

**Research article**

**Symbolic threat and social dominance among liberals and conservatives:  
SDO reflects conformity to political values**

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*Abstract*

*Three studies tested the effects of symbolic threat to group values and strength of ingroup (political party) identification on social dominance orientation (SDO), a measure of tolerance for social hierarchies. In Studies 1 and 3, conservative participants were made to feel as though their group's values were either threatened or not threatened by liberals prior to completing the SDO measure. In Studies 2 and 3, liberal participants were made to feel as though their group's values were either threatened or not threatened by conservatives prior to completing the SDO measure. Results demonstrated that high ingroup (political party) identification was associated with high SDO scores for threatened conservatives, and with low SDO for threatened liberals. These findings suggest that in response to symbolic threat, SDO can shift in directions consistent with protecting the ingroup's identity. Copyright © 2009 John Wiley & Sons, Ltd.*

Intergroup relations are rife with examples of social hierarchies. These hierarchies manifest themselves through differences in wages (e.g., men and women), occupational prestige (e.g., white- and blue-collar workers), formal power (e.g., managers and subordinates), and informal influence (e.g., cliques in schools). It is therefore important to understand precisely what it means to tolerate hierarchies between groups. In particular, does tolerance for hierarchies reflect a general desire for group-based inequality, or can it also reflect the ingroup's specific beliefs and values?

One of the best-known psychological measures of tolerance for hierarchies is social dominance orientation (SDO) (Pratto, Sidanius, Stallworth, & Malle, 1994; Sidanius, 1993). Although SDO was originally designed to assess individuals' chronic attitudes toward group-based inequality, it has recently been shown to change in response to contextual influences (Levin, 1996 *cf.* Sidanius & Pratto, 1999; Schmitt, Branscombe, & Kappen, 2003; Sidanius, Pratto, van Laar, & Levin, 2004). Nevertheless, most studies have continued to treat SDO as a stable personality variable and hence have focused on its consequences rather than its causes (Sidanius & Pratto, 1999). A number of questions therefore remain about what SDO represents and how it arises.

In this paper, we argue that SDO can reflect conformity to the social and political values of the ingroup, especially among highly identified members who believe their ingroup's values are threatened. Building upon previous research (Morrison & Ybarra, 2008), we assess the effects of intergroup threat and strength of group identification on SDO. However, we also test the possibility that the direction of these effects depends on whether the ingroup's core values reinforce or attenuate social hierarchies. To do so, we manipulate perceived threat to group values, referred to as *symbolic threat* (Stephan, Ybarra, & Bachman, 1999; Stephan, Ybarra, Martinez, Schwarzwald, & Tur-kaspa, 1998; Stephan, Ybarra, & Morrison, 2008), among two groups known to differ from one another in their tolerance for hierarchies: Conservative Republicans and liberal Democrats in the United States. Specifically, we threaten Republicans with the notion that Democrats are jeopardizing their party's values, and *vice versa*. Our hypothesis is that the combination of

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symbolic threat and high ingroup identification should increase SDO among conservatives (Republicans) but decrease SDO among liberals (Democrats).

### THREAT AND SOCIAL DOMINANCE ORIENTATION

Social dominance theory (SDT) posits that in contemporary societies, inequalities between groups are perpetuated through “hierarchy-enhancing” beliefs, values, and institutions (Pratto et al., 1994; Sidanius, 1993; Sidanius & Pratto, 1999). From the perspective of SDT, some individuals are more inclined to accept hierarchies than are other individuals, and SDO measures such an inclination (Pratto et al., 1994). People with high SDO hold more favorable attitudes toward group-based hierarchies than do people with low SDO (Sidanius et al., 2004). As such, high SDO has been found to predict support for policies that legitimize or reinforce hierarchies (e.g., military programs, capital punishment) and opposition to policies that delegitimize or attenuate hierarchies (e.g., affirmative action, gay and lesbian rights) (Pratto et al., 1994; Sidanius & Pratto, 1999).

Most research has treated SDO as a dispositional variable that influences various social and political attitudes (Sidanius et al., 2004). Some studies, however, have illustrated that SDO can shift in ways that reflect what is salient in the particular context. In the first investigation of this kind, members of a relatively high-status Jewish sect in Israel had higher SDO scores than did their counterparts in a relatively low-status sect, but only when their sect membership was made salient. When reminded instead of their national identity, these differences disappeared (Levin, 1996; *cf.* Sidanius & Pratto, 1999). The presumed reason was that support for group-based inequality (i.e., high SDO) is consistent with the interests of high-status groups, but not low-status groups. Thus, peoples’ SDO scores do not depend only on the extent to which they favor hierarchical group relations, in general, but also on the social category or issue that happens to be salient at the time (see also Guimond, Dambrun, Michinov, & Duarte, 2003; Huang & Liu, 2005; Lehmiller & Schmitt, 2007; Schmitt et al., 2003). Such findings suggest that it is important to study the antecedents as well as consequences of SDO.

Further supporting the idea that SDO is malleable across situations, recent research has shown that group members’ SDO scores can fluctuate in response to realistic threat, defined as the perception that other groups have the potential to jeopardize the ingroup’s power and resources (Morrison & Ybarra, 2008; see also Maddux, Galinsky, Cuddy, & Polifroni, 2008; Riek, Mania, & Gaertner, 2006; Stephan et al., 2008). In one experiment (Morrison & Ybarra, 2008, Study 3), non-science college majors responded to several statements about science majors that either connoted realistic threat (e.g., “Science majors are overly competitive”) or not (e.g., “Science majors are physically unattractive”), prior to completing the SDO scale. Participants in the realistic threat condition had higher subsequent SDO scores than did those in the control condition, but especially if they considered their academic major to be an important part of their self-definition—in other words, if they identified strongly with their ingroup (see Tajfel & Turner, 1986). These results were thought to stem from a motivation to protect the ingroup’s power and material resources. As such, they are consistent with the notion that SDO may reflect support for specific types of inequalities that benefit the ingroup (see Lehmiller & Schmitt, 2007; Schmitt et al., 2003).

