. ** $p < .01$. *** $p < .001$.

Primary Analyses

We first conducted two multiple regression analyses, one regressing Cohesion Threat candidate support on RWA and SDO and another regressing Status Threat candidate support on RWA and SDO. Consistent with the differential prediction hypothesis, RWA predicted support for the Cohesion Threat candidate, $b = .55$, $SE = .17$, $\beta = .37$, $p < .001$, but SDO did not, $b = .21$, $SE = .14$, $\beta = .17$, *ns* (model $R^2 = .22$, $p < .001$). Moreover, SDO predicted support for the Status Threat candidate, $b = .47$, $SE = .11$, $\beta = .47$, $p < .001$, but RWA did not, $b = .17$, $SE = .12$, $\beta = .15$, *ns* (model $R^2 = .30$, $p < .001$). To assess RWA's and SDO's interactive effects with candidate argument, we created a difference score to indicate greater support for the Cohesion over Status Threat candidate, and regressed this difference score on RWA and SDO (see Judd, Kenny, & McClelland, 2001). This analysis revealed that RWA more strongly predicted Cohesion than Status candidate support, $b = .38$, $SE = .29$, $\beta = .29$, $p = .020$, whereas SDO tended to more strongly predict Status than Cohesion candidate support, $b = -.26$, $SE = .14$, $\beta = -.23$, $p = .061$ (model $R^2 = .08$, $p < .05$).

RWA dimensional analyses — To explore which dimension of RWA drove Cohesion Threat candidate support, we regressed Cohesion Threat candidate support on Authoritarianism, Conservatism, and Traditionalism. As expected, Traditionalism ($b = .71$, $SE = .12$, $\beta = .69$, $p < .001$) was the only significant predictor of Cohesion Threat candidate support (Conservatism and Authoritarianism b s = $-.05$ and $-.19$, respectively, p s $> .225$; model $R^2 = .38$, $p < .001$).

We therefore subsequently regressed the two candidate support measures on Traditionalism and SDO. As in the full RWA scale analysis, Traditionalism predicted support for the Cohesion Threat candidate, $b = .56$, $SE = .10$, $\beta = .54$, $p < .001$, but SDO did not, $b = .19$, $SE = .12$, $\beta = .15$, ns (model $R^2 = .37$, $p < .001$). Moreover, SDO predicted support for the Status Threat candidate, $b = .50$, $SE = .10$, $\beta = .49$, $p < .001$, but Traditionalism did not, $b = .14$, $SE = .08$, $\beta = .17$, $p = .092$ (model $R^2 = .33$, $p < .001$). Testing Traditionalism's and SDO's interactive effects with candidate argument, Traditionalism more strongly predicted Cohesion than Status candidate support, $b = .42$, $SE = .10$, $\beta = .46$, $p < .001$, whereas SDO more strongly predicted Status than Cohesion candidate support, $b = -.31$, $SE = .12$, $\beta = -.28$, $p = .012$ (model $R^2 = .20$, $p < .001$).

Finally, to determine if the differential effects of Traditionalism and SDO on candidate support were moderated by argument order, we conducted a moderated multiple regression analysis on each of the two candidate support measures. For each model, Traditionalism, SDO, and argument Order (0 = Cohesion Threat first; 1 = Status Threat first) were entered in Step 1, and the Traditionalism \times Order and SDO \times Order interactions were entered in Step 2 (Aiken & West, 1991). Neither interaction was significant in the analysis of Cohesion Threat candidate support ($bs < .30$, $ps > .146$). In the analysis of Status Threat candidate support, whereas the Traditionalism \times Order interaction was not significant ($b = -.18$, $SE = .17$, $\beta = -.17$, $p = .293$), the SDO \times Order interaction was significant ($b = .51$, $SE = .21$, $\beta = .40$, $p < .05$). To probe this significant interaction, we used Hayes' (2013) PROCESS macro (model 1), which estimates simple slopes based on the entire sample, a procedure preferable to conducting separate regression analyses at each level of the dichotomous variable (in this case, Order). We used PROCESS to calculate all simple slope analyses reported in this paper. For this SDO \times Order interaction, simple slope analyses (which included Traditionalism as a covariate) indicated that SDO significantly predicted Status Threat candidate support when the Status Threat frame was presented first, $b = .67$, $SE = .12$, $p < .001$, but not when the Cohesion Threat frame was presented first, $b = .16$, $SE = .17$, $p = .332$.

Discussion

When presented with two right-wing candidates who opposed same-sex marriage for different reasons, support for the candidate who framed same-sex marriage as a threat to social cohesion and moral values was predicted by RWA but not SDO, while support for the candidate who framed same-sex marriage as a threat to the status of heterosexuals was predicted by SDO but not RWA. Moreover, RWA was a stronger predictor of cohesion than status threat candidate support, whereas SDO was a stronger predictor of status than cohesion threat candidate support. These effects of RWA on support for a candidate who used moral arguments against same-sex marriage were driven primarily by the Traditionalism dimension of RWA, which assesses adherence to traditional values and morals (Duckitt et al., 2010). Interestingly, the effects of SDO on support for the Status Threat candidate were strongest when the status threat frame was presented *before* the cohesion threat frame. One possible reason for this effect is that because the cohesion threat frame is the more dominant frame in conservative political discourse on same-sex marriage (Brewer, 2002; Tadlock et al., 2007), its greater accessibility may have overridden the effectiveness of the subsequent status frame (for a similar argument, see Chong & Druckman, 2007c). Together, then, these findings provide initial support for our hypotheses that right-wing candidates can differentially use cohesion and status threat frames to appeal to people high in RWA and SDO, respectively.

