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The Differential Effects of Right-Wing Authoritarianism and Social Dominance Orientation on Political Intolerance

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Decades of scholarship have identified several determinants of political intolerance, including authoritarianism and normative threat. Previous attempts in the literature to associate other individual difference variables (i.e., social dominance orientation [SDO]) and situational variables (i.e., out-groups' gains in power and status) have been unsuccessful. Using a dual-process motivational (DPM) model framework, in Study 1 we found that SDO predicted political intolerance of groups with hierarchy-attenuating political objectives. This relationship was consistent over and above other well-known predictors of political intolerance, including right-wing authoritarianism (RWA). RWA predicted intolerance of groups with both hierarchy-attenuating and cohesion-reducing objectives. In Study 2, we manipulated whether an immigrant-rights group was described as presenting a normative threat or as gaining power and status. Consistent with extant findings, RWA moderated the effect of normative threat on political intolerance. More interestingly, SDO moderated the effect of gains in power and status on political intolerance. The implications of these findings are discussed.

KEY WORDS: political intolerance, right-wing authoritarianism, social dominance orientation, dual process model

In a democratic society, we aren't expected to agree with our political opponents, endorse their political objectives, or even like them very much. We are, however, expected to put up with them—that is, to tolerate their rights to free speech, to assembly, and to advocate for their political objectives. Scholars have defined such *political tolerance* as the extent to which we extend these and other civil liberties and rights to groups or individuals with whom we disagree (Marcus, Sullivan, Theiss-Morse, & Wood, 1995; Sullivan, Marcus, Feldman, & Piereson, 1981).

Since Stouffer's (1955) seminal analysis, several individual difference and situational variables that influence tolerance judgments have been identified. Individual differences in political knowledge (Marcus et al., 1995; Stouffer, 1955) and support for democratic principles (Marcus et al., 1995; Sullivan et al., 1981) are strong predictors of political tolerance. On the other hand, political *intolerance* has been associated with a host of individual difference variables including psychological rigidity and dogmatism (Stouffer, 1955; Sullivan et al., 1981), intolerance of ambiguity (McClosky & Brill, 1983), low openness to experience (Marcus et al., 1995), social conformity (Feldman, 2003), authoritarianism or authoritarian attitudes (Altemeyer, 1988; Duckitt & Farre, 1994; Stouffer, 1955) and perceived threat (both as a predisposition and toward the particular target; Marcus et al., 1995; Stouffer, 1955; Sullivan et al., 1981). The situational variable that has been most

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closely tied to political intolerance is threat to social cohesion and order, or *normative threat* (Stenner, 2005). While some scholars have found that normative threat alone increases political intolerance (Marcus et al., 1995), others have found an interactive effect between normative threat and authoritarianism, such that normative threat increases intolerance especially among authoritarians (the authoritarian dynamic; Stenner, 2005; see also Feldman, 2003; Feldman & Stenner, 1997).

In this article, we shift focus to one individual difference variable and one situational variable that have so far been found to *not* influence political intolerance: the ideological attitude dimension of social dominance orientation (SDO; Pratto, Sidanius, Stallworth, & Malle, 1994; Sidanius & Pratto, 1999) and the probability that a target group will gain status, power, and influence (Gibson, 2006; Gibson & Gouws, 2003; Marcus et al., 1995; Stenner, 2005). Using the theoretical framework of the dual-process motivational model of ideological attitudes (DPM; Duckitt, 2001; Duckitt & Sibley, 2010a), we argue that the relationship between SDO and political intolerance depends on the political objectives of the target group, such that SDO will predict political intolerance only of targets with hierarchy-attenuating political objectives. Moreover, we expect that because power and status gains among disadvantaged social groups threaten to attenuate existing status hierarchies, such conditions will be an especially potent accelerant of political intolerance among those high in SDO.

The Dual-Process Motivational Model (DPM)

Whereas earlier scholars suggested that ideology was best conceived unidimensionally (Adorno, Frenkel-Brunswick, 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 versus individual freedom and autonomy, and the other characterized by economic conservatism, group dominance, and power versus egalitarianism. According to the DPM model, right-wing authoritarianism (RWA; Altemeyer, 1988, 1996) and SDO 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), whereas 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).

According to Duckitt (2001; Duckitt & Sibley, 2010a), 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. These hypothesized causal relationships between the social conformity and tough-mindedness traits, dangerous and competitive worldviews, and the RWA and SDO ideological attitude dimensions have been supported through structural equation modeling (SEM) analyses (Duckitt, 2001; Duckitt, Wagner, du Plessis, & Birum, 2002).

Duckitt and Sibley (2009, 2010a) derive three major hypotheses from the DPM model: the differential prediction hypothesis, the differential moderation hypothesis, and the differential mediation hypothesis. A substantial amount of empirical evidence supports the differential prediction hypothesis, which posits that RWA more strongly predicts attitudes on sociocultural political issues, whereas SDO more strongly predicts attitudes on economic and status hierarchy-related issues (Altemeyer, 1998; Duriez & van Hiel, 2002; van Hiel & Mervielde, 2002; 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. The differential moderation hypothesis predicts that RWA and SDO should moderate the effects of concerns over social cohesion and intergroup dominance on sociopolitical and intergroup attitudes, respectively. For example, Duckitt and Sibley (2010b) recently found that RWA more strongly predicted anti-immigrant attitudes when a bogus immigrant group was described as socially deviant and threatening, whereas SDO more strongly predicted anti-immigrant attitudes when the same immigrant group was described as socioeconomically disadvantaged. Finally, Duckitt (2006) has found support for the differential mediation hypothesis, which predicts that the relationship between RWA and attitudes toward socially threatening groups (e.g., drug dealers) should be mediated by perceived threat from those groups, whereas the relationship between SDO and attitudes toward socially competitive or subordinate groups (e.g., unemployment beneficiaries) should be mediated by perceived competition from those groups. For our analysis of political intolerance, we focus on the differential prediction and moderation hypotheses, but we address implications of the differential mediation hypothesis for political intolerance in the General Discussion.

Previous Research on RWA, SDO, and Political Intolerance

The relationship between political intolerance and authoritarianism or related constructs is well-established (Altemeyer, 1988, 1996, 1998; Duckitt & Farre, 1994; Stouffer, 1955; Sullivan et al., 1981). In fact, early treatments of authoritarianism referred to it as an "antidemocratic personality" and defined it as the "degree of *readiness* to behave antidemocratically should social conditions change in such a way as to remove or reduce the restraint upon this kind of behavior" (Frenkel-Brunswik, Levinson, & Sanford, 1947, p. 40). More recent empirical evidence links political intolerance to the RWA ideological attitude dimension. For instance, many of the same personality traits that have been identified as predictors of political intolerance (i.e., psychological rigidity and dogmatism, low openness to experience, social conformity, dispositionally high-threat perception) are also antecedents of RWA (Altemeyer, 1988; Duckitt, 2001, 2006; Sibley & Duckitt, 2008). RWA predicts antidemocratic attitudes among political elites (Altemeyer, 1996, pp. 284–286), who tend to be more tolerant than the mass public (McClosky & Brill, 1983; Stouffer, 1955). RWA even predicts intolerance of groups one might expect people high in RWA to be sympathetic towards, including right-wing targets (Altemeyer, 1988) and individuals who would oppose a Black majority-ruled South African government (Duckitt & Farre, 1994).

