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Abstract

Social dominance orientation (SDO) is one of the most powerful predictors of intergroup attitudes and behavior. Although SDO works well as a unitary construct, some analyses suggest it might consist of two complementary dimensions—SDO-Dominance (SDO-D), or the preference for some groups to dominate others, and SDO-Egalitarianism (SDO-E), a preference for nonegalitarian intergroup relations. Using seven samples from the United States and Israel, the authors confirm factor-analytic evidence and show predictive validity for both dimensions. In the United States, SDO-D was theorized and found to be more related to old-fashioned racism, zero-sum competition, and aggressive intergroup phenomena than SDO-E; SDO-E better predicted more subtle legitimizing ideologies, conservatism, and opposition to redistributive social policies. In a contentious hierarchical intergroup context (the Israeli–Palestinian context), SDO-D better predicted both conservatism and aggressive intergroup attitudes. Fundamentally, these analyses begin to establish the existence of complementary psychological orientations underlying the preference for group-based dominance and inequality.

Keywords

SDO, social dominance orientation, SDO-Dominance, SDO-Egalitarianism, legitimizing ideologies, hierarchy-enhancing and -attenuating social policy

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To "illegal immigrants": "If you commit a crime while you're here, we should hang you and send your body back to where you came from, and your family should pay for it."

—Joyce Kaufman, Florida radio show host

As this recently publicized statement from Tea Party member and popular Florida radio host Joyce Kaufman illustrates, aggressive discourse surrounding American intergroup politics remains all too common (Wing, 2010). The recent passage of an immigration law in Arizona allowing the police to stop and detain anyone suspected of being an undocumented immigrant shows that aggressive antimmigration sentiments are not confined to rhetoric. We argue that such aggressive intergroup attitudes and behaviors are an outgrowth of a distinct psychological orientation, which constitutes one component of *social dominance orientation* (SDO; Pratto, Sidanius, Stallworth, & Malle, 1994).

The overt force and punitiveness prescribed by Kaufman contrast with contemporary apologies opposing affirmative action or limiting international reconciliation. In such rhetoric, other priorities, such as "fairness, meritocracy," or "national

security," are invoked rather than overt references to the inferiority of outgroups or the justness of dominance (e.g., Essex, n.d.; Heller, 2010). We argue that such intergroup attitudes and behaviors, although themselves discriminatory, are not as openly forceful and hostile and rely on a related but distinct psychology of group separation and opposition to group equality. This psychological orientation is also an aspect of SDO. In this article, we explore the implications of both dimensions of SDO for intergroup relations, the ideological justification of inequality, and the psychology of group prejudice.

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Table 1. Items Proposed to Form the SDO-Dominance (SDO-D) and SDO-Egalitarianism (SDO-E) Dimensions

SDO-D SDO-E

- 1. Some groups of people are just more worthy than others.
- 2. In getting what your group wants, it is sometimes necessary to use 2. Group equality should be our ideal. force against other groups.
- 3. Superior groups should dominate inferior groups.
- 4. To get ahead in life, it is sometimes necessary to step on other
- 5. If certain groups of people stayed in their place, we would have fewer problems.
- 6. It's probably a good thing that certain groups are at the top and other groups are at the bottom.
- 7. Inferior groups should stay in their place.
- 8. Sometimes other groups must be kept in their place.

Source: Jost and Thompson (2000). SDO = social dominance orientation.

- 1. It would be good if all groups could be equal.
- 3. All groups should be given an equal chance in life.
- 4. We should do what we can to equalize conditions for different groups.
- 5. Increased social equality.
- 6. We would have fewer problems if we treated different groups more equally.
- 7. We should strive to make incomes more equal.
- 8. No one group should dominate in society.

Social Dominance Orientation

Since its introduction two decades ago (see Sidanius, Pratto, Martin, & Stallworth, 1991, p. 693), SDO has proven to be one of the most versatile and useful constructs for understanding sociopolitical ideologies, the psychology of prejudice, and intergroup behavior within social psychology. SDO is defined as an individual's preference for group-based hierarchy and inequality and has been consistently found to undergird an impressive array of intergroup phenomena that serve to either enhance or attenuate group-based hierarchy (Pratto et al., 1994). For example, SDO has been found to be a powerful predictor of generalized prejudice against, and persecution of, a wide array of denigrated groups such as poor people, Latinos, Asians, foreigners, gays, women, Arabs, Muslims, Blacks, Jews, immigrants, and refugees (e.g., Altemeyer, 1996; Sidanius & Pratto, 1999; Thomsen, Green, & Sidanius, 2008). Furthermore, SDO is related to the endorsement of a broad spectrum of group-relevant social ideologies, including political conservatism, noblesse oblige, just-world beliefs, nationalism, patriotism, militarism, internal attributions for poverty, sexism, rape myths, endorsement of the Protestant work ethic, and other consequential hierarchy-enhancing legitimizing beliefs across a range of cultures (see Sidanius & Pratto, 1999). In addition, SDO is related to attitudes toward group-relevant social policies such as support for wars of aggression, punitive criminal justice policies, the death penalty and torture, and opposition to humanitarian practices, social welfare, and affirmative action (e.g., Federico & Sidanius, 2002; Pratto & Glasford, 2008; Sidanius, Mitchell, Haley, & Navarrete, 2006; Sidanius & Pratto, 1999). People's SDO level influences not only their endorsement of social policies and ideologies but also how they live their lives—for instance, the kinds of jobs they seek and obtain, the kinds of subjects they choose to study, and how well they perform in these areas (for a review, see Haley & Sidanius, 2005).

The generality of SDO is also shown in its ability to predict intergroup attitudes in new situations. For example, in addition to correlating with prejudice toward familiar groups, SDO predicts affect toward both minimal groups and novel social policies (e.g., Amiot & Bourhis, 2005; Pratto et al., 1994; Reynolds et al., 2007; Sidanius, Pratto, & Mitchell, 1994). SDO has also been shown to predict people's future intergroup attitudes and behavior across extended periods of time (Kteily, Sidanius, & Levin, 2011; Thomsen et al., 2010). Altogether, empirical evidence from many countries and concerning many different intergroup contexts has shown that the SDO scale is a powerful index of generalized prejudice, group-relevant social ideologies, sociopolitical policy preferences, and future career choices (see Pratto, Sidanius, & Levin, 2006 for a review).

One or Two Dimensions of SDO?

When the 14-item SDO scale (later referred to as the SDO scale in Sidanius & Pratto, 1999) was initially developed, it was found to be unidimensional (Pratto et al., 1994, Appendix A). Care was taken to ensure that the item set did not produce response acquiescence (Christie & Cook, 1958), captured the full expression of the SDO construct, and demonstrated convergent and discriminant validity (e.g., Loevinger, 1957). However, subsequent factor-analytic and experimental research by a number of scholars suggests that the protrait and contrait sections of the 16-item SDO scale—the most commonly used SDO scale, published in Appendix D of Pratto et al., 1994—may actually produce two distinct yet strongly related substantive subdimensions of SDO (e.g., Jost & Thompson, 2000). One may reflect support for groupbased dominance hierarchies (here called SDO-D), and the other may reflect opposition to group-based equality (SDO-E; see Table 1).

To date, the question of whether SDO consists of one dimension or two related dimensions has not been theoretically

or empirically resolved. The proposed dimensions are composed entirely of either protrait items (SDO-D) or contrait items (SDO-E). As such, any factor-analytic evidence for two dimensions could simply reflect differences in the direction in which items are worded rather than, as we propose, differences in substance between the two dimensions. Thus, even though our early, unpublished, analyses of the SDO₆ scale showed that two dimensions often emerged, it was not clear whether these dimensions were substantively distinct.

The present article reviews evidence that the SDO₆ scale consists of two related dimensions and, importantly, empirically tests whether the proposed dimensions differentially predict outcome variables concerning group-based dominance and opposition to equality. If our research finds that two subdimensions empirically differentiate between theoretically relevant measures, this would demonstrate predictive validity for this distinction and suggest the need for new, balanced, measures of each dimension. As SDO₆ is so widely in used in both experimental and survey research around the world, the results may prove of great theoretical and practical use in understanding prejudice, discrimination, and intergroup relations more broadly.