Study 2

In Study 2, our objective was to conceptually replicate Study 1's findings on a different political issue—namely, immigration policy. Immigrants can pose a cohesion threat as they bring new customs to their host country and may not readily adopt their host country's customs (Paxton & Mughan, 2006). However, immigrants can also pose a status threat to the extent that they may compete for jobs and other resources (Esses, Jackson, & Armstrong, 1998). Not surprisingly, then, both RWA and SDO predict negative attitudes towards immigrants (Hodson & Costello, 2007), and several recent studies in a variety of countries have shown that RWA and SDO differentially predict anti-immigrant attitudes when cohesion and group status threats are salient, respectively (Crawford & Pilianski, in press; Duckitt & Sibley, 2010b; Thomsen, Green, & Sidanius, 2008).

Thus, it seems likely that RWA would more strongly predict support for a right-wing candidate who frames strict immigration policies in terms of cohesion threats, whereas SDO would more strongly predict support for a right-wing candidate who frames such policies in terms of group status threats. To test these hypotheses, participants read the immigration policy statement of a Republican Senator, ostensibly drawn from his campaign's website. In a between-participants design, we varied whether the Senator's immigration policy made cohesion (i.e., requiring immigrants to learn English, the main language in the U.S.) or status (i.e., making sure available jobs went to native-born Americans before immigrants) threats salient. Additionally, because the anti-immigrant policy proposed by the Cohesion Threat candidate is harsh and restrictive, we hypothesized that the Authoritarianism dimension of RWA, which is most predictive of punitive anti-immigrant attitudes (Duckitt et al., 2010), would most strongly predict support for that candidate.

Method

Participants

Using recruitment methods identical to those used in Study 1, we recruited 99 current U.S. residents through MTurk. As an attention check, following their evaluations of the target, participants indicated whether the candidate supported stronger or more lenient immigration policies. Four participants failed to correctly note the candidate's support for stronger immigration policies and were removed. Moreover, because we expected U.S. Latinos to react differently compared to non-Latinos to statements regarding restrictive immigration policies, six additional participants who self-identified as Hispanic or Latino/a were also removed, leaving 89 participants (82% White; 52% female; $M_{\text{age}} = 36$ years; 51% liberal, 25% conservative; 60% Democratic, 21% Republican) in the final analysis.

Materials and Procedure

Participants first completed the 18-item RWA^V and 10-item SDO scales used in Study 1, and were then randomly assigned to either the *Cohesion Threat* or *Status Threat* condition. All participants read a description of the Republican "Senator A", ostensibly drawn from his campaign's website. After describing his early personal life and military and civic service, the Senator offered an immigration policy statement. In the Cohesion Threat condition, the statement read, "I have always supported laws requiring that immigrants to the United States learn to speak English. Too often we see immigrants come here and refuse to learn our language, and so I strongly support legislation that includes a requirement to learn English." This statement was a modified version of a statement made by Senator John McCain (R-Arizona) during a Republican Party primary debate in December 2007. In the Status Threat condition, the statement read, "I have always supported strong immigration policies. Too often American jobs go to foreign laborers. I will carefully scrutinize proposals that affect our nation's immigration policies and will

work to ensure that Americans are first in line for available jobs.” This statement was a modified version of a statement that appears on the website of Senator Pat Roberts (R-Kansas). Each candidate then criticized President Obama’s approach to global leadership, thanked voters for their support, and encouraged them to vote for him in the upcoming election. Participants then completed the 4-item candidate support measure used in Study 1, and then the attention check item. We then assessed ideological self-placement, party affiliation, political knowledge, and demographic information.

Results

Preliminary Analyses

Table 2 reports the descriptive statistics for RWA and its three dimensions, SDO, and candidate support. All measures were reliable. RWA and SDO were correlated with one another and with candidate support, but RWA and its three dimensions were more strongly correlated with candidate support than was SDO.

Table 2

Study 2: Descriptive statistics for study variables

	1	2	3	4	5	6
1. RWA						
2. Authoritarianism	.91***					
3. Conservatism	.94***	.76***				
4. Traditionalism	.93***	.74***	.82***			
5. SDO	.41***	.35**	.35**	.43***		
6. Candidate support	.71***	.65***	.62***	.70***	.41***	
<i>M</i>	3.77	4.09	3.59	3.61	2.37	2.79
<i>SD</i>	1.24	1.33	1.31	1.37	1.18	1.69
α	.94	.82	.89	.87	.93	.91

Note. *N*s ranged from 84 to 89 for the correlational analyses.

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

Primary Analyses

To test our hypotheses in this between-participants design, we conducted a moderated multiple regression analysis in which RWA, SDO, and Threat (0 = Cohesion, 1 = Status) were entered in Step 1, and the RWA \times Threat and SDO \times Threat interactions were entered in Step 2. Although we tested these interactive effects, the primary tests of the differential prediction hypotheses involve comparing the effects of RWA and SDO on support for each individual candidate, as in Study 1.

Table 3 shows that the RWA \times Threat interaction was significant ($p = .009$), and the SDO \times Threat interaction was marginally significant ($p = .089$). Simple slope analyses indicated that RWA predicted support for the Cohesion Threat candidate, $b = 1.23$, $SE = .17$, $p < .001$, but SDO did not, $b = .03$, $SE = .16$, $p = .870$, in line with the differential prediction hypothesis. However, inconsistent with the differential prediction hypothesis, both RWA ($b = .62$, $SE = .15$, $p < .001$) and SDO ($b = .44$, $SE = .18$, $p = .019$) predicted support for the Status Threat candidate. Looked at another way, RWA more strongly predicted Cohesion than Status Threat candidate support, whereas SDO only predicted support for the Status Threat candidate.