The above research provides initial evidence that intergroup threat can affect SDO, at least among those whose group membership is central to their sense of self (Morrison & Ybarra, 2008). But because this research used groups whose values were not clearly compatible or incompatible with high SDO (i.e., non-science majors, non-Asian Americans), it does not thoroughly address the question of when threat should trigger changes in support for group-based inequality. That is, it remains unclear whether threat-induced increases in SDO can also be observed among groups that are less tolerant of social hierarchies, or whether threat may actually decrease the SDO scores of members of such groups. If true, the latter would suggest that SDO does not simply represent a personality trait, or a desire for the ingroup to be more dominant than outgroups, but that it can instead represent a desire to preserve the ingroup’s fundamental values and way of life. To test this possibility, the present paper focuses on symbolic threat to the ingroup’s values rather than realistic threat to the ingroup’s power, in order for the hypothesized response to threat (i.e., conformity to group values) to match the specific type of threat experienced (Wicklund & Gollwitzer, 1982; Zarate, Garcia, Garza, & Hitlan, 2004).

### THREAT AND CONFORMITY TO GROUP VALUES

According to SDT, groups and institutions are often defined in terms of whether their values enhance or attenuate social hierarchies (Sinclair, Sidanius, & Levin, 1998). Members of “hierarchy-enhancing” groups and institutions (e.g., police

officers, criminal prosecutors) have higher SDO on average than do members of “hierarchy-attenuating” groups and institutions (e.g., human rights advocates, public defenders), though there is some variation in SDO scores within each of these groups (Sidanius, Liu, Shaw, & Pratto, 1994; Sidanius, Pratto, Sinclair, & van Laar, 1996). Thus, high SDO is one indicator of a group’s support for hierarchy-enhancing values, whereas low SDO is one indicator of a group’s support for hierarchy-attenuating values. Though people’s prior levels of SDO help to determine whether they join hierarchy-enhancing or hierarchy-attenuating groups in the first place (Sidanius, Pratto, Sinclair, et al., 1996), their SDO scores can also change as they spend more time in those groups (Guimond et al., 2003).

We propose that in response to symbolic threat, SDO scores may either increase (for hierarchy-enhancing group members) or decrease (for hierarchy-attenuating group members). Related to this proposal, some evidence suggests that threat can trigger increases in conformity to the ingroup, a phenomenon that stems from the more general desire to protect the group’s interests during times of threat (see Branscombe, Ellemers, Spears, & Doosje, 1999). In one experiment, participants who read a threatening passage about an outgroup subsequently adhered more rigidly to their group’s culture and linguistic dialect than did participants who read a non-threatening passage (Vaes & Wicklund, 2002).

Other research suggests that the degree of group identification also matters. For example, intergroup threat can lead members of a group with collectivist values to exhibit higher levels of collectivism overall, but only if they identify strongly with the group in the first place (Jetten, Postmes, & McAuliffe, 2002, Study 3). Stated more generally, those who view the ingroup as central to their self-concept are particularly likely to increase their commitment to the group in response to threat. However, both this study and the Vaes and Wicklund (2002) experiment manipulated threat via information that the outgroup was superior to the ingroup on various dimensions, which could be seen as more similar to realistic than symbolic threat. It is therefore unclear whether participants did in fact seek to conform to the ingroup’s values, or whether they were more interested in maintaining the ingroup’s status and reputation. In the present paper, we directly manipulate symbolic threat, as well as control for perceptions of group status, to help determine whether any changes in SDO actually reflect a desire to preserve group values as opposed to status.

We have reviewed literature suggesting that certain groups can be associated with either high or low tolerance for hierarchies, and that the combination of symbolic threat and group identification can predict adherence to the values of the ingroup. Thus, the hypothesized relationship between threat, group identification, and SDO should depend on the ingroup’s espousal of hierarchy-enhancing *versus* hierarchy-attenuating values. Because high SDO is a manifestation of hierarchy-enhancing values, high group identification should predict high SDO scores among threatened members of hierarchy-enhancing groups. Conversely, because low SDO is a manifestation of hierarchy-attenuating values, high group identification should predict low SDO scores among threatened members of hierarchy-attenuating groups. In each case, SDO would represent a means of ensuring that the ingroup retains its fundamental values and way of life, which could involve either support for or opposition to social hierarchies.

It is important to note that most existing research on threat and its consequences for political values has measured right-wing authoritarianism (RWA) rather than SDO. RWA assesses one’s submissiveness to ingroup authorities, aggressiveness toward outgroups, and desire for social order (Altemeyer, 1998). Across several studies, threat has been shown to increase both authoritarian behaviors (Doty, Peterson, & Winter, 1991; Sales, 1973) and RWA scores (Duckitt & Fisher, 2003). However, these studies involved individual-level threats (i.e., to personal safety), rather than the group-level threats (i.e., to ingroup values) manipulated in the present research. Because RWA measures individuals’ motives to submit to authority and preserve social order (see Altemeyer, 1998; Sidanius et al., 2004) and SDO measures tolerance for group-based hierarchies, it is likely that individual-level threats would have a greater impact on RWA than SDO, whereas group-level threats would have a greater impact on SDO than RWA.

## OVERVIEW OF RESEARCH

The present studies tested predictions using a real intergroup context: Democrats and Republicans in the United States. Generally, the Democratic party is associated with liberal values and practices (e.g., support for affirmative action, increased government spending), whereas the Republican party is associated with conservative values and practices (e.g., opposition to affirmative action, decreased government spending). Most relevant to the current set of studies, Republicans (or more generally, political conservatives) tend to have higher SDO than do Democrats (or more generally, political

liberals) overall. These differences in SDO suggest that the conservative Republican value system reflects more tolerance for group-based hierarchies than does the liberal Democratic value system (Pratto et al., 1994; Sidanius & Pratto, 1999).