The relationship between RWA and political intolerance likely has its roots in threat perception, as people high in RWA tend to be dispositionally high in threat perception (Altemeyer, 1988, 1996; Duckitt, 2001), and perceived threat is one of the strongest predictors of political intolerance (Marcus et al., 1995). Thus, the RWA attitude dimension seems to encapsulate what Marcus et al. (1995) referred to as a "standing decision" toward political intolerance—that is, an established attitudinal position, or general stance, in opposition to civil liberties and freedoms (see also Sullivan & Transue, 1999). While people high in RWA might not be politically intolerant towards all groups or individuals under all circumstances, they seem predisposed towards antidemocratic attitudes and behavior. According to Stenner (2005), this predisposition towards political and moral intolerance among authoritarians is activated by normative threat. Using childrearing values to measure authoritarianism, Stenner finds that political intolerance increases among people high in authoritarianism under normative threat (see also Feldman, 2003; Feldman & Stenner, 1997). Despite some differences in conceptualization and measurement of authoritarianism and related constructs, these findings regarding the interactive effects of authoritarianism and normative threat are fully in line with the predictions of the DPM model (Duckitt, 2001; Duckitt & Sibley, 2010a).

Despite Gibson's (2006) suggestion that political psychologists examine the effects of SDO on political intolerance, the few attempts to establish such a relationship have been unsuccessful. Altemeyer (1998) had participants read a bogus letter to the editor arguing that Canada's Charter of Rights and Freedoms should be repealed because it "gives rights to everyone," specifically "pornographers, criminals, and abortionists" (p. 94). RWA was more strongly related to the willingness to repeal this bill of rights than was SDO. Feldman (2003) acknowledged the lack of a relationship between SDO and political intolerance in the extant literature and subsequently found that while authoritarianism was related to intolerance of a neo-Nazi group, SDO was not. Thus, the existing literature has concluded that ideological motives to maintain or enhance existing status hierarchies, as expressed through SDO, do not influence political intolerance. Moreover, conditions that would make these motives salient have also seemingly failed to exacerbate political intolerance (Gibson, 2006). For instance, Marcus et al. (1995) found that the probability of a target group gaining power, which should heighten status-based concerns, did not enhance political intolerance. Other scholars have similarly found no effect of status and power concerns on political intolerance (Gibson & Gouws, 2003) or that the effect of such concerns on authoritarians is minimal relative to normative threat (Stenner, 2005).

Applying the DPM to Political Intolerance

People high in SDO oppose hierarchy-attenuating policies because they threaten to upend the existing structural mechanisms that advantage some groups over others (Pratto et al., 1994; Sidanius & Pratto, 1999). We suspect one reason that SDO has not yet been linked to political intolerance is that the political objectives of targets of intolerance judgments in the extant literature have not been expressly hierarchy attenuating. Recall that when Altemeyer (1998) found that RWA was more strongly related than SDO to the willingness to repeal Canada's bill of rights, the specified targets were "pornographers, criminals, and abortionists." However, RWA more strongly predicts attitudes towards sociocultural issues (e.g., pornography and abortion) than SDO (Crawford et al., 2013; Duriez & van Hiel, 2002; van Hiel & Mervielde, 2002; van Hiel et al., 2004), and some items on the RWA scale Altemeyer used in that study assessed attitudes towards pornography and abortion. These factors would have therefore diminished the potential effect of SDO on political intolerance, relative to RWA. Similarly, Feldman (2003) found that SDO did not predict intolerance of a neo-Nazi group, which is decisively not a hierarchy-attenuating target.

Applying the differential prediction hypothesis to political intolerance, we predicted that RWA but not SDO will predict intolerance of targets with social cohesion-reducing political objectives, e.g., those that challenge social and religious norms and values. This prediction is consistent with Altemeyer's (1998) findings on the relationship between RWA and the willingness to oppress such targets. Given that people high in RWA seem predisposed towards political intolerance (Altemeyer, 1998; Duckitt & Farre, 1994), we expected RWA to predict intolerance of targets with hierarchy-attenuating objectives as well. However, we predicted that SDO will also predict intolerance of targets with hierarchy-attenuating political objectives, over and above the effects of RWA and other common predictors of political intolerance. These predictions were tested in Study 1. Consistent with the differential moderation hypothesis (Duckitt & Sibley, 2010a), and the findings of Feldman and Stenner (Feldman, 2003; Feldman & Stenner, 1997; Stenner, 2005), we predicted that conditions of normative threat will heighten political intolerance among those high in RWA. However, we predicted that gains in power, status, and influence by an out-group, which should make motives of intergroup dominance and superiority salient (Duckitt & Sibley, 2010a; Hewstone, Rubin, & Willis, 2002; Thomsen, Green, & Sidanius, 2008), will heighten political intolerance among those high in SDO. We tested these predictions in Study 2 by manipulating whether a target group was described as presenting a normative threat or as gaining power and status.

Study 1

Study 1 tested the prediction that while RWA would predict political intolerance of targets with both cohesion-reducing and hierarchy-attenuating political objectives, SDO would predict intolerance of targets with hierarchy-attenuating objectives but not of those with cohesion-reducing objectives. For targets with cohesion-reducing objectives, we chose gay rights, abortion rights, and church-state separation activists. Political positions that favor the extension of marriage rights to same-sex couples, women's reproductive rights, and the separation of church and state all challenge traditional norms and values and may therefore be perceived as threats to social cohesion. Authoritarianism is related to opposition to same-sex marriage rights (Rowatt, LaBouff, Johnson, Froese, & Tsang, 2009) abortion rights (Peterson, Doty, & Winter, 1993), and support for school prayer (Stenner, 2005).[1] Comparatively speaking, RWA is a stronger predictor than SDO of culturally conservative beliefs in general (van Hiel et al., 2004). More specifically, RWA has been found to be a stronger predictor of beliefs about gay and lesbian relationships than SDO (Crawford et al., 2013) and of a cultural conservatism measure that assessed attitudes toward abortion, among other issues (Duriez & van Hiel, 2002). Although to our knowledge no data exists comparing the effects of RWA and SDO on opposition to the separation of church and state, a host of evidence indicates that RWA is a stronger predictor of religious fundamentalism than SDO (Altemeyer, 1998; Sibley, Robertson, & Wilson, 2006).

For targets with hierarchy-attenuating political objectives, we chose pro-affirmative action, pro-health care reform, and pro-social welfare activists. Political positions that favor affirmative action policies and expanded health care delivery and social welfare all seek to improve the status of disadvantaged groups and may therefore be perceived as threatening existing status hierarchies. Empirical evidence links SDO to opposition to each of these policies (Pratto et al., 1994; Sidanius, Pratto, & Bobo, 1996). Comparatively speaking, SDO is a stronger predictor than RWA of free-market conservatism in general (Duriez & van Hiel, 2002; van Hiel et al., 2004) and of beliefs about affirmative action policy specifically (Crawford et al., 2013). While there is no available evidence to our knowledge comparing the effects of RWA and SDO on support for universal health care or social welfare programs, Altemeyer (1998) found that compared to RWA, SDO was more strongly correlated with his Economic Philosophy Scale, which included several items assessing support for government-sponsored social programs.