Table 3

Study 2: Moderated multiple regression analysis for the full RWA scale ($N = 84$)

	Step 1			Step 2		
	<i>b</i>	<i>SE</i>	β	<i>b</i>	<i>SE</i>	β
Constant	2.83			2.83		
RWA	.89***	.12	.65	1.23***	.17	.90
SDO	.20	.12	.14	.03	.16	.02
Threat	-.15	.26	-.04	-.14	.26	-.04
RWA × Threat				-.61**	.23	-.35
SDO × Threat				.41 [†]	.24	.19
R^2	.52***			.56***		
ΔR^2	.52***			.04*		

Notes. RWA and SDO were mean-centered. For Threat, 0 = Cohesion, 1 = Status.

[†] $p = .089$. * $p < .05$. ** $p < .01$. *** $p < .001$.

RWA dimensional analyses — As in Study 1, we explored which RWA dimension drove Cohesion Threat candidate support by regressing Cohesion Threat candidate support on Authoritarianism, Conservatism, and Traditionalism. Both Authoritarianism, $b = .73$, $SE = .23$, $\beta = .45$, $p = .003$, and Traditionalism, $b = .67$, $SE = .30$, $\beta = .45$, $p = .030$, emerged as significant predictors, but Conservatism did not, $b = -.15$, $SE = .32$, $\beta = -.09$, $p = .646$.

We therefore subsequently performed two versions of the moderated multiple regression analysis described above, one replacing the full RWA scale with Authoritarianism, and another replacing the full scale with Traditionalism. Interestingly, the significant RWA × Threat and marginally significant SDO × Threat interactions observed in the full RWA scale analysis above were not observed in the Traditionalism dimensional analysis (for the RWA × Threat interaction, $p = .095$; for the SDO × Threat interaction, $p = .224$). Instead, the effects on Cohesion Threat candidate support observed in the full RWA scale analysis were clearly driven by the Authoritarianism dimension, as the expected Authoritarianism × Threat ($p = .009$) and SDO × Threat ($p = .054$) interactions were observed (see Table 4). The conclusions were identical to those from the full scale analysis: simple slope analyses indicated that Authoritarianism predicted support for the Cohesion Threat candidate, $b = 1.08$, $SE = .17$, $p < .001$, but SDO did not, $b = .07$, $SE = .16$, $p = .652$, in line with the differential prediction hypothesis. However, inconsistent with the differential prediction hypothesis, both Authoritarianism ($b = .51$, $SE = .14$, $p < .001$) and SDO ($b = .54$, $SE = .18$, $p = .003$) predicted support for the Status Threat candidate. Looked at another way, Authoritarianism more strongly predicted Cohesion than Status Threat candidate support, whereas SDO only predicted support for the Status Threat candidate.

Discussion

Using a different political issue (i.e., immigration policy) and research design (i.e., between-participants), we largely replicated Study 1's finding that RWA and SDO differentially predict support for right-wing candidates who frame public policy using cohesion and status threats, respectively. Specifically, RWA more strongly predicted support for a candidate whose immigration policy made cohesion threats salient (immigrants learning the host country's language) than did SDO. However, both RWA and SDO significantly predicted support for a candidate whose policy made group status threats salient (immigrants competing for jobs with native-born individuals). This finding is inconsistent with the differential prediction hypothesis, but consistent with other extant studies showing robust

Table 4

Study 2: Moderated multiple regression analysis for the Authoritarianism dimension ($N = 86$)

	Step 1			Step 2		
	<i>b</i>	<i>SE</i>	β	<i>b</i>	<i>SE</i>	β
Constant	2.78			2.75		
Authoritarianism	.74***	.11	.59	1.08***	.17	.86
SDO	.29*	.12	.20	.07	.16	.05
Threat	-.05	.27	-.02	-.02	.26	-.01
Authoritarianism × Threat				-.58**	.22	-.36
SDO × Threat				.47 [†]	.24	.22
R^2	.47***			.52***		
ΔR^2	.47***			.05*		

Notes. SDO and Authoritarianism were mean-centered. For Threat, 0 = Cohesion, 1 = Status.

[†] $p = .054$. * $p < .05$. ** $p < .01$. *** $p < .001$.

effects of RWA across conditions (Cohrs & Asbrock, 2009; Thomsen et al., 2008). The present finding may be attributable to the fact that RWA in general, and Authoritarianism in particular, is a powerful determinant of anti-immigrant attitudes (Duckitt et al., 2010). Further, given their heightened threat sensitivity, people high in RWA may have perceived competition with immigrants for jobs as threatening (Lavine, Lodge, & Freitas, 2005). That said, RWA did more strongly predict support for the Cohesion Threat than Status Threat candidate, consistent with DPM model predictions.

Study 3

Across two different political issues, Studies 1 and 2 demonstrated that right-wing candidates can differentially enhance their support by framing the same issue position with two different kinds of conservative voters in mind—those concerned with social cohesion (i.e., people high in RWA) and those concerned with group status (i.e., people high in SDO). But can *left-wing* candidates also strategically frame a single issue position in different ways to enhance their support among different kinds of *liberal* voters?