Dominance and Egalitarianism

Why might support for group dominance and opposition to group equality reflect two distinct psychological orientations? SDO-D is defined as support for group-based dominance hierarchies in which dominant groups actively oppress subordinate groups. It reflects an early definition of SDO as a generalized imperial imperative (Sidanius & Pratto, 1993). These items specifically tap support for overtly hierarchical intergroup relations (e.g., "Inferior groups should stay in their place"). As such, we hypothesize that SDO-D will be related to phenomena such as support for aggressive intergroup behavior, support of overtly negative intergroup attitudes, support for negative allocations to outgroups, and the perception of group-based competition. These attitudes, behaviors, and cognitions all support dominance hierarchies that involve the *active* subjugation of some groups by other groups. Indeed, since the SDO-D items encompass the approval of groups that "use force" and "step on other groups," we expect SDO-D to be especially related to support for aggressive behavior in intergroup competition (e.g., ethnic persecution). SDO-D also expresses the belief that some groups are "superior" or "more worthy" and thus should be related to overt or old-fashioned prejudice. For example, Sears, Haley, and Henry (2008) found that SDO-D correlates with overtly negative feelings toward Blacks among Whites, the belief that Blacks are biologically inferior, and the belief that Blacks are trying to take resources away from other groups. Similarly, given that SDO-D reflects a preoccupation with maintaining the relative power difference between groups, we expect SDO-D to be related to perceptions of zero-sum group competition. Importantly, these aspects of SDO-D should also make it predict the legitimization or justification of extremely hierarchical systems of group-based dominance.

SDO-E is defined as opposition to group-based equality. This includes an aversion to the general principle of equality and to reducing the level of hierarchy between social groups. Opposition to equality translates psychologically into support for *exclusivity*. People who want groups to be unequal wish to exclude certain groups from access to resources that could elevate their social position. Unlike SDO-D, SDO-E does not imply support for oppression or overt intergroup hostility and aggression. Thus, SDO-E should be related to a wide array of legitimizing myths that subtly support social hierarchy, such as symbolic racism or the Protestant work ethic, which imply that it is legitimate for certain groups to be excluded from access to resources. It should further be related to opposition to redistributive social policies that threaten to increase equality and to policies that would break down group boundaries, such as affirmative action. Given the nature of SDO-E, it should predict the justification and legitimization of social systems that are stratified. However, unlike SDO-D, it should not relate as strongly to support for active domination or extreme subjugation of subordinate groups. Although the two subdimensions should strongly correlate with one another, once this overlap is taken into account, they should differentially predict a variety of grouprelevant outcomes.

Existing Evidence for the Predictive Validity of Two Dimensions

Empirical studies from several research groups have shown that SDO-D and SDO-E differentially correspond with group-relevant variables such as endorsement of prejudicial ideologies and political attitudes and may respond differently to experimental manipulations aimed at promoting fairness between groups. The SDO-E dimension, or some variant of it, accounts for significant variance in conservatism, opposition to international diplomacy, anti-Black attitudes (not including old-fashioned racism), just-world beliefs, and opposition to redistributive social policies (Cohrs, Moschner, Maes, & Kielmann, 2005; Eagly, Diekman, Johannesen-Schmidt, & Koenig, 2004; Freeman, Aquino, & McFerran, 2009; Jost & Thompson, 2000; Kugler, Cooper, & Nosek, 2010; Reyna, Henry, Korfmacher, & Tucker, 2006; Sears et al., 2008; Wakslak, Jost, Tyler, & Chen, 2007; Yoshimura & Hardin, 2009).

At the same time, studies have shown that SDO-D explains variation in other constructs. For example, Eagly et al. (2004) found that SDO-D predicted discrimination against women and homosexuals. Because their index of discrimination combined the belief in traditional gender roles with opposition to gay and lesbian rights, it is not clear exactly which aspects of gender and sexual orientation beliefs corresponded to SDO-D. Peña and Sidanius (2002) examined relationships between the two subdimensions and patriotism and found that U.S. patriotism was more related to SDO-D than to SDO-E.

However, Peña and Sidanius used abbreviated SDO-D and SDO-E scales and did not partial out the effects of SDO-E when examining the effects of SDO-D. Kugler et al. (2010) found that SDO-D better predicted anti-Black bias and symbolic racism among U.S. Whites. However, their finding with respect to anti-Black bias was not consistent, with SDO-D more strongly related to anti-Black bias in one study but not in another. Furthermore, because of their use of partial rather than semipartial correlations, we do not know how each SDO dimension, net of the effect of the other dimension, relates to the total variance of each intergroup attitude of interest. In addition, a few research teams have found that SDO-D appears to have a stronger relationship with RWA than does SDO-E (e.g., Cohrs et al., 2005; Kugler et al., 2010). Finally, Freeman et al. (2009) demonstrated that the effect of SDO-D on donations to a minority organization among dominants was attenuated by invoking examples of good moral behavior, but the effects of SDO-E were unchanged. They attributed this divergent pattern of moderation to their intuition that the attitudes expressed by SDO-D are less acceptable, especially under circumstances in which people have been primed with moral virtues.

Other studies have found no difference in how the two subdimensions predict intergroup attitudes. For example, Guimond, Dambrun, Michinov, and Duarte (2003) found that SDO-D and SDO-E equally predicted prejudice, though their measure of prejudice was a hybrid of positive views of an outgroup and the desire to actively discriminate against an outgroup. Kugler et al. (2010) also found no significant difference between SDO-D and SDO-E's relationships with implicit and explicit ingroup bias and anti-Black attitudes in one of their studies.

Thus, previous research suggests that SDO-D and SDO-E may be related to distinct intergroup phenomena but is inconclusive on this matter for several reasons. First, SDO has been measured inconsistently, with some studies using abbreviated measures and others using novel measures that mix the preference for interpersonal and intergroup inequality. Second, because previous researchers did not consider theoretical distinction we make, their dependent variables of interest may have combined elements that we predict differentially relate to the two dimensions of SDO. Finally, previous studies examined zero-order correlations or partial correlations to assess each dimension's relationship with other intergroup variables. Thus, we do not yet understand how each SDO dimension, net of the effect of the other dimension, relates to the full variance of criterion measures of interest.

Social Structure May Moderate the Differential Effects of SDO-D and SDO-E

Because of the rather dramatic decline in explicit and old-fashioned racism within American society (e.g., Schuman, Steeh, Bobo, & Krysan, 1997), Sears and his colleagues

have argued that SDO-D is no longer a relevant dimension in intergroup relations and contemporary politics (see e.g., Sears et al., 2008, p. 83). Sears, Henry, and Kosterman (2000) found that SDO-D does not predict symbolic racism as well as SDO-E, is weakly related to political orientation and racial policy preferences, and does not relate to legitimizing ideologies such as internal attributions for poverty (also see Sears & Henry, 2005; Sears et al., 2008). However, most of this research has used highly abbreviated versions of the SDO-D and SDO-E scales and has not considered the full spectrum of intergroup attitudes and behavior. Furthermore, these studies stand in contrast to other literature we have reviewed above, which demonstrated that SDO-D does relate to a variety of consequential group-relevant attitudes. Finally, given that this research has focused on the American domestic context, more research is needed to examine the extent to which the differential effects of SDO-D and SDO-E are dependent on sociostructural context.

In contexts such as the contemporary United States, where social stratification does not entail overt hostility and oppression, SDO-E may be more potent. That is, in political-cultural contexts where legitimizing ideologies and political attitudes may be intended to support inequality, but not forceful oppression, SDO-E is likely to be particularly active. However, in societies characterized by openly conflictual intergroup relations, with groups actively, and oftentimes violently, competing for dominance, SDO-D may be more active. In such societies, many legitimacy beliefs and political attitudes may function to support the subjugation of subordinate groups by dominant groups.

To test the idea that political cultures can vary as to whether SDO-D or SDO-E is more active, we analyze data from both the United States and Israel. Although the United States has been engaged in many violent international conflicts in recent decades, nearly all of these conflicts have been outside the United States and unrelated to domestic conflicts among American groups (e.g., ethnic groups). Furthermore, despite its international dominance, the U.S. internal political rhetoric since the modern civil rights era is decidedly egalitarian (e.g., Thernstrom & Thernstrom, 1997). Hence, SDO-E may have potency in the United States, especially when nonovert domestic conflict is under consideration. SDO-E may also be potent in Israel when relations between the two major Jewish ethnic groups— Ashkenazi and Mizrachi Jews—are considered. Ashkenazi Jews (with ancestral roots in the Western countries of North America and Europe) have been found to rate higher in social status than Mizrachi Jews (with roots in the Arab countries of North Africa and the Middle East) along such dimensions as education, occupational prestige, and income (Kraus, 1982). However, relations between Ashkenazi and Mizrachi Jews are not characterized by overt conflict and hostility. As

such, beliefs and ideologies that support unequal relations between Ashkenazi and Mizrachi Jews in Israel should be related to SDO-E.