Method

Participants

We collected two separate samples for this study. Sample 1 consisted of 80 college students (84% White; 86% female; $M_{age} = 20$ years) who volunteered through our participant pool. Students were sent a link to an online questionnaire and were compensated with course credit for their participation. There are, however, known limitations to using college student samples for research on sociopolitical attitudes (Henry, 2008; Sears, 1986). Therefore, Sample 2 consisted of 100 current U.S. residents (70% White; 63% female; $M_{age} = 35$ years) recruited through Amazon.com's Mechanical Turk (MTurk). MTurk is an online labor market where researchers can recruit participants to complete surveys for compensation. Samples obtained from MTurk possess greater demographic diversity and representativeness than college student samples and meet or exceed the diversity and representativeness provided by typical Internet samples (Buhrmester, Kwang, &

[1] Some versions of the RWA scale include items that explicitly assess attitudes towards gays and lesbians, women's reproductive rights, and prayer in school. We did not include any such items in our research materials in either study.

Gosling, 2011). Researchers have established internal and test-retest reliability in MTurk samples (Buhrmester et al., 2011) and have replicated well-established findings in the social psychology and political science literatures with MTurk samples (Berinsky, Huber, & Lenz, 2012; Horton, Rand, & Zeckhauser, 2011). Interested individuals selected a link to the online survey and were compensated 50 cents for their participation. One participant was dropped for having incomplete data, leaving 99 participants. These two samples were combined for a total sample of 179 participants (76% White; 73% female; M_{age} = 28 years). (Differences between the two samples are discussed in the Results and Discussion section).

Materials and Procedure

Independent and dependent variables. Participants first completed an 18-item RWA scale (Duckitt, Bizumic, Krauss, & Heled, 2010) and a 10-item SDO scale (Sidanius & Pratto, 1999). Scale presentation order was randomized across participants. All items were measured on 7-point scales (1 = *Strongly disagree*; 7 = *Strongly agree*), and average RWA and SDO scales were computed. Participants then provided intolerance judgments of the six targets, with higher scores reflecting greater intolerance (1 = *Strongly disagree*; 6 = *Strongly agree*). Appendix I in the online supplemental material reports these six intolerance judgment items. Item order was randomized across participants.

Covariates and demographic information. Similar to Feldman (2003), we included warmth ratings of these six targets (e.g., "pro-gay rights activists"; "pro-affirmative action activists") as covariates to ensure that attitudes towards the targets were not confounded with political intolerance judgments. These warmth ratings were assessed after the intolerance judgments. Warmth ratings were measured on 0–100 point scales, and item order was randomized across participants. Following the warmth ratings, we assessed political knowledge, a well-established predictor of political tolerance (Marcus et al., 1995; Stouffer, 1955). Participants indicated whether liberals or conservatives support or oppose the policies advocated by the targets (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 the political knowledge measure (scores ranged from 0 to 6). We then assessed ideological self-placement (1 = *Extremely liberal*; 7 = *Extremely conservative*) and party affiliation (1 = *Strong Democrat*; 7 = *Strong Republican*). Lastly, participants provided demographic information such as age, gender, and race/ethnicity.

Results and Discussion

Preliminary Analyses

We expected that warmth ratings and intolerance judgments would be independent of each other and, furthermore, that people would differentiate between cohesion-reducing and hierarchy-attenuating targets. We used confirmatory factor analysis (CFA) using AMOS 18 software (Arbuckle, 2009) to determine whether the two different kinds of target warmth ratings and the two different kinds of intolerance judgments would load on four separate factors as predicted or whether six alternative models provided better fit to the sample data. For these analyses, we excluded cases listwise, leaving a sample size of $N = 166$. Table 1 reports the fit indices for each of these seven measurement models, and descriptions of the six alternative models are described in the table note. The hypothesized four-factor solution had acceptable fit according to the χ^2/df ratio (2.30) and the CFI value (.90) (Bollen & Long, 1993; Hu & Bentler, 1999). The RMSEA value (.098) indicated mediocre fit (MacCallum, Browne, & Sugawara, 1996). The hypothesized model also fit the data better than all of the alternatives. It had a lower AIC value than all of the other models, which had

Table 1. Fit Indices for Measurement Models

Model	χ^2	df	χ^2/2	AIC	RMSEA	SRMR	CFI
4 factors[a]	124.836	48	2.60	184.836	.098	.067	.90
3 factors[b]	172.623	51	3.39	226.623	.120	.083	.83
3 factors[c]	209.702	51	4.11	263.702	.137	.105	.78
6 factors[d]	253.375	39	6.50	331.375	.183	.106	.71
2 factors[e]	220.626	53	4.16	270.626	.138	.101	.77
2 factors[f]	283.118	53	5.34	333.118	.162	.110	.69
1 factor[g]	316.088	54	5.85	364.088	.172	.118	.64

Note. AIC = Akaike information criterion; RMSEA = root-mean-square error of approximation; SRMR = standardized root mean square residual; CFI = comparative fix index. [a]hypothesized model with two warmth factors and two intolerance factors for both cohesion-reducing and hierarchy-attenuating targets; [b]two warmth factors, one intolerance factor; [c]one warmth factor, two intolerance factors; [d]six target factors; [e]one warmth factor, one intolerance factor; [f]one cohesion-reducing factor, one hierarchy-attenuating factor; [g]one factor solution. All chi-square values significant, $p < .001$.

Table 2. Study 1: Descriptive Statistics for and Correlations Among Study Variables

	1	2	3	4	5	6	7
1. RWA							
2. SDO	.51***						
3. Knowledge	−.29***	−.26**					
4. Cohesion-reducing target warmth	−.58***	−.29***	.22**				
5. Hierarchy-attenuating target warmth	−.43***	−.41***	.01	.44***			
6. Cohesion-reducing target intolerance	.67***	.40***	−.37***	−.49***	−18*		
7. Hierarchy-attenuating target intolerance	.64***	.60***	−.38***	−.41***	−.47***	.69***	
M	3.74	2.43	5.08	59.68	55.64	2.58	2.51
SD	.94	1.23	1.32	24.83	22.78	1.18	1.12
α	.90	.93	.67	.69	.79	.64	.76

*Note. df*s ranged from 161 to 177 for correlational analyses. *$p < .05$; **$p < .01$; ***$p < .001$.

poor fit (all χ^2/df ratios > 3, RMSEA > .10, SRMR > .08, and CFI < .90). Thus, a model stipulating separate warmth and intolerance factors for cohesion-reducing and hierarchy-attenuating targets provided mostly acceptable fit to the data and was superior to six alternative models. However, because we observed only acceptable but not "good" fit for this model, the main analyses included intolerance judgments of each target individually as well as composite measures of intolerance towards the cohesion-reducing and hierarchy-attenuating targets.