According to Hunsberger and Altemeyer (2006, pp. 100 and 113), people low in RWA hold the opposite motives of those high in RWA: they support non-normative individuals or groups, question authority and other coercive forces, oppose restrictions on individual liberty, and support liberal or progressive social policies. Likewise, people *low* in SDO are motivated to *attenuate* rather than maintain or enhance intergroup dominance and status differences (Sidanius & Pratto, 1999). Based on these assumptions, we presumed that people low in RWA would be most concerned with preserving individual liberty, autonomy, and freedom of choice, whereas people low in SDO would be most concerned with assuring social equality and egalitarianism. We therefore constructed a primary debate between two Democratic candidates who framed same-sex marriage support in terms of individual liberty (ensuring that gays and lesbians are free to marry the partner of their choice) or social equality (ensuring that gays and lesbians are treated equally under the law). We hypothesized that RWA would be a stronger negative predictor of *Liberty* candidate support than would SDO, whereas SDO would be a stronger negative predictor of *Equality* candidate support than would RWA. Further, because Traditionalism was the strongest predictor of support for the right-wing candidate who framed same-sex marriage as a cohesion threat in Study 1, we hypothesized that

Traditionalism would be the RWA dimension that most strongly (negatively) predicted support for the left-wing candidate who framed same-sex marriage support in terms of individual liberty.

Method

Participants

We recruited 137 undergraduates enrolled at a liberal arts college in New Jersey, USA. Students completed the survey online. As an attention check, following target evaluations, participants indicated whether each candidate supported or opposed legalizing same-sex marriage. Nine participants failed to correctly note that both candidates supported legalizing same-sex marriage and were removed, leaving 128 participants (72% White; 75% female; $M_{\text{age}} = 20$ years; 56% liberal, 20% conservative; 57% Democratic, 25% Republican) in the final analysis.

Materials and Procedure

The materials and procedures were identical to those used in Study 1 with the following exceptions: a) participants completed the 16-item SDO scale (Pratto et al., 1994), not the 10-item version used in Studies 1 and 2; and b) participants imagined a debate over same-sex marriage between two *Democratic* Party primary candidates (see Appendix C for debate text). The Liberty candidate argued that denying gays and lesbians the right to marry is an infringement upon their personal freedoms and liberties. The Equality candidate argued that the current system treats gays and lesbians as inherently inferior. This Equality frame is the dominant frame in liberal political discourse on same-sex marriage (Brewer, 2002; Tadlock et al., 2007). Argument order was counterbalanced. Similar to Study 1, regardless of argument order, the first candidate (labeled “Democrat A”) always began with the statement, “I believe that same-sex marriage should be legalized in the United States”, and ended with the statement, “We therefore need to legalize same-sex marriage now.” The second candidate (labeled “Democrat B”) always began with the statement, “I also agree that we need to legalize same-sex marriage in the United States now, but for different reasons than those offered by my fellow candidate.”

Participants then completed the same 4-item measures of candidate support for each candidate used in Study 1, and then the attention check. To determine if participants recognized the differences between the two candidates’ arguments, they then indicated whether they thought each candidate would protect “individual liberty” and “social equality” (1 = *Strongly Disagree*; 7 = *Strongly Agree*). We then assessed ideological self-placement, party affiliation, political knowledge, and demographic information.

Results

Preliminary Analyses

Table 5 reports the descriptive statistics for RWA and its three dimensions, SDO, and the measures of candidate support. All measures were reliable. RWA and SDO were positively correlated with one another, and were both moderately and negatively correlated with each measure of candidate support, although the correlation between RWA and Liberty candidate support was only marginally significant ($p = .062$). Traditionalism was the only RWA dimension significantly negatively correlated with Liberty candidate support. The candidate support measures were highly correlated with one another.

Table 5

Study 3: Descriptive statistics for all study variables

	1	2	3	4	5	6	7
1. RWA							
2. Authoritarianism	.79***						
3. Conservatism	.83***	.45***					
4. Traditionalism	.82***	.44***	.60***				
5. SDO	.35***	.35***	.16	.34***			
6. Liberty candidate support	-.16 [†]	-.10	-.06	-.24**	-.14		
7. Equality candidate support	-.19*	-.18 [†]	.02	-.31***	-.42***	.52***	
<i>M</i>	3.72	3.98	3.55	3.60	2.65	3.96	4.10
<i>SD</i>	.78	.98	.87	1.03	1.03	1.55	1.53
α	.84	.70	.71	.71	.92	.86	.86

Note. *N*s ranged from 120 to 128 for the correlational analyses.

[†] $p < .09$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Perceived protection of liberty and equality — Paired samples *t*-tests indicated that participants recognized the distinction between the two candidates: they believed the Liberty candidate ($M = 6.02$, $SD = 1.08$) was a stronger protector of individual liberty than the Equality candidate ($M = 5.13$, $SD = 1.26$), $t(125) = 5.96$, $p < .001$, and that the Equality candidate ($M = 6.04$, $SD = 1.02$) was a stronger protector of social equality than the Liberty candidate ($M = 5.04$, $SD = 1.26$), $t(124) = 6.75$, $p < .001$. Participants also accurately perceived the reasons behind each candidates' support for same-sex marriage: they perceived the Liberty candidate as a stronger protector of individual liberty than social equality, $t(125) = 7.02$, $p < .001$, and the Equality candidate as a stronger protector of social equality than individual liberty, $t(124) = 7.05$, $p < .001$.