In addition to the Ashkenazi–Mizrachi Jewish ethnic context, there is a second, more hierarchical intergroup context in Israel to consider. Israel has been and continues to be actively engaged in violent conflict with Palestinians, a population that lives both as citizens within the modern state of Israel and as noncitizens in Gaza and the West Bank. The difference in power between Israeli Jews and Palestinians is vast and extends from the political to the economic arena (Smooha, 1992). In previous analyses of the two Israeli samples examined in the current study, Levin and Sidanius (1999) found that the status gap between Jewish Israelis and Palestinian Israelis was perceived to be greater than the gap between Ashkenazi and Mizrachi Jews. Thus, SDO-D may have systemjustifying potency in Israel, particularly when conflict between Israeli Jews and Palestinians is under consideration.

Of course, our theoretical reasoning concerning how social structure may moderate the differential effects of SDO-D and SDO-E should extend to cultures other than the United States and Israel, but as an initial test of this reasoning, we selected these two countries because of the contrast in their predominant political rhetoric and salient intergroup conflicts. We also attempt to control for the effects of other differences between the two countries by surveying the same Israeli samples about two different intergroup contexts: that concerning Ashkenazi versus Mizrachi Jews and that concerning Jewish Israelis versus Palestinian Israelis. In sum, we expect that in extremely hierarchical intergroup contexts such as the Israeli–Palestinian conflict, SDO-D will be positively related to support for hierarchy-enhancing legitimizing ideologies that both reinforce group-based dominance (e.g., nationalism) and maintain the unequal status quo (e.g., political conservatism). SDO-E may continue to predict some intergroup attitudes in such contexts but should not be as potent as SDO-D.

Note that this prediction also stems from our novel conceptualization of SDO-D. Although previous research has argued that SDO-D should be considered the "group justification" dimension (Jost & Thompson, 2000; Kugler et al., 2010) or the "prejudice" dimension (Kugler et al., 2010), we define SDO-D more broadly in terms of its systemic implications and focus on the oppressive nature of intergroup relations supported by individuals who exhibit this orientation. In particular, our conceptualization of SDO-D as indexing support for group-based oppression leads us to hypothesize that support for beliefs and ideologies that would reinforce and legitimize such oppression should be related to SDO-D. In contrast, beliefs and ideologies that would support systems of group inequality (i.e., inequality among American ethnic groups and Jewish ethnic groups in Israel), but not necessarily forceful oppression, should be related to SDO-E.

The Present Research

Although previous studies have examined the proposed dimensions of SDO separately, they are inconclusive with respect to the predictive validity of these dimensions for reasons reviewed above. In addition, previous research has not explicitly examined how sociocultural context might influence the effects of SDO-D and SDO-E. The present study aims to fill these lacunae. Using data from five American samples and two Israeli samples, we test five hypotheses:

Hypothesis 1: In all samples, the SDO₆ scale should be composed of two subdimensions, reflecting the preference for group-based dominance hierarchies (SDO-D) and opposition to egalitarian intergroup relations (SDO-E).

Hypothesis 2: In all samples, the SDO₆ subdimensions should be strongly correlated. Although we hypothesize that each dimension should be uniquely related to a preference for qualitatively different relations between groups, both dimensions support group-based social stratification and as such should overlap considerably.

Hypothesis 3: In all samples, SDO-D should be positively related to perceptions that intergroup conflict is zero-sum, to aggressive intergroup attitudes and behavior (e.g., immigrant persecution), and to overt or "old-fashioned" prejudice.

Hypothesis 4: In contested hierarchical intergroup contexts, such as the Israeli–Palestinian context, SDO-D should be positively related both to support for ideologies that reinforce group dominance (e.g., old-fashioned prejudice) and to support for ideologies that reinforce unequal status relations with subordinate groups (e.g., political conservatism).

Hypothesis 5: In less contested hierarchical intergroup contexts, such as the Ashkenazi–Mizrachi Jewish ethnic context in Israel and the interethnic context in the United States, SDO-E should be related to support for subtle hierarchy-enhancing legitimizing ideologies such as system legitimacy beliefs, negative affect toward subordinate groups, and opposition to redistributive social policies.

We test these hypotheses using the full 16-item SDO₆ scale in six large surveys administered in the United States and Israel. In addition, in a seventh sample, we test these hypotheses using a different measure of SDO designed to demonstrate that any results consistent with our hypotheses will hold with SDO-D and SDO-E dimensions that are balanced with protrait and contrait items. As large surveys do not typically use the full SDO scale, the presence of the full scale in these samples, including one general population

survey, represents a rare opportunity to test these hypotheses using large data sets. In the American samples, only the responses of Whites were analyzed, as the responses of non-Whites to some of our criterion variables should relate differentially to SDO. Similarly, in the Israeli samples, only the responses of Ashkenazi Jews, the dominant Jewish ethnic group, were analyzed.

Method

Participants

Five American samples. In all five samples, we analyzed only data from respondents who indicated that the United States was their native country. Our data for Sample 1 were drawn from a survey of UCLA undergraduates given in 1993. The sample consisted of 186 White participants (51.6% females; $M_{\rm max} = 21.40$, SD = 3.76).

Samples 2 and 3 were also drawn from a university, but in a different region in the United States. These samples consisted of participants from the psychology department participant pool at Harvard University, which consists of university students, staff, and members of the local community. Sample 2, surveyed in 2007, consisted of 491 Whites (66.7% female). In all, 0.4% were younger than 18, 45.8% were between 18 and 21, 15.9% were between 22 and 25, 12.6% were between 26 and 30, and the remainder were older than 30. Sample 3, surveyed in 2009, consisted of 1,711 Whites after excluding those who also participated in Sample 2 (76.6% female). In all, 0.2% were younger than 18, 24.7% were 18 to 21 years old, 15.1% were 22 to 25, 17.1% were 26 to 30, and the remainder were older than 30.

Sample 4 was from the 1996 Los Angeles County Social Survey, which is a large, omnibus survey of Los Angeles County residents recruited using a probability sampling procedure. The survey was administered by telephone using a random-digit dialing procedure. This sample included 182 Whites (52.7% female; M = 47.12, SD = 15.61).

Sample 7 was from a 2009-2010 survey we administered through Amazon's Mechanical Turk platform (Buhrmester, Kwang, & Gosling, 2011). This sample included 528 Whites (60.2% female; $M_{\rm col} = 34.35$, SD = 12.51).

Israeli samples. Our data for Sample 5 were collected from undergraduates in 1994 at Hebrew University, Bar-Ilan University, and the Technion. The sample consisted of 220 Ashkenazi Jews, the dominant Jewish ethnic group in Israel (59.1% female; $M_{\rm age} = 23.84$, SD = 2.98). The survey was translated into Hebrew and then back translated into English to ensure equivalence of meaning across the original and back-translated surveys.

Sample 6 data came from undergraduates surveyed at Hebrew University and Haifa University in 1994. This sample consisted of 205 Ashkenazi Jews (61.5% female; $M_{\text{age}} = 22.56$, SD = 2.53).

Measures

SDO. The full 16-item SDO₆ scale was used in the first six samples (see Table 1). In Samples 1–3, all items were answered on a 7-point scale, with 1 = strongly disagree/disapprove and 7 = strongly agree/approve. In Sample 4, a 4-point scale was used, ranging from 1 = strongly disagree to 4 = strongly agree. Samples 5 and 6 used a 7-point scale, with 1 = do not agree at all and 7 = strongly agree. Alpha reliabilities are reported below, after we use factor analyses to show what items constitute the two dimensions.

Sample 7 used a measure of SDO designed to demonstrate that any findings concerning the factor structure or predictive validity of SDO₆ should also hold for SDO-D and SDO-E dimensions that have an equal number of protrait and contrait items (see Table 2).