Table 2 reports the bivariate correlations among and means, standard deviations, and reliability coefficients for the study variables. Average RWA and SDO scores were consistent with those obtained in the extant literature (Altemeyer, 1996, p. 56; Duckitt et al., 2002; Sidanius & Pratto, 1999, pp. 69–70), suggesting that the distributions of scores in this sample were comparable with previous investigations. Both RWA and SDO were moderately and negatively correlated with composite warmth ratings of the cohesion-reducing and hierarchy-attenuating targets and moderately and positively correlated with the two composite measures of intolerance. Warmth ratings of the two kinds of targets were correlated with each other, as were the two composite measures of intolerance.

Primary Analyses

Tests of the differential prediction hypothesis involve comparing the variance independently explained by RWA and SDO (Duckitt & Sibley, 2007, 2010b; Van Hiel et al., 2004). We therefore

conducted one multiple regression analysis for each of the six dependent items, as well as for the composite measures of intolerance of the cohesion-reducing and hierarchy-attenuating targets, for a total of eight separate multiple regression analyses. Political knowledge was included as a covariate in each analysis. The warmth ratings for each specific target were included as a covariate in the regression model for the corresponding intolerance judgment (e.g., warmth ratings of pro-gay rights activists were entered in the model predicting intolerance of pro-gay rights activists). Composite warmth ratings for the three cohesion-reducing targets and three hierarchy-attenuating targets were included in the models for the cohesion-reducing and hierarchy-attenuating targets, respectively. RWA and SDO were also entered in each model.

Table 3 reports the multiple regression analyses on the composite measure of intolerance towards the cohesion-reducing targets and for the three cohesion-reducing targets individually. As predicted, RWA was a strong and robust predictor of intolerance of cohesion-reducing targets in each analysis, over and above the effects of political knowledge and perceived warmth ratings. SDO was not a significant predictor in any of these analyses despite its significant bivariate correlation with the composite measure of intolerance towards the cohesion-reducing targets (see Table 2). Table 4 reports the multiple regression analyses on the composite measure of intolerance towards the hierarchy-attenuating targets and for the three hierarchy-attenuating targets individually. Consistent with expectations, SDO significantly predicted intolerance of hierarchy-attenuating targets in each analysis, over and above the effects of RWA, political knowledge, and warmth ratings.[2]

Modification by sample. Student participants ($M = 5.37$, $SD = .90$) had higher political knowledge scores than MTurk participants ($M = 4.86$, $SD = 1.55$), $t(175) = 2.61$, $p < .05$. No significant sample differences emerged in RWA, SDO, the composite warmth ratings, or the composite measures of intolerance (all ts < 1.77, all ps $> .078$). Furthermore, support for the hypotheses did not vary significantly by sample: in separate hierarchical multiple regression models, we examined whether the sample (i.e., student or MTurk) moderated the effects of RWA and SDO on intolerance by including the dummy-coded sample variable in Step 1 of the models, and the sample X SDO and sample X RWA interactions in Step 2 of the models (Aiken & West, 1991). No significant interactions emerged (all ps $> .148$).

Consistent with prior research (Altemeyer, 1998; Duckitt & Farre, 1994), right-wing authoritarianism predicted political intolerance. Moreover, RWA predicted intolerance over and above political knowledge and perceived warmth ratings and regardless of whether the target's political objectives were social cohesion-reducing or hierarchy-attenuating. These findings suggest that people high in RWA possess a standing decision towards political intolerance (Marcus et al., 1995). Importantly, this study is the first to identify social dominance orientation as a predictor of political intolerance. SDO, which reflects a motive to maintain intergroup dominance and superiority (Duckitt & Sibley, 2010a; Sidanius & Pratto, 1999), predicted political intolerance only of groups whose political objectives were to reduce existing status hierarchies and promote greater social equality. These relationships were significant over and above other well-established predictors of intolerance (i.e., RWA, political knowledge, warmth ratings). These results therefore suggest that previous research (Altemeyer, 1998; Feldman, 2003) had not established a relationship between SDO and political intolerance not because one did not exist, but because those previous investigations, which did not include expressly hierarchy-attenuating groups as targets, had not sufficiently agitated the group-based dominance concerns of those high in SDO. Lastly, these findings extend the

[2] The relationships between RWA, SDO, and the dependent variables were identical when ideological self-placement was also included as a covariate, as well as when all covariates were excluded. Additionally, we ran a series of eight hierarchical multiple regression analyses with the RWA × SDO interaction included in a second step of each model (one for each individual dependent item, and one for each of the composite measures of intolerance). None of these interactions were significant, all ps $> .081$.

Table 3. Study 1: Multiple Regression Analyses on the Cohesion-Reducing Targets

	Cohesion-Reducing Composite				Gay Rights				Abortion Rights				Church-State Separation			
	b	*SE*	*B*	*t*	*b*	*SE*	*B*	*t*	*b*	*SE*	*B*	*t*	*b*	*SE*	*B*	*t*
Knowledge	−.18	.05	−.20	3.24**	−.09	.08	−.08	1.14	−.17	.07	−.17	2.29*	−.27	.09	−.20	3.05**
Warmth	−.01	.01	−.18	2.53*	−.02	.01	−.37	5.04***	−.01	.01	−.11	1.49	−.01	.01	−.13	1.75
RWA	.60	.10	.48	6.06***	.43	.13	.27	3.35**	.56	.12	.40	4.52***	.85	.15	.46	5.53***
SDO	.05	.06	.05	.71	.04	.09	.04	.46	−.02	.09	−.02	.21	.05	.10	.03	.46
R^2				.50				.36				.27				.40
Constant				2.58				2.40				2.49				2.94

Note. All covariates and independent variables are mean-centered. *df*s for these models ranged from (5,151) to (5,158). *$p < .05$; **$p < .01$; ***$p < .001$.

Table 4. Study 1: Multiple Regression Analyses on the Hierarchy-Attenuating Targets

	Hierarchy-Attenuating Composite				Affirmative Action				Health Care Reform				Welfare			
	b	*SE*	*B*	*t*	*b*	*SE*	*B*	*t*	*b*	*SE*	*B*	*t*	*b*	*SE*	*B*	*t*
Knowledge	−.17	.05	−.21	3.67***	−.10	.07	−.09	1.37	−.19	.06	−.21	3.26**	−.22	.06	−.21	3.39**
Warmth	−.01	.01	−.24	3.98***	−.01	.01	−.24	3.23**	−.01	.01	−.21	3.16**	−.01	.01	−.24	3.78***
RWA	.40	.08	.34	5.24***	.47	.11	.32	4.17***	.46	.10	.35	4.78***	.31	.10	.21	2.95**
SDO	.24	.06	.26	4.12***	.21	.09	.18	2.28*	.15	.07	.16	2.20*	.38	.08	.34	4.91***
R^2				.58				.37				.41				.47
Constant				2.50				2.62				2.38				2.52

Note. All covariates and independent variables are mean-centered. *df*s for these models ranged from (5,155) to (5,158). *$p < .05$; **$p < .01$; ***$p < .001$.

dual-process motivational (DPM) model beyond intergroup attitudes (Sibley & Duckitt, 2008) and sociopolitical beliefs (Crawford et al., 2013; van Hiel et al., 2004) to political intolerance, demonstrating that SDO predicts intolerance of groups with hierarchy-attenuating, but not cohesion-reducing, political objectives. Somewhat inconsistent with the DPM model approach, RWA predicted intolerance of not just cohesion-reducing but also hierarchy-attenuating targets, reflecting the fact that people high in authoritarianism are generally predisposed towards political intolerance (Altemeyer, 1988, 1996; Duckitt & Farre, 1994; Stouffer, 1955; Sullivan et al., 1981; Sullivan & Transue, 1999).