Primary Analyses

As in Study 1, we conducted two multiple regression analyses, one regressing Liberty candidate support on RWA and SDO and another regressing Equality candidate support on RWA and SDO. Consistent with the differential prediction hypothesis, SDO negatively predicted support for the Equality candidate, $b = -.63$, $SE = .14$, $\beta = -.42$, $p < .001$, but RWA did not, $b = -.06$, $SE = .18$, $\beta = -.03$, *ns* (model $R^2 = .19$, $p < .001$). However, contrary to our predictions, neither RWA ($b = -.26$, $SE = .19$, $\beta = -.13$, *ns*) nor SDO ($b = -.13$, $SE = .15$, $\beta = -.09$, *ns*) significantly predicted Liberty candidate support, although the RWA effect was in the expected direction (model $R^2 = .03$, *ns*).

To assess RWA's and SDO's interactive effects with candidate argument, we created a difference score to indicate greater support for the Liberty over Equality candidate, and regressed this difference score on RWA and SDO (Judd et al., 2001). This analysis revealed that low scores on the SDO scale more strongly predicted Equality than Liberty candidate support, $b = .48$, $SE = .14$, $\beta = .33$, $p = .001$. Although there was a tendency for low scores on the RWA scale to more strongly predict support for the Liberty than Equality candidate, this difference was not significant, $b = -.15$, $SE = .18$, $\beta = -.08$, $p = .416$ (model $R^2 = .10$, $p < .01$).

RWA dimensional analyses — Traditionalism was the only RWA dimension with a significant bivariate relationship with Liberty candidate support (Table 5). Unsurprisingly then, after regressing Liberty candidate support on Authoritarianism, Conservatism, and Traditionalism, Traditionalism, $b = -.50$, $SE = .17$, $\beta = -.34$, $p = .004$, was the

only significant predictor of Liberty candidate support (Conservatism and Authoritarianism b s = .28 and -.04, respectively; p s > .168).

We therefore subsequently regressed the two candidate support measures on Traditionalism and SDO. Consistent with the differential prediction hypothesis, Traditionalism negatively predicted Liberty candidate support, $b = -.34$, $SE = .14$, $\beta = -.22$, $p < .05$, but SDO did not, $b = -.10$, $SE = .14$, $\beta = -.07$, ns (model $R^2 = .06$, $p < .05$). Moreover, SDO was a stronger negative predictor of Equality candidate support, $b = -.52$, $SE = .13$, $\beta = -.36$, $p < .001$, than was Traditionalism, $b = -.26$, $SE = .13$, $\beta = -.17$, $p < .05$ (model $R^2 = .20$, $p < .001$). Testing Traditionalism's and SDO's interactive effects with candidate argument, low scores on the SDO scale more strongly predicted Equality than Liberty candidate support, $b = .42$, $SE = .14$, $\beta = .29$, $p = .002$, but low scores on the RWA scale did not predict support for one candidate over another, $b = -.04$, $SE = .14$, $\beta = -.03$, $p = .792$ (model $R^2 = .08$, $p < .01$). Finally, moderated multiple regression analyses examining order effects determined that unlike Study 1, argument order did not significantly moderate these relationships, all p s > .058.^{vi}

Discussion

While Studies 1 and 2 demonstrated that RWA and SDO have differential effects on right-wing candidate support, Study 3 extended those findings to show that these ideological attitude dimensions also exert differential effects on support for left-wing candidates who make different values salient on a single political issue. Specifically, support for a left-wing candidate who framed same-sex marriage in terms of preserving individual liberty and freedom was most strongly and negatively predicted by the Traditionalism dimension of RWA, which (on the low end of the scale) assesses valuing making one's own choices over conformity to traditional morals and values (Duckitt et al., 2010). On the other hand, support for a candidate who framed the same issue position in terms of social equality was most strongly and negatively predicted by SDO. The interactive effects suggest that people low in SDO clearly preferred the Equality candidate; however, while people high in RWA show a slight preference for the Liberty candidate, they supported both candidates roughly equally.

General Discussion

Framing effects research has examined how opposing sides of a policy debate use frames to influence policy attitudes (Chong & Druckman, 2007a, 2007b; Sniderman & Theriault, 2004). Employing a dual process motivational (DPM) model perspective (Duckitt, 2001; Duckitt & Sibley, 2010a), we found in three studies that candidates on the same side of a policy debate can enhance support for their candidacy by using different frames to mobilize support among different subsets of their constituency. Specifically, candidates can differentially influence support for their candidacies by offering messages that make the values and motives of people high (or low) in right-wing authoritarianism (RWA) and social dominance orientation (SDO) salient.

Together, Studies 1 and 2 showed that when right-wing candidates use messages that raise threats to social cohesion, RWA is a stronger predictor of candidate support than SDO, but when right-wing candidates raise threats to group status, SDO is generally a stronger predictor of candidate support than RWA. These effects were demonstrated across two separate political issues (i.e., same-sex marriage and immigration policy) and using both within- and between-participants research designs. Moreover, these RWA effects were driven primarily by theoretically relevant sub-dimensions (i.e., Traditionalism for same-sex marriage and Authoritarianism for immigration policy), as derived from Duckitt et al.'s (2010) recent reconceptualization of the RWA construct. The only

finding somewhat inconsistent with the differential prediction hypothesis is that RWA and SDO were equally predictive of Status Threat candidate support in Study 2. This finding is, however, consistent with other extant findings showing that while RWA has its strongest effects on anti-immigrant attitudes under conditions of threat, it also predicts anti-immigrant attitudes under other conditions (Cohrs & Asbrock, 2009; Thomsen et al., 2008). That said, RWA did more strongly predict support for the Cohesion Threat than Status Threat candidate in Study 2, consistent with DPM model predictions (Duckitt & Sibley, 2010a; see also Crawford & Pilanski, in press).