Intergroup attitudes hypothesized to be more strongly related to SDO-D. We expected old-fashioned prejudice, zero-sum competition, and aggressive intergroup attitudes to be more strongly related to SDO-D than to SDO-E (see the appendix for items and scale reliabilities for all samples). "Old-fashioned" prejudice alleges that Blacks and Latinos in the American context and Mizrachi Jews in the Israeli ethnic context are intellectually challenged, have a poor work ethic, and are generally "inferior." It was measured in Samples 1, 2, 3, 5, and 7. Zero-sum competition addresses the notion that a gain for certain groups entails a loss for other groups. It was measured in Samples 1, 4, 5, 6, and 7. Various aggressive intergroup attitudes were measured. Nationalism (measured in Samples 1, 5, 6, and 7) represents a particularly aggressive assertion of one's country as superior, reflecting the desire to dominate other countries. Support for immigrant persecution was assessed in Samples 2, 3, and 7 by a variation of Altemeyer's Posse Scale, an instrument measuring one's willingness to participate in persecution of and violence against immigrants (Altemeyer, 1996; Thomsen et al., 2008). Sample 7 was unique among American samples in also assessing war support, the belief in the legitimacy of wars, death penalty support, general punitiveness, and preferences for hierarchy-enhancing jobs. The Israeli samples included some variables that pertained directly to the longstanding Israeli–Palestinian conflict, including the denial of Palestinians' right to land (Sample 5), belief in the Jewish right over all of Israel (Sample 5), and belief that ceding land to Palestinians is a threat to security (Samples 5 and 6). Samples 5 and 6 also contained a variable indexing support for war as a means of maintaining superiority. Sample 6 also assessed support for a "strong-arm" policy toward Arabs. Importantly, Samples 5 and 6 allow us to test whether variables that we hypothesize are more related to SDO-E than SDO-D in the United States and similar societies (i.e., outgroup affect, political conservatism) might be strongly related to SDO-D in the relatively hierarchical Israeli–Palestinian context. The variables measured for this purpose were

Table 2. Social Dominance Orientation (SDO) Measure With Equal Numbers of Protrait and Contrait Items in Each Dimension

SDO-Dominance (SDO-D)

SDO-Egalitarianism (SDO-E)

Protrait SDO-D:

- 1. Having some groups on top really benefits everybody.
- 2. It's probably a good thing that certain groups are at the top and other groups are at the bottom.
- 3. An ideal society requires some groups to be on top and others to 3. It is unjust to try to make groups equal. be on the bottom.
- 4. Some groups of people are simply inferior to other groups. Contrait SDO-D:
- 5. Groups at the bottom are just as deserving as groups at the top.
- 6. No one group should dominate in society.
- 7. Groups at the bottom should not have to stay in their place.
- 8. Group dominance is a poor principle.

Protrait SDO-E:

- I. We should not push for group equality.
- 2. We shouldn't try to guarantee that every group has the same quality of life.
- 4. Group equality should not be our primary goal. Contrait SDO-E:
- 5. We should work to give all groups an equal chance to succeed.
- 6. We should do what we can to equalize conditions for different
- 7. No matter how much effort it takes, we ought to strive to ensure that all groups have the same chance in life.
- 8. Group equality should be our ideal.

The 16 items selected for this measure were taken from a set of 99 items, which were submitted to a principal axis factor analysis. The scree plot from this analysis indicated that there were four primary dimensions. A second principal axis factor analysis with a restriction of four dimensions yielded two interpretable dimensions representing dominance and egalitarianism. The highest loading items were selected from these two dimensions, taking into consideration wording direction (protrait/contrait) and redundancy. We replaced one item in the SDO-E dimension because it was nearly identical to another item and replaced one item from the SDO-D dimension because it suggested a preference for ingroup dominance rather than hierarchy in general. This measure does not represent a new measure of SDO but is used in Sample 7 to demonstrate that any results we obtain are not the result of a confound in protrait-contrait wording and dimension.

negative affect toward Palestinians and right-wing political identification (Samples 5 and 6) as well as legitimacy beliefs concerning relations between Arabs and Jews (Sample 6).

Intergroup attitudes hypothesized to be more strongly related to SDO-E. We expected political conservatism (in the United States), system justification/legitimacy beliefs (in the United States and Israeli Jewish ethnic contexts), opposition to affirmative action, the Protestant work ethic, the belief that college admissions are fair, opposition to various redistributive racial/social policies, symbolic racism, and negative affect toward the Mizrachi Jews (in Israel) to be more strongly related to SDO-E than to SDO-D (see the appendix). Conservatism was measured through political party affiliation and self-placement on social and economic conservatism scales. It was assessed in Samples 1, 2, 3, 4, and 7. System justification/legitimacy beliefs concerning American and Israeli (Ashkenazi and Mizrachi) ethnic groups—measured in Samples 1, 2, 5, and 7—represent the idea that one gets what one deserves, and the social system is fair and just. Opposition to affirmative action was measured in Samples 1, 2, 4, and 7. Similar to system legitimacy beliefs, the Protestant work ethic reflects the view that one will be rewarded for what one works for. It was measured in Samples 1 and 4. Samples 2 and 3 also asked about the legitimacy of admissions to an elite university (Harvard), which can be interpreted as a system legitimacy belief. Opposition to various redistributive racial/social policies was measured in Samples 1, 2, 3, 5, and 7. Samples 4 and 7 were unique in assessing support for symbolic racism, which contrasts with the "old-fashioned" racism believed to be related to SDO-D. Sample 7 also assessed preferences concerning the unequal distribution of resources between schools at a fictional university and

preferences for hierarchy-attenuating jobs. As negative affect is a core component of symbolic racism, associated with SDO-E, we believed negative affect toward Mizrachi Jews (the lower status Jewish ethnic group) would be more strongly related to SDO-E. Note, however, that this prediction stands in contrast to our prediction that SDO-D will relate more strongly to negative affect toward Palestinians. Given the long-standing and continuing Israeli hostility toward Palestinians, we reasoned that negative affect toward Palestinians would be predicted substantially more by support for active group dominance than by opposition to group equality.

Results

Our first goal was to test whether a two-factor model of the 16 SDO items in fact fits the data better than a one-factor model. We conducted confirmatory factor analyses with two correlated latent dimensions representing SDO-D and SDO-E. Each dimension was represented by three parcels, which included the eight items expected to represent the dimension (see Table 1). The use of item parcels rather than individual items has been shown to reduce the random error of manifest indicators (Little, Cunningham, Shahar, & Widaman, 2002). That is, the reliability of our indicators is improved because forming composites (parcels) will take into account the random error associated with any one item. In Sample 1, the two-factor model yielded an excellent fit with just two modifications (χ^2/df ratio = 1.00, root mean square error of approximation [RMSEA] = .00, comparative fit index [CFI] = 1.00), whereas the one-factor model yielded a relatively poor fit even after two modifications (χ^2/df ratio = 5.88,

Table 3. Fit Statistics for Confirmatory Factor Analyses for Two- and One-Factor Social Dominance Orientation (SDO) Models and Chi-
Square Difference Tests Comparing the Two Models

					$\chi^2_{\text{difference}}$ test	
	χ^2/df	RMSEA	CFI	χ^2_{diff}	df	p <
Sample I						
Two-factor model	1.00	.00	1.00	35.15	1	.001
One-factor model	5.88	.17	.95			
Sample 2						
Two-factor model	2.47	.06	.99	479.94	1	.001
One-factor model	55.52	.34	.78			
Sample 3						
Two-factor model	7.50	.06	.99	1998.52	1	.001
One-factor model	228.73	.37	.71			
Sample 4						
Two-factor model	1.13	.03	1.00	39.75	1	.001
One-factor model	5.95	.17	.85			
Sample 5						
Two-factor model	1.07	.02	1.00	84.37	1	.001
One-factor model	10.32	.21	.89			
Sample 6						
Two-factor model	1.00	.00	1.00	33.45	1	.001
One-factor model	5.06	.15	.95			
Sample 7						
Two-factor model	0.84	.00	1.00	49.90	1	.001
One-factor model	7.85	.12	.98			

RMSEA = root mean square error of approximation; CFI = comparative fit index. For all samples, we used item parcels in these analyses. Parcel I consisted of the mean of Items I-3 under SDO-D in Table I, Parcel 2 consisted of the mean of Items 4-6 under SDO-D, and Parcel 3 was the mean of Items 7-8 under SDO-D. Parcels 4, 5, and 6 were the means of Items I-3, 4-6, and 7-8 under SDO-E, respectively. For Sample 7, we created parcels in the same way, using items found in Table 2 instead. In Sample I, based on modification indices, we correlated the residuals of Parcels 5 and 6 and Parcels 5 and 1 in the two-factor model and the residuals of Parcels 5 and 6 in the one-factor model. In Sample 4, we correlated the residuals of Parcels I and 4 in the two-factor model and Parcels 2 and 3 in the one-factor model. In Sample 7, for the two-factor model, we correlated the residuals of Parcels I and 4 and 2 and 5. For the one-factor model, we correlated the residuals of Parcels I and 2 and 5 and 6.

RMSEA = .17, CFI = .95).² The chi-square difference test showed a significant deterioration of model fit in the one-factor model (χ^2_{diff} = 35.15, df = 1, p < .001). Identical analyses in Samples 2–6 yielded similar results (see Table 3).

We also conducted the same analysis for Sample 7, where the two dimensions were each balanced with protrait and contrait items, and found that a two-factor model (χ^2/df ratio = 0.84, RMSEA = .00, CFI = 1.00) fit better than a one-factor model (χ^2/df ratio = 7.85, RMSEA = .12, CFI = .98; χ^2_{diff} = 49.90, df = 1, p < .001).