Study 2

Guided by the differential prediction hypothesis of the DPM model (Duckitt & Sibley, 2010a), Study 1 demonstrated that SDO predicts political intolerance of targets with hierarchy-attenuating political objectives over and above RWA and other predictors of political intolerance. According to the differential moderation hypothesis of the DPM model, the effects of SDO on intergroup and sociopolitical attitudes should be enhanced by circumstances that elicit concerns over intergroup dominance and superiority (Duckitt & Sibley, 2010a). Such circumstances have been examined as a potential catalyst for political intolerance by other scholars, but without success. For example, Marcus et al. (1995) found that the probability of a target group gaining power and influence did not enhance intolerance. Similarly, Stenner (2005) found that news of a national economic downturn, which should enhance group-based dominance concerns, did not increase political intolerance except among only the most highly authoritarian individuals, and even then, such effects were minor relative to the effect of normative threat.

However, we suspect that the probability of an outgroup gaining power and status should be particularly troubling to those high in SDO, who are motivated to maintain or enhance existing status hierarchies that favor dominant groups over disadvantaged groups (Sidanius & Pratto, 1999). This should especially be the case if the group can be perceived as having hierarchy-attenuating political objectives. Thus, if a political activist group that advocates on behalf of a disadvantaged group were to gain power, status, and influence, those high in SDO should be less likely to extend basic civil liberties and protections to that activist group. We therefore tested the prediction that SDO would more strongly predict political intolerance under conditions that enhance such group-based dominance concerns than those that threaten social cohesion (i.e., normative threat). Based on the differential moderation hypothesis (Duckitt & Sibley, 2010a), as well as other findings that normative threat increases political intolerance among authoritarians (Feldman, 2003; Stenner, 2005), we also tested the prediction that RWA would more strongly predict political intolerance under normative threat than under conditions of enhanced group-based dominance concerns.

To test these predictions in Study 2, we examined political intolerance of an immigrant-rights group. Immigrants may pose threats to social cohesion, as they bring to their host country new customs, and may not readily adopt the customs of their host country (Paxton & Mughan, 2006). However, immigrants may also pose a threat to intergroup dominance and superiority to the extent that they may compete for jobs and other resources (Esses, Jackson, & Armstrong, 1998). Thus, both RWA and SDO predict negative attitudes towards immigrants (Dhont & van Hiel, 2009; Hodson & Costello, 2007; Zakrisson, 2005), and we suspect that while people high in RWA would likely perceive an immigrant-rights group as having social cohesion-reducing political objectives, people high in SDO would likely perceive this same group as having hierarchy-attenuating objectives. Moreover, these perceptions should be amplified by conditions that make normative threat and group-based dominance concerns salient, respectively. Some existing research examining anti-immigrant attitudes already supports this differential moderation hypothesis. For example, Thomsen, et al. (2008) found that whereas conditions that blur existing status boundaries enhanced anti-

immigrant attitudes among those high in SDO, threats to social cohesion heightened anti-immigrant attitudes among those high in RWA. Other evidence indicates that SDO more strongly predicted negative attitudes towards an immigrant group described as socioeconomically disadvantaged, while RWA more strongly predicted negative attitudes towards an immigrant group described as normatively threatening (Duckitt & Sibley, 2010b).

For our purposes of examining political intolerance, we adapted the "normative violations" and "probability of power" manipulations used by Marcus et al. (1995) and applied them to political intolerance of a hypothetical immigrant-rights group, the American Immigration Alliance (AIA). We constructed two vignettes which described the AIA as presenting either a normative threat or as gaining power and status. In the normative threat condition, the AIA holds an unruly and disruptive rally that ultimately culminates in violence among protestors, counterdemonstrators, and police. In the power and status condition, the AIA is described as being financially sound with growing support among young voters and sympathetic political elites (see Appendix II in the online supplemental material for vignette texts). Consistent with the differential moderation hypothesis, we predicted that SDO would more strongly predict intolerance of the AIA in the power and status condition than in the normative threat condition, whereas RWA would more strongly predict intolerance in the normative threat condition than in the power and status condition.

Method

Participants

One hundred and thirty-two current U.S. residents (75% White; 57% female; $M_{age} = 34$ years) volunteered through Mechanical Turk and were compensated 50 cents for their participation.

Materials and Procedures

Participants first completed the RWA and SDO scales, as described in Study 1. They were then randomly assigned to either the normative threat or power and status condition (Appendix II in the online supplemental material). After reading the vignette, participants completed a four-item measure of intolerance of the American Immigration Alliance (AIA). These items measured both support for the AIA's rights (i.e., to organize and influence immigration policy; to teach at public schools and universities) as well as support for increased restrictions on and surveillance of the AIA (i.e., barring them from holding public rallies; tapping their phones). Item order was randomized across participants. These four items were used to create an average measure of intolerance of the AIA, with higher scores reflected greater intolerance. Participants then completed manipulation checks and measures of perceived warmth and competence, which were presented in random order across participants.

To confirm that the AIA was perceived differently across conditions, participants responded to two items presented in random order across participants: "The AIA is likely to disrupt social order" and "The AIA is likely to be successful in their efforts to bring about more lenient U.S. immigration policies." The AIA should be perceived as more disruptive of social order in the normative threat condition but more likely to be successful in the power and status condition.

Recent evidence suggests that groups are evaluated along two fundamental dimensions: how warm one feels towards the group and how competent they believe the group to be (stereotype content model; Fiske, Cuddy, Glick, & Xu, 2002). Study 1 was limited in that it only assessed warmth ratings of the targets. We therefore assessed feelings of both warmth and competence toward the AIA, which were each measured on four-item scales (warm, friendly, honest, and well-intentioned; competent, intelligent, skillful, and capable; Fiske et al., 2002), with the order of these

eight items randomized across participants. Average perceived warmth and perceived competence ratings were computed. The dependent measure, manipulation checks, and perceived warmth and competence ratings were all measured on 6-point scales (1 = *Strongly disagree*; 6 = *Strongly agree*). Participants then completed an eight-item measure of political knowledge similar to the one used in Study 1 (scores ranged from 1 to 8). Lastly, participants provided ideological self-placement, party affiliation, and demographic information such as age, gender, and race/ethnicity.

Results and Discussion

Preliminary Analyses

Table 5 reports the bivariate correlations among and means, standard deviations, and reliability coefficients for the study variables. As in Study 1, average RWA and SDO scores were consistent with those obtained in the extant literature. RWA and SDO were moderately and negatively correlated with perceived warmth and competence towards the AIA. Neither RWA nor SDO were related to the condition variable, but the condition variable was moderately and positively correlated with perceived warmth and competence, suggesting that the AIA was least liked in the normative threat condition than in the power and status condition. The negative correlation between the experimental condition and the dependent measure of intolerance suggests that participants were generally more intolerant of the AIA when they presented a normative threat than when they were gaining power and status.