In all three studies, we manipulated symbolic threat to the ingroup's political values using newspaper editorials. In Study 1, Republican participants were exposed to either high or low levels of symbolic threat, with Democrats as the outgroup. We predicted that among threatened Republicans, those who identified strongly with their political party would subsequently exhibit *higher* SDO scores than those who identified less strongly, as such scores indicate tolerance of group-based hierarchies. In Study 2, Democratic participants read a newspaper editorial that elicited either high or low levels of symbolic threat, with Republicans as the outgroup. Here, we hypothesized that among threatened Democrats, those who identified strongly with their political party would subsequently exhibit *lower* SDO scores than those who identified less strongly, as such scores indicate intolerance of group-based hierarchies.

In Study 3, we included both Republican and Democratic participants, and we used a different, more direct manipulation of symbolic threat. We predicted that among Republicans exposed to symbolic threat, high group identification would be associated with high SDO scores. Conversely, we predicted that among Democrats exposed to symbolic threat, high group identification would be associated with low SDO scores. We expected these results to hold even after controlling for RWA and perceptions of group status.

## STUDY 1

In Study 1, politically conservative Republican participants completed a group identification measure and read one of two passages. Both passages were written in the format of a newspaper editorial and focused on the outcome of a hypothetical future US Presidential election. Though each passage described a negative outcome for the ingroup and a positive outcome for the outgroup, one passage was meant to elicit higher levels of symbolic threat than the other. After reading the passage, participants completed the SDO scale. We predicted that under conditions of symbolic threat, highly identified Republicans would demonstrate higher SDO scores than less-identified Republicans.

### Method

#### *Participants*

Fifty individuals (21 men, 28 women, 1 unspecified; mean age = 32.9, SD = 12.8) were recruited from a national website to participate in this online experiment. The website, sponsored by a private West Coast university, advertises paid online studies to individuals from all areas of the United States. All participants reported in a demographic survey that they belonged to the Republican party and were politically conservative. The study took approximately 10 minute to complete, and participants were entered into a drawing to win a \$25 gift certificate to a major online retailer as compensation. Each participant was randomly assigned to either the symbolic threat condition ( $n = 21$ ) or the control condition ( $n = 29$ ). Two participants with extreme scores (i.e., more than 2.5 standard deviations from the mean)—one on group identification and the other on SDO—were excluded from the analyses, leaving 48 participants in the final sample.

#### *Procedure and Materials*

Participants first read that the purpose of the study was to explore the relationship between pre-existing beliefs and memory—in other words, the extent to which people tend to recall information that is consistent *versus* discrepant with their attitudes. The instructions indicated that they would answer some questions about their political attitudes, read a short passage written by either a Democrat or a Republican, and take a test on their memory of the passage. In reality, all participants read a passage described as having been written by a Republican, and there was no memory test.

After reading the instructions, participants completed an eight-item group (political party) identification measure designed to assess the importance of one's group membership to one's self-definition. The items were originally developed

by Hogg and Hains (1996) and referred to groups in general. However, we reworded them to pertain to political party membership (e.g., “How much do you identify with your political party?” “How important is your political party to you?”). Participants’ responses were averaged to form a composite, with higher scores reflecting stronger identification ( $\alpha = .91$ ).

For the symbolic threat manipulation, participants read one of two passages purportedly written by a Republican. The original passages, adapted from newspaper editorials published in *The New York Times* one day after the 2004 Presidential election, were written by Democrats and described the defeat of the Democratic party in that particular election. However, we made some changes to these passages so that they were supposedly written by Republicans and described the defeat of the Republican party in a hypothetical future election. Participants were instructed to focus on how they would feel if that were the actual outcome of the next election.

In the symbolic threat condition, the author expressed his/her fear that the Democratic party leaders would “try and drive their extreme positions through against the will of slightly less than the majority of American people” and asserted, “Democrats need to understand that we are the United States, not the Democratic states.” In the control condition, the author expressed his/her disappointment about the election (e.g., “I have just cast my fifth vote in an election, and it is the third time that I have been unhappy with the outcome;” “Maybe it is my sadness about how divided our country has become”). Thus, the former passage was meant to sound more threatening than the latter.

Following the symbolic threat manipulation, participants completed Pratto et al.’s (1994) 16-item SDO scale, which measures an individual’s level of support for group-based hierarchies. Example items included, “Inferior groups must stay in their place” and “We should strive to make incomes more equal” (reverse-scored). Participants responded to each item on a seven-point scale (1 = strongly disagree, 7 = strongly agree), and their responses were averaged to form a composite ( $\alpha = .93$ ). To disguise the purpose of the SDO measure, the instructions stated that the researchers were pilot-testing the items for use in future studies.

At the end of the experiment, participants completed Crowne and Marlowe’s (1964) eight-item social desirability scale. This scale, which measures one’s motives to present oneself in a favorable light, consists of eight true–false questions (e.g., “Are you always courteous, even to people who are disagreeable?”). Because some items on the SDO scale are controversial and thus may trigger tendencies to respond in socially desirable ways (see Jost & Thompson, 2000; Morrison & Ybarra, 2008), we included participants’ social desirability scores as a covariate in each of our studies. The scores were computed as the sum total of participants’ responses to the items ( $\alpha = .62$ ). Finally, participants were debriefed as to the real purpose of the experiment and were told that the memory test would not take place.