Having replicated previous findings demonstrating that a two-factor model fits the data better than a unidimensional model, we computed the reliabilities for the two SDO subscales. The SDO-D dimension was found to be highly reliable in all six samples using the SDO₆ scale: Sample 1 α = .89, Sample 2 α = .91, Sample 3 α = .92, Sample 4 α = .82, Sample 5 α = .81, Sample 6 α = .84. The SDO-E dimension was reliable as well: Sample 1 α = .88, Sample 2 α = .90, Sample 3 α = .91, Sample 4 α = .80, Sample 5 α = .79, Sample 6 α = .82. The balanced subdimensions in Sample 7 were similarly

reliable with $\alpha = .88$ for SDO-D and $\alpha = .90$ for SDO-E. These dimensions are used in all subsequent analyses.

To test Hypothesis 2, concerning the relationship between SDO-D and SDO-E, we computed Pearson correlation coefficients. The dimensions were strongly correlated in all seven samples: Sample 1 r=.53 (p<.001), Sample 2 r=.49 (p<.001), Sample 3 r=.44 (p<.001), Sample 4 r=.36 (p<.001), Sample 5 r=.49 (p<.001), Sample 6 r=.64 (p<.001), Sample 7 r=.76 (p<.001).

Hypothesis 3 predicted that SDO-D would correlate more strongly with endorsing intergroup aggression, subordinate group inferiority, zero-sum competition between groups, and overt domination than would SDO-E. To test this hypothesis, we regressed each of the intergroup attitudes thought to be related to this dimension on SDO-D and SDO-E simultaneously in a multiple regression analysis and obtained semipartial correlations. We further tested whether the semipartial correlation between SDO-D and each criterion was stronger than each criterion's relationship to SDO-E using Malgady's test for comparing two dependent semipartial correlations (Hittner, Finger, Mancuso, & Silver, 1995). We used

Table 4. Semipartial (part) Correlations Among SDO-E, SDO-D, and Criterion Variables Hypothesized to Be Related to SDO-D

			Difference	e test
Criterion variable	SDO-E part R	SDO-D part R	t	Þ
Sample I—UCLA 1993				
Old-fashioned racism	.18**	.33***	-1.36	.09
Zero-sum competition	.09	.31***	-1.84	.04
Nationalism	.27***	$.12^{\dagger}$	1.25	.11
Sample 2—Harvard 2007				
Old-fashioned racism	.18***	.37***	-2.98	.00
Support for immigrant persecution	.05	.42***	-5.33	.00
Sample 3—Harvard 2009				
Old-fashioned racism	.10***	.44***	-9.67	.00
Support for immigrant persecution	.06**	.46***	-11.29	.00
Sample 4—LACSS 1996				
Zero-sum competition	.07	.34***	-2.36	.00
Sample 5—Israeli universities 1994				
Old-fashioned prejudice toward Mizrachi Jews	.15**	.28***	1.19	.12
Zero-sum competition (with Mizrachi Jews)	.02	.36***	3.21	.00
Nationalism	16*	.22**	3.25	.00
Denial of Palestinian right to land	04	.44***	4.56	.00
Jewish right over all of Israel	10	.39***	4.45	.00
Giving Palestinian land threatens security	06	.36***	3.74	.00
War support	06	.28***	2.96	.00
Negative affect toward Palestinians	.07	.30***	2.11	.02
Right-wing political identification	.00	.32***	2.73	.00
Sample 6—Israeli universities 1994				
Zero-sum competition (with Mizrachi Jews)	.02	.36***	3.09	.00
Nationalism	.09	03	-0.90	.19
Giving Palestinian land threatens security	.04	.23**	1.58	.06
War support	.01	.12 [†]	0.87	.19
"Strong-arm" policy toward Arabs	.11	.34***	2.11	.02
Negative affect toward Palestinians	.06	.28***	1.81	.04
Right-wing political identification	.03	.26***	1.80	.04
System legitimacy between Arabs and Jews	.24***	.15*	-0.83	.21
Sample 7—Amazon MTurk 2009–10	 -		0.00	
Old-fashioned racism	01	.33***	-4.78	.00
Zero-sum competition	.12**	.19***	-0.97	.17
Nationalism	.03	.28***	-3.41	.00
Support for immigrant persecution	.06	.25***	-2.66	.00
War support	.09*	.17***	-1.01	.16
War legitimacy beliefs	01	.28***	-4.00	.00
Death penalty support	.03	.19***	2.15	.02
Punitiveness	.04	.24***	-2.65	.00
Hierarchy-enhancing jobs	12**	.21***	-4.08	.00

Difference tests are one-tailed. The *p* values of the semipartial correlations are based on significance tests of the *B* coefficients obtained from the same regression analyses as the semipartial correlations.

 $^{\dagger}p < .10.*p < .05.**p < .01.***p < .001.$

one-tailed tests given our a priori predictions concerning which dimension should more strongly relate to the criterion variables we examine. Given the large number of analyses involved, we refer the reader to Table 4 rather than present all statistics in the text, where we describe the findings.³ We first report the results for Samples 1–6, in which the SDO₆ scale was used, and then describe the findings for

Sample 7, in which the two SDO dimensions were composed of both protrait and contrait items.

As expected, old-fashioned prejudice (Samples 1, 2, 3, and 5) was predicted significantly by SDO-D in all four samples. It was significantly more strongly related to SDO-D than to SDO-E in Samples 2 and 3, marginally significantly more related to SDO-D than to SDO-E in Sample 1, and more

strongly related to SDO-D, though not significantly so, in Sample 5 (see Table 4).

Perceptions of zero-sum competition vis-à-vis a subordinate ethnic group (Samples 1, 4, 5, and 6) were significantly predicted by SDO-D and significantly more strongly predicted by SDO-D than by SDO-E in all samples.

We also assessed attitudes toward aggressive intergroup behavior (i.e., nationalism and immigrant persecution). Nationalism was related to SDO-D in the way we expected in Sample 5—that is, significantly related to SDO-D and significantly more related to SDO-D than SDO-E—but was only marginally significantly related to SDO-D in Sample 1. Interestingly, nationalism was also significantly positively related to SDO-E in Sample 1 and significantly negatively related to SDO-E in Sample 5. In Sample 6, nationalism was not related to SDO-D or SDO-E. In both Sample 2 and Sample 3, support for immigrant persecution was significantly related to SDO-D and more strongly related to this dimension than to SDO-E.

Samples 5 and 6 provided the greatest number of unique variables to test the differential predictive power of SDO-D. SDO-D significantly predicted the denial of a Palestinian right to land and the belief that Jews have a right to all of Israel in Sample 5. These beliefs were significantly better predicted by SDO-D than by SDO-E. The belief that ceding land to Palestinians threatens Israeli security was assessed in Samples 5 and 6 and significantly predicted by SDO-D in both cases; SDO-D was a significantly better predictor of this belief than SDO-E in Sample 5 and a marginally significantly better predictor in Sample 6. Support for war to maintain national superiority was significantly predicted by SDO-D in Sample 5 and marginally significantly predicted by SDO-D in Sample 6. In Sample 5, war support was significantly better predicted by SDO-D than by SDO-E. Finally, Sample 6 also assessed support for a "strong-arm" policy toward Arabs and revealed that this was significantly predicted by SDO-D and significantly better predicted by SDO-D than by SDO-E.

Finally, Sample 7 demonstrated that a measure of SDO-D composed of *both* protrait and contrait items is more related to criteria we would expect to relate more to SDO-D than to SDO-E. Specifically, SDO-D significantly predicted old-fashioned racism, zero-sum competition, nationalism, support for immigrant persecution, war support, beliefs about war legitimacy, support for the death penalty, general punitiveness, and a preference for hierarchy-enhancing jobs. SDO-D was significantly more related to these criteria than SDO-E in seven out of nine cases.

In support of Hypothesis 4—the prediction that SDO-D would be related to outcomes that justify the existing hierarchy in contexts where the hierarchy is severe and highly contested—SDO-D also significantly predicted negative affect toward Palestinians and right-wing political identification in Israel in two independent samples (Samples 5 and 6), and these variables were better predicted by SDO-D than by SDO-E. Although outgroup affect and political conservatism

are hypothesized to be more related to SDO-E in a less hierarchical context, it appears that negative affect toward subordinate groups and support for right-wing political establishments are strongly related to SDO-D when power relations are more contested and hierarchical. In addition, in Sample 6, the belief that the system governing relations between Arabs and Jews in Israel is legitimate was predicted by SDO-D and SDO-E and not differentially predicted by the two dimensions.