Independent samples *t*-tests on the manipulation check items indicated that perceptions of the AIA varied by experimental condition. As expected, the AIA was perceived as more likely to disrupt social order in the normative threat condition ($M = 4.09$, $SD = 1.13$) than in the power and status condition ($M = 3.09$, $SD = 1.22$), $t(129) = 4.87$, $p < .001$. Conversely, the AIA was perceived as more likely to successfully influence immigration policy in the power and status condition ($M = 4.00$, $SD = .91$) than in the normative threat condition ($M = 2.82$, $SD = 1.34$), $t(129) = 5.88$, $p < .001$.

Primary Analyses

We predicted that SDO would more strongly predict intolerance of the AIA in the power and status condition than in the normative threat condition, whereas RWA would more strongly predict intolerance in the normative threat condition than in the power and status condition. Following Aiken and West (1991), these hypotheses were tested in a two-step hierarchical regression analysis on the

Table 5. Study 2: Descriptive Statistics for and Correlations Among Study Variables

	1	2	3	4	5	6	7
1. RWA							
2. SDO	.41***						
3. Political knowledge	−.19*	−.34***					
4. Warmth	−.34***	−.27**	.02				
5. Competence	−.48***	−.27**	.08	.73***			
6. Condition	−.01	.07	.01	.39***	.37***		
7. Intolerance of AIA	.52***	.37***	−.40***	−.44***	−.50***	−.22*	
M	3.77	2.48	6.78	3.78	4.96	.49	2.50
SD	1.18	1.42	1.51	1.11	.93	.50	1.10
α	.93	.94	.63	.91	.91	–	.76

Note. AIA stands for *American Immigrant Alliance*, the target of the judgment. *df*s ranged from 125 to 129 for correlational analyses. *$p < .05$; **$p < .01$; ***$p < .001$.

Table 6. Study 2: Hierarchical Multiple Regression Analysis on the Immigrant-Rights Target Group

	Step1				Step 2			
	b	*SE*	*B*	*t*	*b*	*SE*	*B*	*t*
Political knowledge	–.20	.05	–.27	3.74***	–.18	.05	–.25	3.45**
Warmth	–.11	.10	–.12	1.14	–.09	.10	–.10	.93
Competence	–.21	.13	.18	1.64	–.19	.12	–.17	1.56
RWA	.31	.08	.32	3.87***	.47	.11	.50	4.29***
SDO	.05	.06	.06	.75	–.07	.08	–.09	.89
Condition	–.26	.17	–.12	1.55	–.31	.17	–.14	1.89†
RWA × Condition					–.27	.14	–.20	1.90†
SDO × Condition					.26	.12	.21	2.22*
R^2				.47				.50
ΔR^2				.47***				.03*
Constant				2.62				2.63

Note. Political knowledge, warmth, competence, RWA, and SDO were mean-centered. *df*s = 6, 177 in Step 1; *df*s = 8, 115 in Step 2. †$p < .07$; *$p < .05$; **$p < .01$; ***$p < .001$.

dependent measure of intolerance of the AIA. Political knowledge, warmth ratings, competence ratings, RWA, SDO, and experimental Condition (0 = normative threat, 1 = status and power) were entered into Step 1. The RWA × Condition and SDO × Condition interactions were entered into Step 2.

Table 6 reports the results of this hierarchical regression analysis. Significant main effects of political knowledge and RWA indicated that lack of political knowledge and RWA predicted intolerance of the AIA. Consistent with Marcus et al.'s (1995) findings, people were marginally more intolerant in the normative threat condition than in the power and status condition ($p = .062$). Based on the hypotheses, we expected significant SDO × Condition and RWA × Condition interactions, such that SDO more strongly predicted intolerance in the power and status condition than in the normative threat condition, and RWA more strongly predicted intolerance in the normative threat condition than in the power and status condition. As expected, the SDO × Condition interaction was statistically significant ($p = .029$), and the RWA × Condition approached significance ($p = .059$).[3]

Figure 1 presents the SDO × Condition interaction. As expected, simple slopes indicated that SDO predicted intolerance of the AIA in the power and status condition ($b = .21$, $SE = .09$, $B = .27$, $t = 2.28$, $p = .026$), but not in the normative threat condition ($b = –.08$, $SE = .08$, $B = –.12$, $t = 1.04$, $p = .301$). Looked at another way, whereas those high in SDO (1 SD above the mean) were equally intolerant of the AIA across conditions ($b = .04$, $SE = .22$, $B = .02$, $t = .20$, $p = .842$), those low in SDO (1 SD below the mean) were more intolerant of the AIA in the normative threat condition than in the power and status condition ($b = –.67$, $SE = .24$, $B = –.31$, $t = 2.76$, $p = .007$).

Figure 2 presents the RWA × Condition interaction. Again, as expected, simple slopes indicated that RWA predicted intolerance of the AIA in the normative threat condition ($b = .45$, $SE = .12$, $B = .47$, $t = 3.69$, $p = .001$) but did not significantly predict intolerance in the power and status condition ($b = .17$, $SE = .11$, $B = .19$, $t = 1.55$, $p = .127$). Looked at another way, whereas those high in RWA (1 SD above the mean) were more intolerant of the AIA in the normative threat condition

[3] With ideological self-placement included as a covariate in the model, the SDO × Condition interaction was still statistically significant (p = .032), and the RWA × Condition interaction was still marginally significant (p = .086). The same can be said for when all covariates were removed from the model (*p*s = .075 and .005, respectively). We also ran a three-step hierarchical regression analysis to test for a possible RWA × SDO × Condition interaction, but none emerged ($p = .225$). We also examined whether RWA or SDO moderated the effects of the condition variable on warmth ratings, competence ratings, or the manipulation checks. None of these interactions were significant, all *p*s > .119.

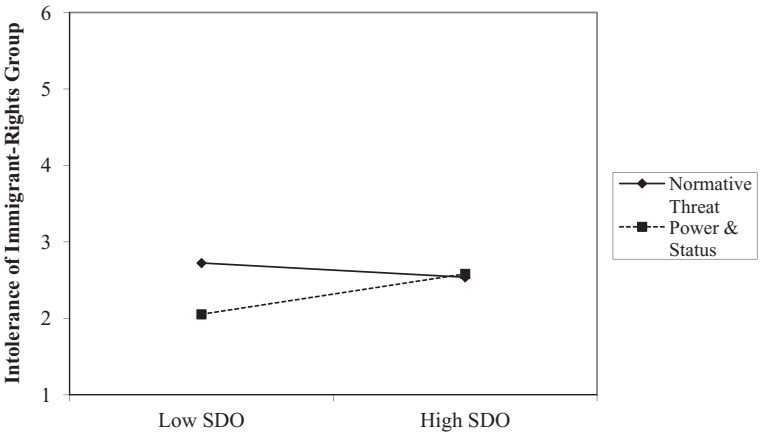

Figure 1. Study 2: Effect of SDO on intolerance of the immigrant-rights group by experimental condition.