## Results and Discussion

We predicted that high group (party) identification would be associated with high SDO, but particularly among Republicans who had been led to believe that their group’s values were threatened. To test this prediction, participants’ responses were submitted to a condition (0 = control, 1 = symbolic threat)  $\times$  group identification (centered continuous variable) multiple regression analysis, with SDO as the dependent variable and social desirability as a covariate. The interaction was decomposed by examining the correlation between group identification and SDO in each experimental condition Aiken and West (1991).<sup>1</sup>

There were no main effects of condition, group identification, or social desirability on SDO. However, the hypothesized two-way interaction was significant ( $B = .69$ ,  $SE = .34$ ),  $t(43) = 2.04$ ,  $p < .05$  (see Figure 1). Simple slopes analyses revealed that in the symbolic threat condition, participants had marginally higher SDO scores the more they identified with the Republican party ( $B = .34$ ,  $SE = .26$ ),  $t(43) = 1.29$ ,  $p = .10$ . In the control condition, participants had lower SDO scores the more they identified with the Republican party ( $B = -.35$ ,  $SE = .21$ ),  $t(43) = -1.71$ ,  $p < .05$ . The latter finding was unexpected, but one possible explanation is that the author of the control passage conveyed disappointment in a failure experienced by the ingroup, which may have caused highly identified members to distance themselves from their group more than they normally would. Indeed, highly identified members react more strongly to ingroup failures than do less-

<sup>1</sup>Due to the directional nature of our predictions, all simple slopes and main effects in the present studies were analyzed using one-tailed tests.

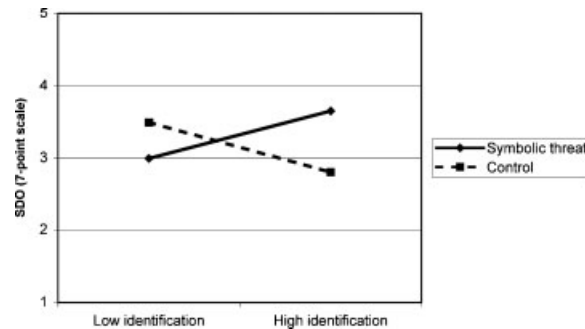


Figure 1. SDO as a function of condition (symbolic threat vs. control) and group identification (plotted at 1 SD above and below mean), Study 1 (Republican sample)

identified members (Wann, Grieve, Waddill, & Martin, 2008), and ingroup failures (e.g., discrepancies between what the ingroup has achieved and what members think the ingroup should achieve) have been found to predict low levels of collective self-esteem (Bizman, Yinon, & Krotman, 2001).

Overall, the findings from Study 1 suggest that in groups that endorse hierarchy-enhancing political values (e.g., conservative Republicans), symbolic threat and high group identification are associated with high SDO. However, Study 1 leaves open the question of whether the opposite pattern of results can be observed in groups that endorse hierarchy-attenuating political values (e.g., liberal Democrats). We suggest that if SDO can reflect conformity to the ingroup's political values, then symbolic threat should be associated with low SDO for those Democrats who identify strongly with their ingroup, and hence who are motivated to adhere to group values under conditions of threat. Study 2 tested this hypothesis.

## STUDY 2

In Study 2, politically liberal Democratic participants read a newspaper editorial meant to elicit either relatively high or relatively low levels of symbolic threat, with conservative Republicans as the outgroup. Both editorials focused on the outcome of the 2004 US Presidential election in which George W Bush (the Republican incumbent) defeated John Kerry (the Democratic challenger). After reading the editorial, participants completed the SDO scale, a filler task, and a group (political party) identification measure. We hypothesized that participants' SDO scores would be lower the more strongly they identified with their political party, but that this would be especially true for those in the symbolic threat condition.

## Method

### Participants

Thirty-two individuals (11 men, 21 women; mean age = 32.2, SD = 10.0) were recruited from the same website as in Study 1 to participate in a study on political beliefs and attitudes. In a demographic survey, all participants reported that they belonged to the Democratic (or other left-wing) party, and that they were politically liberal.<sup>2</sup> Participants were randomly assigned to either the symbolic threat condition ( $n = 17$ ) or the control condition ( $n = 15$ ). Upon completion of the study, participants were entered into a drawing to win one of several \$25 gift certificates to a major online retailer.

<sup>2</sup>Three participants indicated that they belonged to another left-wing (i.e., non-Democratic) party, and excluding the data from these participants did not change the pattern of results. No participants in Studies 1 or 3 indicated that they belonged to another left- or right-wing party.

### Materials and Procedure

The procedure of this study was similar to that of Study 1. Participants were told that they would read a passage written by either a Democrat or a Republican, and that they would then be tested on their memory of the passage. Paralleling Study 1, all participants were actually assigned to read a passage written by an ingroup member (i.e., a Democrat), and the memory test never took place.

The symbolic threat manipulation was one of the two actual newspaper editorials from Study 1. Both editorials focused on the Republican incumbent's victory in the 2004 US Presidential election. As noted in our description of Study 1, we had reworded these editorials so that they were described as being written by Republicans and focused on the results of a hypothetical future election. In Study 2, however, we used the original wording of the editorials so that they were described as being written by Democrats and focused on the actual results of the 2004 election. With the exception of these modifications, the wording of the symbolic threat and control passages was identical across Studies 1 and 2.

Following the threat manipulation, participants completed the SDO scale ( $\alpha = .93$ ), a filler questionnaire, the group (political party) identification measure from Study 1 ( $\alpha = .90$ ), and the social desirability scale ( $\alpha = .73$ ), in that order.<sup>3</sup> All participants were fully debriefed at the end of the experiment.

### Results and Discussion

We expected to find the opposite pattern of results as in Study 1—in other words, that Democrats who read the threatening passage about Republicans would demonstrate lower (as opposed to higher) SDO scores to the extent that they identified strongly with their political party. This was not expected to be the case for Democrats who did not read the threatening passage. To test this prediction, the results of this study were submitted to a condition (0 = control, 1 = symbolic threat)  $\times$  group identification (centered continuous variable) regression analysis, controlling for social desirability.

There were no main effects of condition, group identification, or social desirability on SDO. However, the predicted two-way interaction between condition and group identification was significant ( $B = -.68$ ,  $SE = .29$ ),  $t(27) = -2.54$ ,  $p < .03$  (see Figure 2). Decomposition of the interaction indicated that group identification was associated with low SDO among participants in the symbolic threat condition ( $B = -.47$ ,  $SE = .24$ ),  $t(27) = -2.34$ ,  $p = .03$ , but not among participants in the control condition ( $B = .21$ ,  $SE = .16$ ),  $t(27) = 1.35$ ,  $p = .09$ .