Study 3 demonstrated that right-wing candidates are not the only ones who can capitalize on these differential framing effects, as SDO but not RWA negatively predicted support for a left-wing candidate who framed same-sex marriage support in terms of assuring social equality. The findings for a left-wing candidate who framed same-sex marriage in terms of individual liberty were more nuanced: the differential prediction hypothesis was only supported on the Traditionalism dimension, which more strongly and negatively predicted support for the Liberty candidate than did SDO. Whereas people low in SDO clearly preferred the Equality candidate, people low in RWA showed a slight preference for the Liberty candidate, but ultimately supported both candidates equally. The strength of the Equality candidates' argument in Study 3 may reflect the fact that "marriage equality" has become the dominant frame in left-wing discourse on same-sex marriage. Recent polling research also suggests that this is a powerful frame: in a Rutgers-Eagleton poll of New Jersey voters, support for marriage rights for gays and lesbians jumped from 51% when it was framed as "gay marriage" to 62% when it was framed as "marriage equality" (Rutgers Eagleton Center for Public Interest Polling, 2011).

Implications for Framing Effects

An impressive body of evidence underscores how message frames shape policy attitudes (Chong & Druckman, 2007b; Jerit, 2009; see Chong & Druckman 2007a for a review). However, framing effects in cases in which the issue position is held constant (e.g., within-party electoral contests) have been largely ignored. In the U.S., for example, these are increasingly important contexts in which to understand framing effects, as more states have moved their primaries to earlier dates in the election season (Tolbert, Redlawsk, & Bowen, 2009). This "frontloading effect" expands the number of relevant primary contests and likely contributes to more heated primary debate.

For candidates who might not differ from their opponents in the substance of policy position, advantages gained through rhetorical style and value considerations may influence the outcome of a primary election. With an awareness of the values of different subsets of their constituency (to which even political novices have access; see Footnote iii), campaigns can tailor their messages to increase support among particular voters. Given that U.S. President Barack Obama's re-election campaign website allowed visitors to select the campaign's message tailored towards their own sociodemographic group (e.g., LGBT Americans; Young Americans), campaigns are likely already aware of this strategy, at least at the social demographics level. Of course, the present studies focused on peoples' value considerations, which can provide a more nuanced, and perhaps more useful, approach to targeted voter appeal. Through in-person and online voter outreach and sophisticated voter database management, campaigns could potentially ascertain, maintain, and utilize information on voters' values to implement targeted campaign messaging. Future research could explore these possibilities, as well as how and when voters rely on these sets of values using dynamic process tracing techniques (e.g., Lau & Redlawsk, 2006).

Recently, framing researchers have suggested that scholars examine competing frames by which respondents are exposed to multiple frames in a within-participants design, as opposed to being exposed to one of several frames in a between-participants design (Chong & Druckman, 2007a, 2007b; Jerit, 2009; Sniderman & Theriault,

2004). This recommendation stems from the fact that framing effects diminish in competing contexts because respondents moderate their opinions when faced with two opposing positions (Chong & Druckman, 2007b). This consideration is less relevant to the present studies because we held issue position constant, providing participants little motivation to moderate their responses. Importantly, these studies demonstrated that in cases in which frames differ not in policy position but in salient value considerations, related but distinct ideological motives and values differentially influenced candidate support in both competing (Studies 1 and 3) and non-competing (Study 2) framing contexts.

Implications for the Dual Process Motivational Model

While earlier DPM model research emphasized the differential effects of RWA and SDO on intergroup attitudes (Duckitt, 2001; Duckitt & Sibley, 2007), the DPM model has been increasingly applied to people's political attitudes, including policy positions (Van Hiel et al., 2004), biased assimilation processes (Crawford et al., 2013), and political intolerance (Crawford & Pilanski, in press). The present work further extends the DPM model's predictions to political communication in general and framing effects in particular. Surprisingly, these studies are also the first to extend the DPM model's predictions from attitudes towards social groups and policies to attitudes towards individual actors (i.e., political candidates). Furthermore, whereas most research has focused on the intergroup and sociopolitical attitudes and behavior of people high in RWA and SDO, Study 3 demonstrated that low scores on the RWA and SDO scales capture meaningful political attitudes that should be explored by future research (see also Crawford, 2012; Crawford & Xhambazi, in press). Finally, all three studies showed that theoretically-relevant dimensions of RWA drove support for particular political candidates (i.e., Traditionalism for both pro- and anti-same-sex marriage candidates; Authoritarianism for anti-immigrant candidates), supporting the utility of a multidimensional conceptualization of RWA (Duckitt et al., 2010).

Limitations and Future Directions

Whereas the predictions for RWA in Studies 1 and 2 were generally supported in both the full scale and dimensional analyses, hypothesis support relied on the Traditionalism dimension in Study 3. While this finding is consistent with a multidimensional approach to RWA, it was not an a priori expectation. Moreover, whereas people low in SDO clearly preferred the Equality candidate, people low in RWA essentially supported both candidates equally. As mentioned above, the prevalence of the "marriage equality" frame in left-wing discourse may account for these findings. Another possible explanation is that the RWA construct and scale have been developed and predominantly applied with the psychology of the political right, but not the left, in mind (Crawford, 2012). Thus, it may more adequately capture attitudes and behaviors on the right than the left; or, possibly, the three dimensions may be more constrained among high scorers than among low scorers.