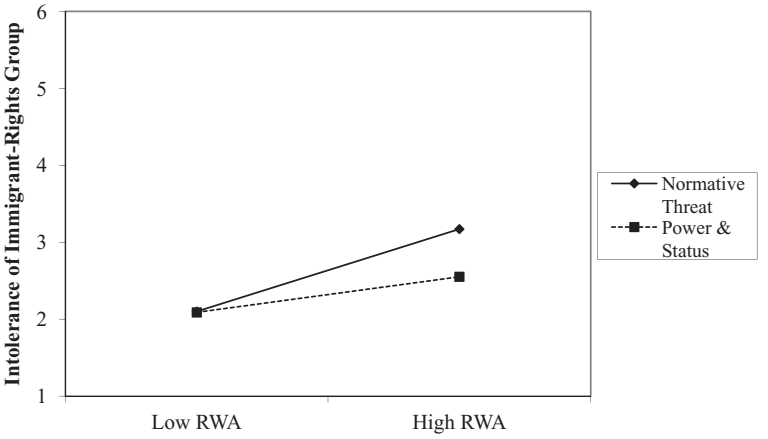

Figure 2. Study 2: Effect of RWA on intolerance of the immigrant-rights group by experimental condition.

than in the power and status condition ($b = -.62$, $SE = .24$, $B = -.28$, $t = 2.53$, $p = .013$), those low in RWA (1 SD below the mean) were equally tolerant of the AIA across conditions ($b = -.01$, $SE = .22$, $B = -.01$, $t = .04$, $p = .969$).

In their influential work on political tolerance, Marcus et al. (1995) found that political intolerance does not increase as a function of whether a least-liked group is likely to gain power and status, and others have drawn similar conclusions (Gibson, 2006; Gibson & Gouws, 2003). Drawing on the differential moderation hypothesis derived from the DPM model (Duckitt & Sibley, 2010a), we expected that the effect of an immigrant-rights group gaining power, status, and influence on political intolerance would be moderated by social dominance orientation, which expresses the motive to maintain or enhance intergroup dominance and superiority (Sidanius & Pratto, 1999). As expected, SDO significantly predicted intolerance of an immigrant-rights group when that group was described as gaining power and status, but not when that same group was described as presenting a normative threat. Additionally, while there was a nonsignificant trend for RWA to predict intolerance when the immigrant-rights group was described as gaining power and status, RWA did significantly predict intolerance under normative threat. These findings are consistent with both the DPM model's

prediction that the effect of normative threat on intergroup and sociopolitical attitudes will be moderated by RWA but not SDO, as well as Stenner's (2005) findings that relative to other kinds of threats (including economic decline and the probability that Blacks will make economic gains), normative threat uniquely enhances political intolerance among authoritarians.

Differences among people low and high in RWA and SDO provide an additional interesting angle on these findings. While people low in SDO were more intolerant of the AIA under normative threat than threat to power and status (as people generally are; Marcus et al., 1995), people high in SDO were as intolerant of the AIA in the power and status condition as they were in the normative threat condition. Consistent with Stenner (2005), people high in RWA were more intolerant under normative threat than under threat to status and power. The fact that people low in RWA were equally tolerant of the AIA across conditions highlights the importance they place on individual autonomy and freedom (Crawford, 2012; Duckitt & Sibley, 2010a).

General Discussion

Across two studies, we provide the first evidence for the relationship between political intolerance and social dominance orientation, an ideological attitude dimension associated with maintaining the superiority of certain socially constructed groups over others (Duckitt & Sibley, 2010a; Sidanius & Pratto, 1999). Guided by the dual-process motivational model (DPM; Duckitt, 2001; Duckitt & Sibley, 2010a), we predicted that RWA and SDO would differentially predict political intolerance of targets with social cohesion-reducing and hierarchy-attenuating political objectives, respectively (Study 1), and that they would differentially moderate the effects of normative threat and group-based dominance concerns on political intolerance, respectively (Study 2).

These hypotheses were largely supported. First, the effects of RWA on political intolerance were very much consistent with extant findings in the DPM model and political tolerance literatures. In Study 1, while factors such as political knowledge and attitudes towards the target predicted intolerance, RWA was consistently a strong predictor of political intolerance, regardless of whether the group's political objectives were cohesion-reducing or hierarchy-attenuating. In Study 2, RWA predicted intolerance of the immigrant-rights group regardless of condition, but it was an especially potent predictor of intolerance under normative threat. Overall, these results are consistent with existing literature indicating that authoritarians are predisposed towards political intolerance (Altemeyer, 1988, 1996; Duckitt & Farre, 1994; Stouffer, 1955; Sullivan et al., 1981; Sullivan & Transue, 1999) and that normative threat is especially likely to increase intolerance among authoritarians (Feldman, 2003; Feldman & Stenner, 1997; Stenner, 2005).

Of course, the more novel and important findings here are those regarding the relationship between SDO and political intolerance. Earlier investigations suggested that whereas the motives for social cohesion and collective security captured by RWA were strong determinants of political intolerance, the group-based dominance motives captured by SDO were not (Altemeyer, 1998; Feldman, 2003). However, those investigations explored intolerance towards targets such as pornographers, abortionists, and neo-Nazis (Altemeyer, 1998; Feldman, 2003), groups that do not expressly agitate hierarchy-attenuating motives. Study 1 determined that SDO *does* predict political intolerance, even above political knowledge, attitudes towards the group, and RWA, but only when those group's political objectives are hierarchy-attenuating. This pattern was observed across three separate targets with varying political objectives (support for affirmative action, social welfare policies, and health care reform), and across both student and nonstudent samples. In Study 2, consistent with Marcus et al.'s (1995) findings, people were generally more politically intolerant when an immigrant-rights group presented a normative threat than when it stood to gain power and status. However, our results advance the political tolerance literature by determining that gains in power and status by a group with potentially hierarchy-attenuating political objectives is an especially potent

catalyst for intolerance among people high in SDO. As Figure 1 indicates, the probability of power and status gains among the immigrant-rights group increased intolerance among those high in SDO to levels observed under normative threat. Thus, for people who are motivated by group dominance and superiority (i.e., people high in SDO), gains in power and status among advocates for a disadvantaged social group appear to be as threatening as when that same activist group causes societal disarray and disorder.

These studies are the first to integrate two rich literatures: a long-standing tradition of political tolerance research (Stouffer, 1955; Marcus et al., 1995; Sullivan & Transue, 1999) with the DPM model, a recently developed perspective for understanding the antecedents and consequences of two related but distinct ideological attitudes. Our results advance the field's understanding of political intolerance in two important ways. First, Stenner (2005) has persuasively argued that the motives for social cohesion and collective security captured by authoritarianism are uniquely powerful determinants of political intolerance. These studies show that motives to maintain or enhance existing status hierarchies, as captured by SDO, can also lead to political intolerance. Second, these findings indicate that the effect of the political context on intolerance depends on one's ideological motives: while conditions that cause societal disarray and disorder (i.e., normative threat) generally enhance intolerance relative to conditions that disrupt existing status hierarchies (i.e., gains in power and status), especially among people motivated to maximize social cohesion (i.e., high in RWA), such disruptions to existing status hierarchies provoke political intolerance among people who seek to maintain or enhance existing status hierarchies (i.e., high in SDO) to levels observed under normative threat.