Our next test, Hypothesis 5, predicted that SDO-E would correlate more strongly with endorsement of subtle legitimizing myths (e.g., symbolic racism), support for the status quo (e.g., system legitimacy beliefs), and opposition to redistributive social policies in the United States and in the Jewish ethnic context in Israel. We also predicted that SDO-E would relate more strongly to political conservatism in the United States. We followed the same regression procedure used to test Hypothesis 3, regressing each of these variables on SDO-D and SDO-E simultaneously, and again examined whether the semipartial correlations were significantly different (through one-tailed tests; see Table 5). We begin with the results for Samples 1–6 and then report the findings for Sample 7.

We measured political conservatism in all four American samples (Samples 1–4) and, in every case, found that it was significantly predicted by SDO-E and significantly more strongly related to SDO-E than SDO-D.

System justification/legitimacy beliefs were assessed in Samples 1 and 2, and in both cases they were predicted significantly by SDO-E and more strongly by SDO-E than SDO-D. We also measured system legitimacy in the Jewish Israeli ethnic context in Sample 5. As this measure assessed beliefs in the legitimacy of status differences between the Jewish ethnic groups in Israel (a less contested hierarchical context similar to race relations in the United States), we expected SDO-E to be related to it. System legitimacy was indeed related to SDO-E in the Jewish Israeli ethnic context but not more strongly than it was related to SDO-D. Consistent with our expectations, we found that denial of ethnic discrimination in Israel was predicted significantly by SDO-E in Sample 5 and was more positively related to this dimension than to SDO-D.

Turning to affirmative action in the United States, as we expected, opposition to this policy was predicted significantly by SDO-E in all three samples in which it was measured (Samples 1, 2, and 4) and significantly more related to this dimension than to SDO-D. The Protestant work ethic in the United States was similarly significantly related to SDO-E in Samples 1 and 4 and significantly more related to this dimension than SDO-D in Sample 1.

We also expected that the belief that the admissions process to Harvard University is fair would be positively related to SDO-E and more positively related to SDO-E than to SDO-D, and we found in Samples 2 and 3 that this was indeed the case.

Opposition to various redistributive social policies—that is, opposition to legally enforced racial policy and opposition to social welfare in Sample 1, opposition to redistributive social policy and opposition to civil rights activists in Samples 2 and 3, and opposition to income redistribution (between Jewish ethnic groups in Israel) in Sample 5—was found to be significantly predicted by SDO-E in all seven of these cases and was significantly more related to SDO-E than to SDO-D in all cases except with respect to civil rights activists in Sample 2.

Symbolic racism was measured in Sample 4 and, as expected, was significantly related to SDO-E and marginally significantly more strongly related to SDO-E than to SDO-D.

Finally, in both Sample 5 and Sample 6, we found that negative affect toward the Mizrachi Jews was significantly predicted by SDO-E but not significantly more strongly predicted by SDO-E than by SDO-D. Relationships with affect toward Palestinians were different. Although negative affect is a component of symbolic racism and thus generally expected to be better predicted by SDO-E, when negative affect toward an outgroup that is engaged in a bitter conflict with the dominant group (Palestinians vis-à-vis the dominant Jewish group in Israel) is considered, it is expected to be better predicted by SDO-D than by SDO-E. This is consistent with our argument that the relationship among SDO-D, SDO-E, and intergroup attitudes is affected by the nature of the social system under consideration.

Critically, results from Sample 7 again assured us that our findings with the SDO₆ scale are not the result of the two dimensions including either all protrait or all contrait items. As in the other samples, the SDO-E dimension significantly predicted political conservatism, opposition to affirmative action, opposition to racial policy, opposition to welfare, symbolic racism, support for unequal distribution of university resources at a fictional university, and a preference for hierarchy-attenuating jobs. In five out of seven of these cases, SDO-E was a significantly better predictor than SDO-D. Unexpectedly, system legitimacy was significantly predicted by SDO-D in this sample and better predicted by SDO-D than by SDO-E. However, this was the one exception to the general pattern of results.

Discussion

The present research examined whether the SDO₆ scale consists of two distinct, substantive subdimensions—support for group-based domination and opposition to group-based equality. We tested both the factor-analytic structure of the SDO items and whether each subdimension differentially predicts criterion variables in seven samples. Results supported all of our hypotheses. Specifically, in all seven samples, a two-factor solution accounted for the intercorrelations among the 16 SDO₆ items better than a one-factor solution, confirming Hypothesis 1 that SDO is composed of two

subdimensions. Confirming Hypothesis 2, SDO-E and SDO-D were both strongly correlated in every sample. Our substantive hypotheses examined the kinds of intergroup attitudes that should be more strongly related to SDO-D or to SDO-E. Confirming Hypothesis 3—that SDO-D especially relates to the active and forceful subjugation of outgroups—endorsements of immigrant persecution, old-fashioned racism, perceived zero-sum competition, and support for war were all significantly predicted by SDO-D beyond the effects of SDO-E in the United States and in Israel. Furthermore, consistent with Hypothesis 4—that SDO-D would also predict system legitimizing/justifying ideologies (e.g., conservatism) in extremely hierarchical and highly conflictual intergroup contexts—we found that in the context of the Israeli-Palestinian conflict, members of the high-status Jewish ethnic group exhibited a relationship between SDO-D on one hand and political conservatism and negative affect toward Palestinians on the other hand. This was replicated in two independent samples. Hypothesis 5 proposed that SDO-E especially relates to less confrontational hierarchyenhancing ideologies that legitimize relatively egalitarian but still socially stratified systems. Confirming this, we found that for the variables we thought would be predicted by SDO-E—namely, subtle hierarchy-enhancing legitimizing ideologies and hierarchy-attenuating social policies most were predicted significantly by SDO-E, controlling for the effects of SDO-D. Moreover, these variables were more strongly predicted by SDO-E than by SDO-D. Notably, results from Sample 7 provided support for these hypotheses using a different measure of SDO composed of SDO-D and SDO-E dimensions that were balanced with four protrait and four contrait items each, ruling out the possibility that these dimensions are purely an artifact of the directionality of the item wording.

Given these findings, it appears safe to conclude that there are two related but conceptually distinct aspects of SDO and that these aspects predict qualitatively different intergroup phenomena. The point of greatest convergence between us and two other research teams who have examined the structure of SDO, namely Jost and Thompson (2000) and Kugler et al. (2010), lies in our collective views on what SDO-E should relate to. That is, all three research teams argue for and find support for the relationship between SDO-E and hierarchy-attenuating social policies (e.g., affirmative action opposition) and political conservatism in the United States. The replication of these findings by independent research teams using different operationalizations of criterion measures provides confidence that SDO-E corresponds to noninclusive and nonegalitarian preferences regarding intergroup relations.

Despite this similarity in our mutual understanding of SDO-E, our interpretation differs somewhat from the system-justification approach of Jost and Thompson (2000) and Kugler et al. (2010) in two important ways. First, we do not believe that the concept of system justification

Table 5. Semipartial (part) Correlations Among SDO-E, SDO-D, and Criterion Variables Hypothesized to Be Related to SDO-E

Criterion variable Sample I—UCLA 1993 Political conservatism System legitimacy Opposition to affirmative action Protestant work ethic Opposition to legally enforced racial policy Opposition to social welfare Sample 2—Harvard 2007	.48*** .45*** .34*** .36*** .52*** .46***	05 02 02 06	4.80 4.17 2.90 3.43	.00 .00
Political conservatism System legitimacy Opposition to affirmative action Protestant work ethic Opposition to legally enforced racial policy Opposition to social welfare	.45*** .34*** .36*** .52***	02 02 06	4.17 2.90	.00
System legitimacy Opposition to affirmative action Protestant work ethic Opposition to legally enforced racial policy Opposition to social welfare	.45*** .34*** .36*** .52***	02 02 06	4.17 2.90	.00
Opposition to affirmative action Protestant work ethic Opposition to legally enforced racial policy Opposition to social welfare	.34*** .36*** .52***	02 06	2.90	
Protestant work ethic Opposition to legally enforced racial policy Opposition to social welfare	.36*** .52***	06		
Opposition to legally enforced racial policy Opposition to social welfare	.52***		3.43	.00
Opposition to social welfare		.06		.00
• •	.46***		4.56	.00
Sample 2—Harvard 2007		.03	3.96	.00
ourriple 2 That vard 2007				
Political conservatism	.30***	.11**	2.63	.00
System legitimacy	.36***	.15***	3.12	.00
Opposition to affirmative action quotas	.22***	04	3.36	.00
Opposition to redistributive social policy	.47***	.12**	5.65	.00
Opposition to civil rights activists	.27***	.19***	1.21	.11
Belief that Harvard admissions is fair	.40***	07 [†]	6.51	.00
Sample 3—Harvard 2009				
Political conservatism	.37***	.04 [†]	8.86	.00
Opposition to redistributive social policy	.55***	.04 [†]	15.88	.00
Opposition to civil rights activists	.34***	.13***	5.63	.00
Belief that Harvard admissions is fair	.31***	05*	8.90	.00
Sample 4—LACSS 1996				
Political conservatism	.28***	.07	1.73	.04
Opposition to affirmative action	.31***	.03	2.33	.01
Protestant work ethic	.22**	.09	1.11	.14
Symbolic racism	.29***	.14 [†]	1.29	.10
Sample 5—Israeli universities 1994				
System legitimacy between Jewish groups	.24***	.25***	-0.09	.41
Opposition to income redistribution	.39***	14*	-4.77	.00
Negative affect toward Mizrachi Jews	.20***	.H [†]	-0.83	.20
Denial of ethnic discrimination	.22**	17*	-3.38	.00
Sample 6—Israeli universities 1994				
Negative affect toward Mizrachi Jews	.20**	.09	-0.89	.19
Sample 7—Amazon MTurk 2009–10				
Political conservatism	.22***	.05	2.21	.01
System legitimacy	.00	.17***	-2.06	.02
Opposition to affirmative action	.20***	03	2.91	.00
Opposition to racial policy	.38***	.05	5.35	.00
Opposition to welfare	.28***	.14***	2.12	.02
Symbolic racism	.17***	.19***	-0.27	.39
Unequal distribution of university resources	.16***	.14***	0.33	.37
Hierarchy-attenuating jobs	.23***	.07 [†]	2.21	.01