These studies involved candidate evaluations in within-party contests, and were therefore limited in that they did not exclusively target conservative Republican participants for Studies 1 and 2 or liberal Democratic participants for Study 3. For Study 1 in particular, the low proportion of Republican participants and increasing progressive attitudes towards marriage equality in the U.S. (Jones, 2013) likely explain the very low support for each anti-same-sex marriage candidate (see Table 1). Unfortunately, the relatively small number of Republicans in Studies 1 and 2 and of Democrats in Study 3 does not allow us to test the differential prediction hypothesis among the targeted party audience, which future research should certainly explore. That said, in the U.S. context, over half of U.S. states allow unaffiliated voters to vote in within-party electoral contests (The Center for Voting and Democracy, n.d.). Moreover, across these three samples, there was certainly variation in RWA, SDO, and party

affiliation, as no bivariate correlation between party affiliation and these ideological attitude dimensions exceeded $r = .54$ (average $r = .35$). Thus, it was appropriate and important to consider all participants for these analyses, regardless of party affiliation or ideological orientation.

One clear limitation of these studies is that they were conducted entirely within the context of the U.S. political system. The results should therefore not apply to all political systems. Future research should therefore explore how framing influences the differential effects of RWA and SDO in within-party electoral contests in other political systems. One potentially interesting line of research could examine whether these differential within-party framing effects depend on the strength of the country's ideological contrast. For example, we should expect to replicate these findings in countries like the United States with relatively weak ideological contrast and thus weaker correlations between RWA and SDO (e.g., Canada, South Africa; Duckitt, 2001; Roccato & Ricolfi, 2005). However, differential framing of within-party political messages may be less effective in countries with strong ideological contrasts and therefore stronger RWA-SDO correlations (e.g., Germany, Australia; Duckitt, 2001; Roccato & Ricolfi, 2005).

Finally, these studies used the DPM model as a vehicle for understanding the dynamics of political message framing in within-party political contests. It stands to reason that similar processes can also be captured using other frameworks in political or moral psychology, such as moral foundations theory, which posits, for example, that the foundations of ingroup, authority, and purity are related but distinct pillars of conservatives' morality (Graham, Haidt, & Nosek, 2009; Weber & Federico, 2013).

Conclusion

While rational self-interest might drive some electoral behavior, psychologists and political scientists have amply demonstrated the influence of emotions, values, and ideology in voting behavior and candidate support (Jost, 2006; Marcus, Neuman, & MacKuen, 2000; Shah, Domke, & Wackman, 1996). The present studies shed new light on how ideological motives for social cohesion (vs. individual liberty) and group dominance (vs. social equality) as captured by RWA and SDO, respectively, can influence candidate support. While we certainly imagine that opportunistic political campaigns could cynically exploit such information, we hope we are not too naïve in suggesting that elected officials can use this information to encourage greater democratic participation and engagement among their respective constituencies.

Notes

i) In this paper, we explored the multidimensionality of RWA, but not SDO. Previous investigators have examined the multidimensionality of SDO using balanced SDO scales (e.g., Ho et al., 2012; Kugler, Cooper, & Nosek, 2010), which we did not include in these studies. Future research could use the balanced multidimensional scales developed by these authors to provide an optimal test of the multidimensional effects of SDO on candidate support.

ii) In all three studies, scales were computed only for participants who completed every scale item. Subsequently, casewise deletion was used for each separate analysis, which explains variation of *Ns* within each study. To examine whether extreme scores in our three samples unduly influenced our conclusions, we calculated Mahalanobis and Cook's distances to identify potential multivariate outliers in the regression analyses reported in these studies (Tabachnick & Fidell, 2013). There were no outliers identified in Studies 1 or 2. In Study 3, only one participant exceeded the critical χ^2 value of 13.816 ($p < .001$, $df = 2$); that said, this participant's responses did not significantly exert influence, as measured by Cook's distance ($D < 1$). As a

precaution, we removed this participant and recalculated the regression analyses. Because removal of this participant did not alter any of our conclusions, we retained this participant in the analyses reported in the main text of Study 3.

iii) In a pilot study, 92 undergraduates were randomly assigned to read a brief description of either people high in RWA or people high in SDO, and chose which of the two frames they believed would be most appealing to that target audience. A chi square test for independence confirmed that people chose the Cohesion Threat frame over the Status Threat frame for people high in RWA and the Status Threat frame over the Cohesion Threat frame for people high in SDO, $\chi^2(1, n = 72) = 31.61, p < .001$.

iv) We did not observe enough variation on political knowledge to examine its moderating effects: in each study, at least 92% of participants answered four of the six items correctly (Study 1: $M = 5.59, SD = 0.78$; Study 2: $M = 5.48, SD = 1.06$; Study 3: $M = 5.33, SD = 0.95$).

v) No items on the RWA and SDO scales were related to attitudes towards immigrants or immigration, so the full scales were used.

vi) Regarding this marginally significant Traditionalism \times Order interaction, simple slope analyses (including SDO as a covariate) indicated that as expected, Traditionalism did not predict Equality candidate support when the argument tailored towards people low in Traditionalism (i.e., the Liberty argument) was presented last ($p = .999$), but it was an unexpected negative predictor of Equality candidate support when the Equality argument was presented last ($p = .005$). Looked at another way, whereas for people high in Traditionalism (one SD above the mean) support for the Equality candidate was the same independent of argument order ($p = .902$), people low in Traditionalism (one SD below the mean) tended to more strongly support the Equality candidate when the Equality argument was presented last than when it was presented first ($p = .177$). These asymmetrical order effects might perhaps have something to do with both the general strength (Rutgers Eagleton Center for Public Interest Polling, 2011) and accessibility (Tadlock et al., 2007) of the Equality argument.