These results also inform the DPM model, extending two of its three predictions to the domain of political intolerance. For the differential prediction hypothesis, the results from Study 1 slightly deviated from the DPM model's expectations. Consistent with that hypothesis, SDO only predicted intolerance of targets with hierarchy-attenuating, not cohesion-reducing, political objectives. However, RWA predicted intolerance of both kinds of targets. RWA is likely such a strong predictor of political intolerance because of its relationship to threat perception (Altemeyer, 1988, 1996; Duckitt, 2001), one of the strongest predictors of political intolerance (Marcus et al., 1995; Sullivan & Transue, 1999). Thus, for RWA, political intolerance may set a limit for the differential prediction hypothesis, which has been convincingly supported in research in the domains of intergroup or sociopolitical attitudes (Crawford et al., 2013; Duriez & van Hiel, 2002; Sibley & Duckitt, 2008; van Hiel et al., 2004). The results of Study 2 also present a slight deviation from the differential moderation hypothesis, which would expect that among people high in SDO, intolerance of the immigrant-rights group would be greater in the power and status condition than the normative threat condition. Instead, while SDO predicted intolerance in the power and status condition as predicted, people high in SDO were as intolerant in this condition as in the normative threat condition. This finding seems consistent with evidence from Study 2 and elsewhere (Marcus et al., 1995; Sullivan et al., 1981) that normative threat is an especially potent predictor of political intolerance. Thus, perceptions that a group is responsible for causing societal chaos and disorder may place a ceiling on political intolerance, even among people high in SDO. Of course, Study 2 also indicated that authoritarianism raises this ceiling, a finding consistent with the DPM model and other perspectives (Feldman, 2003; Feldman & Stenner, 1997; Stenner, 2005). Together, we do not believe that these findings challenge the DPM model; rather, they suggest that the exceptional effects of RWA and normative threat on political intolerance lead to slight alterations of the model's hypotheses.

These studies were guided by the DPM model, which conceptualizes the RWA and SDO scales as measures of ideological attitude dimensions rather than measures of personality (Duckitt & Sibley, 2009, 2010a). However, the extant political tolerance literature has treated "authoritarianism" as more akin to a personality variable. For example, Marcus et al. (1995) characterize "authoritarianism" as a *predisposition* rather than an attitudinal position (i.e., standing decision). Feldman and

Stenner (Feldman, 2003; Feldman & Stenner, 1997; Stenner, 2005) also identify "authoritarianism" as a predisposition, which they operationalize as the endorsement of strict childrearing values. That said, we believe that our understanding of RWA as an ideological attitude dimension that captures an authoritarian predisposition is fully in line with this previous scholarship. According to Duckitt (2001; Duckitt & Sibley, 2010a), the antecedents of RWA include much of what we associate with an authoritarian predisposition, including experiences of punitive socialization, a personality style characterized by social conformity, and a fundamental belief that the world is a dangerous place. In fact, Stenner (2005) employs the RWA scale as a dependent measure of the "expression" of the authoritarian predisposition.

Limitations and Future Directions

We did not measure perceived normative threat in Study 1, which has been common practice in past political tolerance research (Feldman, 2003; Marcus et al., 1995; Stenner, 2005). We made this decision for two reasons. First, we planned on manipulating normative threat in Study 2, given our prediction that RWA would moderate its effects on intolerance of the immigrant-rights group. Second, a priori, it was unclear to us whether perceived normative threat should be as potent a catalyst for intolerance among those high in SDO as perceived competition. Recall that the differential mediation hypothesis predicts that the relationship between RWA and attitudes toward socially threatening groups should be mediated by perceived threat from those groups, whereas the relationship between SDO and attitudes toward socially competitive or subordinate groups should be mediated by perceived competition from those groups. Thus, perceptions of normative threat might not best explain intolerance towards hierarchy-attenuating targets among people high in SDO. Based on our findings from Study 1, we would expect that the relationship between RWA and intolerance of both cohesion-reducing and hierarchy-attenuating targets would be mediated by perceived normative threat from those targets, whereas the relationship between SDO and intolerance of hierarchy-attenuating targets would be mediated by perceptions that those targets threaten the status hierarchy. Future research could test these predictions.

Study 2 utilized modified versions of Marcus et al.'s (1995) normative violations and probability of power manipulations to examine the effects of normative threat and gains in power and status on intolerance among those high in RWA and SDO, respectively. In addition to those two manipulations, Marcus et al. (1995) also manipulated normative *reassurance* (i.e., peaceful and orderly demonstration) and the *low* probability of the target group gaining power. Based on the findings from Study 2, as well as the DPM model, we suggest that normative reassurance might increase tolerance among those high in RWA relative to normative threat, while reassurance that a target group will likely *not* gain political power will increase tolerance among those high in SDO relative to a condition in which the group gains power and status. Using this framework, future research could examine conditions that would thus optimize political tolerance among those high in right-wing authoritarianism and social dominance orientation.

There are several reasons why we may have underestimated the effects of RWA and SDO on political intolerance because of our use of Mechanical Turk (MTurk) samples in these studies. First, although MTurk samples are more representative of the U.S. population than convenience samples of college students, they are not as representative as national probability samples such as those used in the ANES, which tend to be older and more politically conservative than MTurk samples (Berinsky et al., 2012). Had we included older and more conservative participants in our samples, the observed effects of RWA and SDO on intolerance may have been stronger. Second, respondents in online samples like those obtained from MTurk can be less attentive than student participants (Goodman, Cryder, & Cheema, 2012; Oppenheimer, Meyvis, & Davidenko, 2009). Oppenheimer et al. (2009) find that removing participants who fail embedded attention checks can reduce error

variance and increase statistical power in online samples. We did not embed attention checks in these studies. Thus, it is possible we have underestimated the effects of RWA and SDO on intolerance because some inattentive participants may have been retained. It would therefore be optimal to replicate these findings in nationally representative samples of attentive respondents using embedded experimental manipulations. That said, given that Berinsky et al. (2012) note that locally obtained convenience samples (e.g., college students) are the modal sample type for experiments in political science, we agree with those authors that MTurk presents a valuable approach for conducting internally valid experiments in political science.

Conclusion

If authoritarianism reflects a desire for social cohesion and collective security, then it seems only right that the extant literature has largely focused on the effects of authoritarianism on political intolerance and the societal conditions that induce intolerance among authoritarians (Altemeyer, 1998; Duckitt & Farre, 1994; Feldman & Stenner, 1997; Marcus et al., 1995; Stenner, 2005). The present studies extend this rich literature by implicating the motive to maintain intergroup dominance and superiority (as expressed by social dominance orientation) in political intolerance of groups with hierarchy-attenuating political objectives. Moreover, this research is the first to indicate that for those relatively high in intergroup dominance motives, changes to societal power structures are as strong a catalyst for political intolerance as societal disorder and disarray, i.e., normative threat. This is important to both our theoretical and practical understanding of political tolerance—while most people may feel relatively unthreatened when disadvantaged groups promise to climb the social ladder, such conditions can have an effect on those with strong intergroup dominance motives that may threaten the rights and civil liberties of others.

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