Difference tests are one-tailed. The p values of the semipartial correlations are based on significance tests of the B coefficients obtained from the same regression analyses as the semipartial correlations.

necessarily invokes sentiments expressed by SDO-E. For example, in Samples 5 and 6, support for right-wing political beliefs, a typical measure of endorsement of the status quo, was more strongly related to SDO-D than to SDO-E. We argue that in hierarchical societies engaged in violent intergroup conflicts, legitimizing the existing social structure

may be more strongly related to SDO-D than to SDO-E. In other words, the relational orientation that motivates system justification hinges crucially on the kinds of relationships the system entails. When the system entails contested, conflictual dominance relations, such as the Israeli–Palestinian conflict, support for the hierarchical status quo may be motivated

 $^{^{\}dagger}p < .10.*p < .05.**p < .01.***p < .001.$

more by support for group-based dominance than by opposition to group-based equality.

Introducing the moderating role of sociostructural context is fraught with difficulty as there are many ways in which the two societies we surveyed, the United States and Israel, differ. Nevertheless, the fact that the specific differences in the intergroup landscape of the two countries affect the predictive power of the two SDO subdimensions in precisely the direction predicted by our framework is particularly impressive. As one attempt to address country-specific effects, we measured negative affect toward outgroups in two different intergroup contexts within Israel. The hypothesized differential role of SDO-D and SDO-E in predicting affect toward Palestinians and Mizrachi Jews, respectively, emerged even within samples, bolstering our argument that what matters is the intergroup context under consideration.

A second way in which our perspective differs from that of others is that in contrast to Kugler et al. (2010), we do not see SDO-D as the dimension that relates most strongly to prejudice. Rather, we believe that different types of prejudice are differentially related to the two SDO dimensions. What is often called old-fashioned prejudice, that is, the belief in outgroup inferiority, should serve to legitimize group-based dominance and thus should be related to SDO-D. However, prejudice that is dressed up not in notions of outgroup inferiority but in reference to other values that nonetheless have the consequence of demeaning outgroups, like symbolic racism, should be more related to SDO-E. Our data confirm the conceptual distinction between "old-fashioned" and "modern" prejudice and show that modern prejudice is still motivated by support for group inequality. Furthermore, we emphasize that SDO-E is about group-based inequality. Although it should share variance with prior operationalizations of antiegalitarianism (e.g., Katz & Hass, 1988), groupbased antiegalitarianism should be distinguished from beliefs about interpersonal equality.

Thus, we define SDO-D more broadly in terms of its systemic implications and thoroughly demonstrate its implications for a particular form of intergroup relations. Its relation to aggressive intergroup behavior, zero-sum competition, and particular forms of prejudice—shown here for the first time—demonstrates that this broader definition is necessary and that the consequences of SDO-D may not be fully captured by previous definitions.

Contrary to the conclusions of Sears et al. (2008), the present evidence shows that the SDO-D dimension is far from being sociopolitically inert, even in the United States. Furthermore, in the Israeli sample, SDO-D was related to support for war, affect toward Palestinians, and various forms of opposition to making concessions to Palestinians. Indeed, we found that SDO-D was a better predictor than SDO-E was for aggressive intergroup behaviors, perceptions of zero-sum intergroup competition, and old-fashioned racism. Although SDO-D may not predict more subtle forms of intergroup bias, such as support for less

extreme hierarchy-enhancing ideologies or opposition to hierarchy-attenuating social policies, we have demonstrated that it is useful in understanding more extraordinary, potentially costly intergroup conflicts.

SDO-E, meanwhile, appears to predict the subtle forms of intergroup bias that might be most effective in perpetuating systems of group-based inequality. Many theorists in the field of intergroup relations have argued that persuasion, or ideological control, is the preferred means of social control, compared to the use of naked force, in maintaining group-based hierarchies (e.g., Jackman, 1994; Sidanius & Pratto, 1999; Tyler, 2006). It is thus important to have a measure of the general preference for inequality between social groups that is distinct from support for active domination.

Importantly, we note that in many instances, it may still be best to use the full SDO scale. Many forms of bias might naturally mix elements of both dimensions of SDO. For example, perceiving mixed-race individuals as belonging more to their subordinate parent group (i.e., according to a rule of *hypodescent*) might entail the belief that the subordinate parent group is inferior but at the same time constitute a relatively subtle means of maintaining status boundaries (Ho, Sidanius, Levin, & Banaji, 2011). In such cases, separating the SDO scale will not prove more useful than using the full scale.

Social dominance theory argues that the SDO scale is a good measuring stick for testing the function of legitimizing myths, in particular whether they are hierarchy enhancing or hierarchy attenuating (Pratto et al., 2006). Along these lines, examining whether a legitimizing myth is more related to SDO-D or SDO-E may help ascertain whether the myth is intended to support dominance and oppression involving the use of force or intended to uphold inequality in less overt ways. For example, the finding that old-fashioned racism is more related to SDO-E suggests that old-fashioned racism might justify forceful forms of group oppression such as slavery or apartheid, whereas symbolic racism might lead one to oppose equality for all groups but not support the use of force to dominate subordinate groups.

Thus, in cases where researchers are interested in a phenomenon that has *clearly* been shown to relate to one dimension or the other, it may be practical to measure just one dimension of SDO and thereby reduce the length of study surveys. However, in cases where the phenomenon of interest could potentially mix elements of SDO-D and SDO-E, or where it is unclear whether an attitude subserves a preference for group-based dominance or opposition to equality, it would be better to use the full SDO scale.

We view both dimensions of SDO as primarily supporting generalized group-based hierarchy rather than *ingroup* dominance (Pratto et al., 2006), even if there are qualitative differences in the character of the hierarchy the two dimensions support. However, at present, a few items in the SDO-D dimension (e.g., "In getting what your group wants, it is sometimes

necessary to use force against other groups") may be interpreted as measuring support for ingroup dominance. Future measures of SDO should remove this potential confound.

We would also like to emphasize that the SDO scale used in Sample 7 does not represent an empirically validated new measure of SDO. More work is needed to demonstrate the reliability and validity of a new measure. Nevertheless, the measure we used, with both SDO-D and SDO-E balanced with protrait and contrait items, does clearly demonstrate that our findings cannot simply be attributed to a confound in item wording.

Social dominance theorists have long argued and demonstrated that individual differences in the desire for group-based hierarchy have serious consequences for the ways in which individuals engage in intergroup relations. The new analyses presented in this study demonstrate that depending on the outcome and the sociostructural context, one component of SDO might be more consequential than the other. These findings should help us understand more precisely the underpinnings of intergroup conflict, whether it occurs on the battlefield or in the voting booth. We hope that continued analysis of SDO's structure and function, and the further development of its measurement, will shed more light on what motivates various manifestations of intergroup inequality.

Appendix

All measures used a 1 (*strongly disagree/disapprove*) to 7 (*strongly agree/approve*) scale unless otherwise indicated. Reverse-coded items are marked with an asterisk.

Samble 1

SDO-D Criterion Variables.

Old-fashioned racism ($\alpha = .89$)

- 1. Blacks are inherently inferior.
- 2. Chicanos/Latinos are inherently inferior.
- 3. African Americans are less intellectually able than other groups.
- 4. African Americans are lazier than other groups.
- 5. Latinos are less intellectually able than other groups.
- 6. Latinos are lazier than other groups.