These results support the hypothesis that under conditions of symbolic threat, highly identified members of hierarchy-attenuating groups demonstrate a pronounced intolerance of social hierarchies—that is, an especially strong commitment to their group's political values. Thus, just as highly identified conservatives (Republicans) protect their group's values under threat by being more tolerant of social hierarchies (i.e., exhibiting higher SDO scores) than less-identified

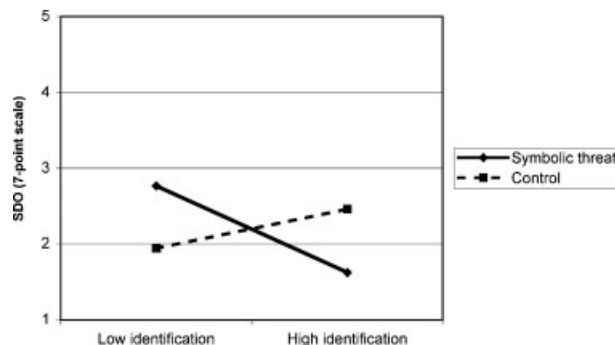


Figure 2. SDO as a function of condition (symbolic threat vs. control) and group identification (plotted at 1 SD above and below mean), Study 2 (Democratic sample)

<sup>3</sup>Unlike in Study 1, all participants in Study 2 responded to the group identification items after rather than before the manipulation. However, their group identification scores were not affected by experimental condition,  $t(30) = -.089$ ,  $ns$ , which reduces potential concerns about the order of presentation of the tasks in this study.

conservatives, highly identified liberals (Democrats) also protect their group's values under threat, in this case by becoming less tolerant of social hierarchies (i.e., exhibiting lower SDO scores) than less-identified liberals.

### STUDY 3

The goals of Study 3 were multifaceted. First, although Studies 1 and 2 supported the present hypotheses, they were conducted on Republicans and Democrats separately. It is therefore possible that the opposite results in Studies 1 and 2 were due to other unobserved differences between the two samples, rather than to differences in group ideology. Study 3 provided a stronger test of predictions by including members of both political parties in the same experiment.

Second, in both Studies 1 and 2, the author of the passage in the control condition expressed disappointment about a negative outcome for the ingroup. As noted in the discussion of Study 1, this may have led highly identified group members to dissociate themselves from the ingroup, evidenced by a negative identification-SDO relationship among Republican control participants (and a marginal positive identification-SDO relationship among Democratic control participants in Study 2). Thus, the control condition used in Study 3 was designed to be more neutral in valence, so that it would not reverse the relationship between group identification and SDO.

Third, because the manipulations of threat in Studies 1 and 2 were not checked, it remains unclear whether they did in fact activate symbolic threat. It may be that the threat passages made salient realistic as well as symbolic threat, given their references to "Democratic [Republican] party leaders" (i.e., those in power). To address this issue, the passage in Study 3 was written so that it clearly referred to symbolic threat and not realistic threat. Additionally, a pretest was conducted to ensure that the passage activated perceptions of symbolic threat. Another potential concern with the manipulations from Studies 1 and 2 is that they confounded threats to one's political party (the ingroup in the present experiments) with threats to one's nation, as the passages made references to "how divided the United States has become" Study 3 attempted to alleviate this concern by not referring to the nation at all, only to the ingroup and outgroup political parties.

Finally, Study 3 sought to address two plausible alternative explanations for the findings from the first two studies. One was that highly identified Republicans (Democrats) demonstrated high (low) SDO under threat because of their relatively high (low) status. That is, at the time Studies 1 and 2 were run, the United States had a Republican president, as well as a Republican majority in both the Senate and House of Representatives. The fact that both the symbolic threat and control passages described a negative outcome for the ingroup, even when Republicans were the ingroup (Study 1), is reassuring. However, it does not constitute conclusive evidence that the effects of party membership on SDO are not a byproduct of group status differences. Given that higher perceived group status has been shown to predict higher SDO in many studies (e.g., Levin, 2004; Schmitt et al., 2003; Sidanius & Pratto, 1999), demonstrating the independence of these effects is critical. Study 3 did so by measuring Republicans' and Democrats' perceptions of one another's status.

A second alternative account for the results of Studies 1 and 2 is that the effects of symbolic threat, group identification, and political party on SDO were attributable to changes in RWA. For instance, Duckitt and Fisher (2003) showed that experimentally induced perceptions of the world as a dangerous place had a weak positive effect on SDO, but that this result was fully mediated by changes in RWA. Indeed, previous research has shown that SDO is modestly correlated with RWA (Sidanius & Pratto, 1999). Though Duckitt and Fisher (2003) manipulated individual-level threat and the present studies focus on symbolic threat to group values, it is nevertheless possible that our effects are due to the relationship between RWA and SDO. Study 3 addressed this issue by measuring both RWA and SDO, and controlling for RWA scores in the analysis.

## Method

### *Participants*

Ninety individuals (32 men, 55 women, 3 unspecified; mean age = 31.1, SD = 11.2) were recruited from the same national database as in Studies 1 and 2 to participate in this experiment. Of these, 46 self-identified on a demographic survey as liberal Democratic party members, and 44 self-identified as conservative Republican party members. Each participant was randomly assigned to the symbolic threat condition ( $n = 44$ ) or the control condition ( $n = 46$ ). One participant was omitted from the dataset because he did not complete the SDO scale, leaving 89 individuals in the final sample.



### Procedure and Materials

All experimental materials were presented online. Democratic participants were directed to a particular website to complete the study, and Republican participants were directed to a different website. The initial instructions were identical to those used in Studies 1 and 2: Participants read that they would read a short political passage, complete a few surveys, and take a memory test. After reading these instructions, participants completed the eight-item group identification measure from the first two studies ( $\alpha = .94$ ).