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Competing Interests

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Appendices

Appendix A. RWA Items (Studies 1 – 3)

- It's great that many young people today are prepared to defy authority.
- What our country needs most is discipline, with everyone following our leaders in unity.
- Students at high schools and universities must be encouraged to challenge, criticize, and confront established authorities.
- Obedience and respect for authority are the most important virtues children should learn.
- Our country will be great if we show respect for authority and obey our leaders.
- People should be ready to protest against and challenge laws they don't agree with.
- Nobody should stick to the "straight and narrow"; instead, people should break loose and try out lots of different ideas and experiences.
- The "old-fashioned ways" and "old-fashioned values" still show the best way to live.
- It is important that we preserve our traditional values and moral standards.
- Traditional morality and traditional values have a lot wrong with them.
- The sinful ways of living and behaving of many young people way one day destroy our society.
- Everyone should have their own lifestyle, religious beliefs, and sexual preferences, even if it makes them different from everyone else.*
- Capital punishment is barbaric and never justified.
- Being kind to loafers or criminals will only encourage them to take advantage of your weakness, so it's better to use a firm, tough hand when dealing with them.
- Our society does NOT need a government with stricter and more punitive laws.
- The facts on crime and the recent public disorders show we have to crack down harder on troublemakers if we are going to preserve law and order.
- Our prisons are a shocking disgrace; criminals are unfortunate people who deserve much better care, instead of so much punishment.
- The way things are going in this country, it's going to take a lot of "strong medicine" to straighten out the troublemakers.

Note. The first six items formed the Conservatism dimension; the next six items formed the Traditionalism dimension; the last six items formed the Authoritarianism dimension. The asterisked item was dropped from the analyses in Studies 1 and 3 because of its relevance to sexual orientation and thus same-sex marriage attitudes.

Appendix B. SDO Items (Studies 1 – 3)

- Some groups of people are simply inferior to other groups.
- It's OK if some groups have more of a chance in life than others.
- If certain groups stayed in their place, we would have fewer problems.
- It's probably a good thing that certain groups are at the top and other groups are at the bottom.
- Sometimes other groups must be kept in their place.

- It would be good if all groups could be equal.
- Group equality should be our ideal.
- All groups should be given an equal chance in life.
- We would have fewer problems if we treated people more equally.
- No one group should dominate in society.
- In getting what you want, it is sometimes necessary to use force against other groups.
- To get ahead in life, it is sometimes necessary to step on other groups.
- Inferior groups should stay in their place.
- We should do whatever we can to equalize conditions for different groups.
- Increased social equality.
- We should strive to make incomes as equal as possible.

Note. The first ten items were used in all three studies. The last six items were only used in Study 3.

Appendix C. Texts of the Same-Sex Marriage Message Frames (Studies 1 and 3)

Cohesion Threat Frame (Study 1)

A constitutional amendment is needed to protect the traditional definition of marriage as the union of one man and one woman. This definition of marriage has formed the fundamental building block of all human societies, across all cultures. Throughout human history, marriage has been the most enduring and important human institution. Same-sex marriages would threaten the sacredness of the institution of marriage, would undermine the traditional American family, and would irreparably harm our children. In effect, the legalization of same-sex marriage would destroy the moral fabric of our society. We therefore cannot allow same-sex marriage to become legalized. Congress needs to take action on instituting a constitutional amendment to defend marriage now.

Status Threat Frame (Study 1)

Congress needs to take immediate action and adopt a constitutional amendment to protect the definition of marriage. America is facing tough economic times. When a state recognizes a marriage, it bestows upon the couple certain benefits that are costly to both the state and other individuals. Collecting a deceased spouse's social security, claiming an extra tax exemption for a spouse, and having the right to be covered under a spouse's health insurance policy are just a few examples of the costly benefits associated with marriage. If same-sex marriage were legalized, benefits intended for heterosexual married couples would be given, at the taxpayer's expense, to same-sex couples that do not merit those benefits. Legalizing same-sex marriage would therefore threaten to take away benefits intended for heterosexual couples, and would further deteriorate our already troubled economy.

Liberty Frame (Study 3)

I have a fundamental problem when the government makes decisions about people's personal lives. It is not the government's business to intrude into the bedrooms of consenting adults. Too often we see the government act as if it knows what is best for its people, rather than allowing them the freedom to make their own decisions. In my view, denying gays and lesbians the right to marry is a violation of their personal freedom and individual liberty. Legalizing same-sex marriage will therefore ensure that individual liberty, the central value that our country was founded upon, is guaranteed for gay and lesbian Americans.

Equality Frame (Study 3)

For me, it is a real problem when the law treats one group of Americans as inferior to another group of Americans. Federal and state laws that deny gays and lesbians the right to marry legitimize and foster inequality between heterosexual Americans and gay and lesbian Americans. Marriage inequality has real consequences, too—it denies crucial benefits and privileges to gay and lesbian couples that heterosexual couples receive only because of their sexual orientation. Legalizing same-sex marriage will guarantee that that we preserve the fundamental American value of equality for all, regardless of sexual orientation.