Next, participants were presented with the passage on which they would purportedly be tested. As in Studies 1 and 2, the passage took the form of a newspaper editorial, and participants were told that it had been written by a member of their own political party. The passage, which supposedly appeared in *The New York Times* on 3 May 2008, described the author's feelings about the upcoming November election. In the symbolic threat condition, the author argued that "Democrats [Republicans] need to protect their party's fundamental beliefs and values more than ever," and "the absence of a true balance of belief systems can ultimately lead to divisiveness and polarization." S/he also cited specific examples of the outgroup trying to impose their party's values on the ingroup. Some of these examples (e.g., beliefs about same-sex marriage) were related to SDO and preference for hierarchies, but other examples (e.g., beliefs about stem-cell research) were not. In the control condition, the author argued that "both parties have made gains in their status and resources, as well as their fundamental values," and that "Democrats and Republicans have coexisted side-by-side and relatively peacefully for decades."

Prior to running this study, 49 individuals in a separate web-based sample (25 liberal Democrats, 24 conservative Republicans) were randomly assigned to read either the symbolic threat ( $n = 22$ ) or control ( $n = 27$ ) passage written by a member of their own political party. Democrats (Republicans) then indicated their agreement with three statements assessing perceptions of symbolic threat from the outgroup (e.g., "Republicans [Democrats] pose a threat to Democrats' [Republicans'] beliefs and values") and three statements assessing perceptions of realistic threat (e.g., "Republicans [Democrats] pose a threat to Democrats' [Republicans'] power and status"), on a seven-point scale (1 = strongly disagree, 7 = strongly agree). One participant who completed the pretest in more than three standard deviations above the mean amount of time for the sample was excluded from the analysis. Collapsing across political party membership, which did not produce any reliable main effects or interactions, participants who read the symbolic threat passage perceived higher levels of symbolic threat ( $M = 5.33$ ,  $SD = 1.13$ ) than did participants who read the control passage ( $M = 4.77$ ,  $SD = 1.40$ ),  $F(1, 46) = 2.30$ ,  $p < .07$ ,  $\eta^2 = .048$ . However, participants in the symbolic threat and control conditions perceived equal levels of realistic threat ( $M_s = 4.82$  and  $4.62$ ,  $SD_s = 1.17$  and  $1.48$ , respectively),  $F(1, 46) = .27$ ,  $p < .31$ ,  $\eta^2 = .006$ . Thus, as predicted, the symbolic threat (relative to the control) passage activated concerns about the ingroup's beliefs and values, but not concerns about the ingroup's power and status.

In the current experiment, once participants had read the passage, they completed the 16-item SDO scale ( $\alpha = .92$ ), followed by Altemeyer's (1998) abbreviated RWA scale. This scale consists of six items assessing people's desire to preserve social order and traditional values (e.g., "Our country will be destroyed someday if we do not end the perversions eating away at our moral fiber and moral beliefs"). Participants responded to each item on a scale from 1 (strongly disagree) to 7 (strongly agree). Their responses were averaged together, with higher scores indicating a greater preference for social order and tradition ( $\alpha = .89$ ).

At the end of the experiment, participants responded to the eight social desirability questions from Studies 1 and 2 ( $\alpha = .67$ ) and completed a demographic survey. This survey included two questions that were designed to measure perceptions of ingroup and outgroup status: (1) How high in status are Democrats? (2) How high in status are Republicans? Participants responded on a seven-point scale (1 = very low in status, 7 = very high in status). To compute a relative group status index, their rating of the outgroup's status was subtracted from their rating of the ingroup's status, with higher scores reflecting higher levels of perceived ingroup status. Finally, participants were fully debriefed and thanked.

## Results and Discussion

### Tests of Hypotheses

It was predicted that for Republican participants, high group (party) identification would be associated with high SDO in the symbolic threat condition, but not in the control condition. Conversely, for Democratic participants, high group (party)

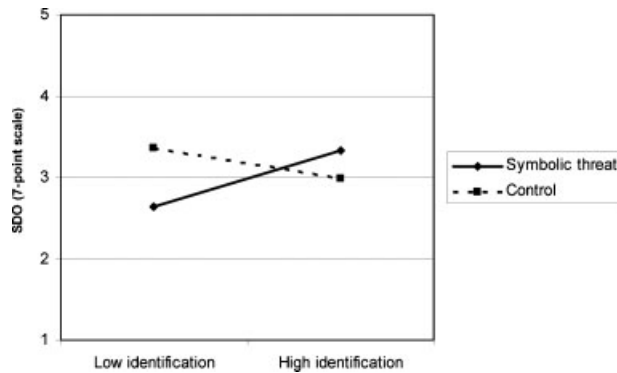


Figure 3. SDO as a function of condition (symbolic threat vs. control) and group identification (plotted at 1 SD above and below mean), Study 3 (Republican participants)

identification was expected to be associated with low SDO in the symbolic threat condition, but not in the control condition. To test these hypotheses, the results were submitted to a condition (0 = control, 1 = symbolic threat)  $\times$  party membership (0 = Republican, 1 = Democratic)  $\times$  group identification (centered continuous variable) regression analysis, with SDO as the dependent measure and social desirability as a covariate. The overall three-way interaction was decomposed by examining the condition  $\times$  group identification interactions for Democrats and Republicans separately, and then examining the correlation between group identification and SDO within each experimental condition. All main effects were interpreted in the first block of the regression, all two-way interactions in the second block, and the three-way interaction in the third block.

Other than a main effect of party membership, such that Republicans had higher SDO than Democrats ( $B = -.76$ ,  $SE = .21$ ),  $t(84) = -3.63$ ,  $p < .001$ , the only significant result to emerge was the predicted three-way interaction ( $B = -1.04$ ,  $SE = .37$ ),  $t(80) = -2.81$ ,  $p < .01$ . Among Republican participants, there was a significant interaction between condition and group identification ( $B = .45$ ,  $SE = .23$ ),  $t(80) = 2.01$ ,  $p < .05$  (see Figure 3). Simple slopes analyses revealed that high group identification was associated with high SDO in the symbolic threat condition ( $B = .29$ ,  $SE = .16$ ),  $t(80) = 1.83$ ,  $p < .04$ . Group identification and SDO were unrelated in the control condition ( $B = -.16$ ,  $SE = .16$ ),  $t(80) = -1.00$ ,  $p = .16$ . Thus, when highly identified Republicans' values are threatened, they respond with high SDO, presumably because tolerance of hierarchies reflects their ingroup's fundamental belief system.

Among Democratic participants, there was also a condition (symbolic threat vs. control) by group identification interaction ( $B = -.59$ ,  $SE = .29$ ),  $t(80) = -2.01$ ,  $p < .05$  (see Figure 4). Simple slopes analyses revealed that high group identification was associated with low SDO in the symbolic threat condition ( $B = -.54$ ,  $SE = .23$ ),  $t(80) = -2.33$ ,  $p = .01$ , whereas the relationship between group identification and SDO was nonsignificant in the control condition ( $B = .05$ ,  $SE = .18$ ),  $t(80) = .26$ ,  $p = .40$ . Thus, when highly identified Democrats' values are threatened, they respond with low SDO, presumably because intolerance of hierarchies represents their ingroup's fundamental belief system.

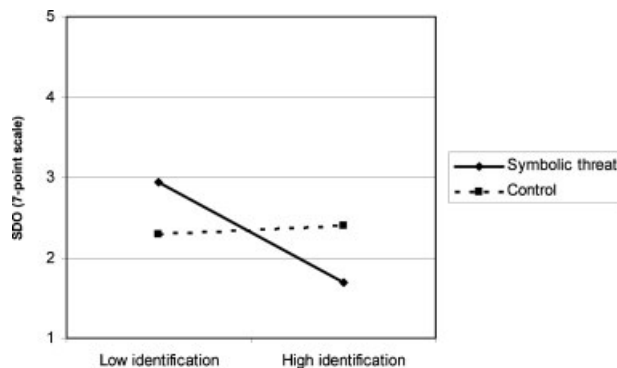


Figure 4. SDO as a function of condition (symbolic threat vs. control) and group identification (plotted at 1 SD above and below mean), Study 3 (Democratic participants)

### Relative Group Status

One potential explanation for the present findings is that highly identified Republicans whose values are threatened have higher SDO than their Democratic counterparts because the former are higher in status than the latter. Indeed, on the relative group status index described earlier, Republican participants ( $M = .95$ ,  $SD = 1.80$ ) scored significantly higher than Democratic participants ( $M = .16$ ,  $SD = 2.69$ ),  $F(1, 87) = 2.70$ ,  $p = .05$ ,  $\eta^2 = .02$ . Republicans' higher SDO could therefore reflect a desire to maintain their ingroup's position at the top of the social hierarchy, rather than a desire to maintain their ingroup's values. In other words, group membership could be conflated with group status. To test this possibility, a condition (symbolic threat vs. control)  $\times$  relative group status (centered continuous variable)  $\times$  group identification regression analysis was conducted with SDO as the outcome variable and social desirability as a covariate. The condition  $\times$  party membership  $\times$  group identification interaction term and all lower order effects were also entered into the regression, so that the effects of party membership and relative group status could be analyzed simultaneously.

In this analysis, the condition  $\times$  party membership  $\times$  group identification interaction remained significant ( $B = -1.28$ ,  $SE = .38$ ),  $t(75) = -3.34$ ,  $p = .001$ . However, the condition  $\times$  group status  $\times$  group identification interaction failed to reach significance ( $B = -.09$ ,  $SE = .08$ ),  $t(75) = -.54$ ,  $p < .30$ . With the exception of a main effect of political party membership ( $B = .67$ ,  $SE = .22$ ),  $t(82) = 3.08$ ,  $p < .005$ , there were no lower order effects. The results thus suggest that group ideology (Democratic vs. Republican) influenced members' responses to symbolic threat over and beyond any effects of group status.

### RWA

Because of the modest positive relationship between SDO and RWA in previous research (e.g., Duckitt & Fisher, 2003; Sidanius & Pratto, 1999), as well as in the present study ( $r = .27$ ,  $p = .01$ ), it was necessary to confirm that any effects of threat, party membership, and identification on SDO were independent of their effects on RWA. To do so, the main regression analysis presented above was re-run with SDO as the outcome variable and RWA as a covariate. The condition (symbolic threat vs. control)  $\times$  party membership  $\times$  group identification interaction remained reliable ( $B = -.98$ ,  $SE = .38$ ),  $t(79) = -2.57$ ,  $p = .01$ . Thus, the present effects of threat and identification on Republicans' and Democrats' SDO cannot be attributed to changes in RWA.

## GENERAL DISCUSSION

The present experiments suggest that the effects of symbolic threat and group identification on SDO are in fact contingent upon the ingroup's core political values. Highly identified members of groups that tolerate social hierarchies respond to symbolic threat with high SDO, as was found with conservative Republican participants in Studies 1 and 3. In contrast, highly identified members of groups that do not tolerate social hierarchies respond to symbolic threat with low SDO, as was found with liberal Democratic participants in Studies 2 and 3. These results hold even after taking into account perceptions of relative group status and RWA, both of which were measured in Study 3. Thus, the effects of party ideology on SDO are not due to the relationship between SDO and RWA (which increases in response to individual-level threat), nor are they due to any perceived status differences between Democrats and Republicans.

Earlier, we noted that Republicans and political conservatives are generally higher in SDO than Democrats and political liberals (Pratto et al., 1994; Sidanius & Pratto, 1999; Sidanius, Pratto, & Bobo, 1996). It is therefore tempting to assume that SDO and political party identification (i.e., the importance of one's party to the self-concept) should always be related. Indeed, SDO has been found to correlate with several forms of group identification, such as gender (Dambrun, Duarte, & Guimond, 2004; Wilson & Liu, 2003) and ethnicity (Sidanius, Pratto, & Rabinowitz, 1994). However, there is considerable variation in SDO scores within each of these groups. Some of this variation can be attributed to factors other than group identification, including intergroup threat (see Morrison & Ybarra, 2008). Supporting this claim, our studies provide evidence that group (political party) identification is correlated with SDO especially under conditions of symbolic threat.

Some studies have already begun to investigate the relationship between intergroup threat and SDO, and have demonstrated that realistic threat to group status and power can increase the SDO scores of highly-identified group members (Morrison & Ybarra, 2008). These previous studies were conducted with a wide range of social groups, including non-Asian Americans threatened by Asian Americans and non-science majors threatened by science majors. In all cases, threat and group identification elicited higher levels of SDO. However, the groups used in this research did not differ in terms of whether they embraced hierarchy-enhancing or hierarchy-attenuating values, nor did this research make salient any value differences between the groups. Non-science majors, for example, may include students who study economics (a hierarchy-enhancing field) and psychology (a hierarchy-attenuating field) (Sidanius, Sinclair, & Pratto, 1996).

The present experiments differed from Morrison and Ybarra's (2008) studies by using social groups that differed in their hierarchy-enhancing (Republicans) versus hierarchy-attenuating (Democrats) values. In addition, participants in the present experiments were led to believe that an outgroup posed a symbolic threat to their group's value system, rather than a realistic threat to their group's power and status. These two differences help to explain why the Morrison and Ybarra (2008) paper showed consistent increases in SDO under threat, whereas the current paper showed that the direction in which SDO shifts depends on the ingroup's values.

One unresolved question is how hierarchy-attenuating group members might respond after being exposed to realistic threat. It is possible that realistic threat leads members of both hierarchy-enhancing and hierarchy-attenuating groups to exhibit higher SDO scores, due to a desire to preserve the ingroup's position in society. An alternative possibility, however, is that realistic threat (like symbolic threat) actually produces lower SDO scores among hierarchy-attenuating group members, who might view intolerance of hierarchies as a way to assert their group's position. The answer could depend on whether the realistic threat involves the ingroup's power relative to a hierarchy-enhancing outgroup (e.g., Republicans) or the ingroup's power relative to other hierarchy-attenuating groups (e.g., immigrants). In the former case, decreases in SDO may be more likely due to the differences between the ingroup's and outgroup's hierarchy-relevant values. However, if hierarchy-attenuating groups were to experience symbolic threat from one another, their SDO scores may not decrease because the two groups would hold similar beliefs about hierarchies. These issues should be investigated in future research.

## The Meaning of SDO

Taken together, the current studies shed light on precisely what the construct of SDO measures. Previously, SDO has been treated as a dispositional variable that assesses general attitudes toward group-based inequality (Pratto et al., 1994; Sidanius & Pratto, 1999), or more recently, as a context-sensitive variable that changes in an attempt to improve the ingroup's status relative to outgroups (Guimond et al., 2003; Morrison & Ybarra, 2008; Schmitt et al., 2003). The current studies expand research on the malleability of SDO by showing that attitudes toward inequality can reflect conformity to the ingroup's social and political values—provided, of course, that these values can be clearly defined as hierarchy-enhancing or hierarchy-attenuating. Thus, our results do more than suggest that conceptualizing SDO as a stable personality variable may be problematic, a point raised by several theorists (e.g., Lehmler & Schmitt, 2007; Schmitt et al., 2003; Sidanius et al., 2004). Because highly identified members of hierarchy-enhancing and hierarchy-attenuating groups react to SDO in opposite ways following symbolic threat, the current studies also show that the positive effects of threat and identification on SDO obtained in prior research (Morrison & Ybarra, 2008) are not generalizable to groups whose beliefs and values explicitly repudiate social hierarchies.

In addition to having implications for research on SDO specifically, the findings in this paper allow us to revisit our initial question of what it means to tolerate social hierarchies in general. The present analysis suggests that perhaps this question is too broad. To obtain a finer grained and more informative answer, we might instead ask what it means for *particular groups* to tolerate social hierarchies (see Lehmler & Schmitt, 2007; Schmitt et al., 2003). For hierarchy-enhancing groups, tolerance of group-based hierarchies (e.g., high SDO) indicates promotion of the ingroup's core political values. For hierarchy-attenuating groups, however, tolerance of group-based hierarchies indicates rejection of the ingroup's core political values, whereas an intolerance of hierarchies (e.g., low SDO) reflects a desire to promote the meaning system of the ingroup. Thus, what appears on the surface to be a belief that "all groups should be created equal," might actually be a belief that the ingroup's values should prevail over others. Stated differently, the seemingly egalitarian

responses that highly identified, hierarchy-attenuating group members demonstrate under threat may be, in a sense, group-serving biases in disguise.

## Concluding Remarks

The present research has suggested that SDO can function as a belief system that changes in response to different situations, especially those involving symbolic intergroup threat. However, it takes this idea a step further by illustrating that the direction of these effects depends on the nature of the ingroup's core values. While this indicates that SDO is richer and more context-dependent than has typically been assumed, it also suggests that the construct of SDO may be in need of some refinement. Perhaps such refinement could be accomplished by asking participants about their tolerance for specific types of group-based hierarchies (e.g., "Some political parties are just more worthy than others"), or even about their attitudes toward value-based differences between groups (e.g., "Some groups of people are simply superior in their values to others"). For members of hierarchy-attenuating groups such as Democrats, being asked about political parties and group values in particular may yield higher scores than would be asked about groups in general, whereas for members of hierarchy-enhancing groups such as Republicans, the question wording may make little if any difference. Future research should explore these possibilities, as they would provide more insight into how attitudes toward social inequality can be interpreted across various situations.

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