Zero-sum competition ($\alpha = .67$)

- 1. Better jobs for African Americans means fewer good jobs for Whites.
- 2. The economic advancement of certain groups threatens the advancement of other ethnic groups.

Nationalism ($\alpha = .60$)

- 1. For the most part, America is no more superior than any other industrialized country in the world.*
- To maintain our country's economic superiority, aggressive economic policies are sometimes necessary.
- 3. The USA should not dominate other countries.*
- 4. There are many other cultures in the world that are superior to ours.*

SDO-E Criterion Variables.

Political conservatism ($\alpha = .88$)

- 1. How would you describe your political party preference?
- $1 = Strong\ Democrat\ to\ 7 = Strong\ Republican$
- 2. In terms of economic issues, how would you describe your political attitudes and beliefs?
- $1 = very \ liberal \ to \ 7 = very \ conservative$
- 3. In terms of social issues, how would you describe your political attitudes and beliefs?
- $1 = very \ liberal \ to \ 7 = very \ conservative$

System legitimacy ($\alpha = .78$)

- 1. America is a just society where differences in status between ethnic groups reflect actual group differences.
- 2. Differences in status between ethnic groups are fair.
- Minority groups are given the same treatment as other ethnic groups in the criminal justice system.
- 4. American society treats all ethnic groups equally.
- 5. Although there was discrimination in the past, today members of all ethnic groups have equal opportunity.

Opposition to affirmative action ($\alpha = N/A$)

1. Affirmative action.*

Protestant work ethic ($\alpha = .79$)

- If people work hard they almost always get what they want.
- 2. Most people who don't get ahead should not blame the system; they really have only themselves to blame.

- In America, getting ahead doesn't always depend on hard work.*
- 4. Even if people work hard, they don't always get ahead.*

Opposition to legally enforced racial policy ($\alpha = .87$)

- 1. Government should see to it that minorities get fair treatment in jobs.*
- Government should not pass laws concerning the hiring of ethnic minorities.
- 3. Government should ensure that Whites and minorities go to the same school.*
- 4. Government has no business trying to ensure racial integration in schools.
- 5. Government should do what it can to improve the economic condition of poor ethnic minorities.*
- 6. Government has no business trying to improve the economic condition of poor ethnic minorities.

Opposition to social welfare ($\alpha = .83$)

- 1. Greater assistance to the poor*
- 2. Reduced public support for the homeless
- 3. Reduced benefits for the unemployed

Sample 2

SDO-D Criterion Variables.

Old-fashioned racism ($\alpha = .75$)

- 1. Racial integration*
- 2. White superiority
- 3. Blacks are inherently inferior

Support for immigrant persecution ($\alpha = .93$)

Now, suppose that the American government some time in the future passed a law outlawing immigrant organizations in the US. Government officials then stated that the law would only be effective if it were vigorously enforced at the local level and appealed to every American to aid in the fight against these organizations.

Please indicate how much you agree or disagree with the following statements:

- 1. I would tell my friends and neighbors that it was a good law.
- 2. I would tell the police about any immigrant organizations that I knew.
- 3. If asked by the police, I would help hunt down and arrest members of immigrant organizations.
- 4. I would participate in attacks on the immigrant headquarters organized by the proper authorities.
- 5. I would support physical force to make members of immigrant organizations reveal the identity of other members.

6. I would support the execution of leaders of immigrant organizations if the government insisted it was necessary to protect the U.S.

SDO-E Criterion Variables.

Political conservatism ($\alpha = .81$)

1.	now would you describe your political party preference?
	Strong Republican Weak Republican Independent Republican Independent Independent Democrat Weak Democrat Strong Democrat Other (please specify)
2.	In terms of <i>economic issues</i> , how would you describe your political attitudes and beliefs?
	Very Conservative Conservative Slightly Conservative Middle-of-the-road Slightly Liberal Liberal Very Liberal Other (please specify)
3.	In terms of <i>social issues</i> , how would you describe your political attitude and beliefs?
	Very Conservative Conservative Slightly Conservative Middle-of-the-road Slightly Liberal Liberal Very Liberal

System legitimacy ($\alpha = .68$)

Other (please specify)

Please use the following scale to rate the extent to which each of the following statements is true for you. There are no right or wrong answers for any question. The best answer is what you think is true for yourself.

- 1. Our society is an open society where all individuals can achieve higher status.
- 2. Advancement in our society is possible for all individuals.
- Differences in status between groups in society are fair.
- 4. Differences in status between groups in society are the result of injustice.*

Opposition to affirmative action quotas ($\alpha = N/A$)

Please indicate how you personally feel about different kinds of affirmative action. For the following policy,

Appendix (continued)

please indicate if you strongly support, somewhat support, somewhat oppose, or strongly oppose the policy.

- 1. Quotas, that is, setting aside places for certain groups.*
- 1 = strongly oppose, 2 = somewhat oppose, 3 = somewhat support, 4 = strongly support

Opposition to redistributive social policy ($\alpha = .73$)

- 1. Government sponsored healthcare for everybody*
- 2. Low income housing*
- 3. Reduced benefits for the unemployed
- 4. Increased taxation of the rich*

Opposition to civil rights activists ($\alpha = N/A$)

1. Civil-rights activists*

Belief that Harvard admissions is fair ($\alpha = .85$)

- 1. Societal injustice makes it impossible for some Blacks to get the acceptance to Harvard that they truly deserve.*
- 2. Societal injustice makes some Whites get an acceptance to Harvard that they don't actually deserve.*
- 3. Societal injustice makes some White persons get the spot at Harvard that should have been given to another, Black, person if things were fair.*

Samble 3

SDO-D Criterion Variables.

Old-fashioned racism ($\alpha = .75$)

- 1. Racial integration*
- 2. White superiority
- 3. Blacks are inherently inferior

Support for immigrant persecution ($\alpha = .91$)

Now, suppose that the American government some time in the future passed a law outlawing immigrant organizations in the US. Government officials then stated that the law would only be effective if it were vigorously enforced at the local level and appealed to every American to aid in the fight against these organizations.

Please indicate how much you agree or disagree with the following statements:

1. I would tell my friends and neighbors that it was a good law.

- 2. I would tell the police about any immigrant organizations that I knew.
- 3. If asked by the police, I would help hunt down and arrest members of immigrant organizations.
- 4. I would participate in attacks on the immigrant headquarters organized by the proper authorities.
- 5. I would support physical force to make members of immigrant organizations reveal the identity of other members.
- 6. I would support the execution of leaders of immigrant organizations if the government insisted it was necessary to protect the U.S.

SDO-E Criterion Variables.

Political conservatism ($\alpha = .89$)

1.	How would you describe your political party preference?
	Strong Republican Weak Republican Independent Republican Independent Independent Democrat Weak Democrat Strong Democrat Other (please specify)
2.	In terms of <i>economic issues</i> , how would you describe your political attitudes and beliefs? Very Conservative Conservative Slightly Conservative Middle-of-the-road Slightly Liberal Liberal Very Liberal Other (please specify)
3.	In terms of <i>social issues</i> , how would you describe your political attitude and beliefs? Very Conservative Conservative Slightly Conservative Middle-of-the-road Slightly Liberal Liberal

Opposition to redistributive social policy ($\alpha = .73$)

- 1. Government sponsored healthcare for everybody*
- 2. Low income housing*

___ Very Liberal
Other (please specify)

- 3. Reduced benefits for the unemployed
- 4. Increased taxation of the rich*

Opposition to civil rights activists ($\alpha = N/A$)

1. Civil-rights activists*

Belief that Harvard admissions is fair ($\alpha = .88$)

- Societal injustice makes it impossible for some Blacks to get the acceptance to Harvard that they truly deserve.*
- 2. Societal injustice makes some Whites get an acceptance to Harvard that they don't actually deserve.*
- 3. Societal injustice makes some White persons get the spot at Harvard that should have been given to another, Black, person if things were fair.*

Sample 4

SDO-D Criterion Variables.

Zero-sum competition ($\alpha = .77$)

Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree with the statement?

- 1. More good jobs for Blacks means fewer good jobs for members of other groups.
- 2. The more influence Blacks have in local politics the less influence members of other groups will have in local politics.
- 3. The more good housing and neighborhoods go to Blacks, the fewer good houses and neighborhoods there will be for members of other groups.
- Many Blacks have been trying to get ahead economically at the expense of members of other groups.

SDO-E Criterion Variables.

Political conservatism ($\alpha = .67$)

- Generally speaking, and regardless of how you are registered, do you usually think of yourself as a democrat, a republican, neither a democrat nor a republican, an independent, or what?
- a. Do you think of yourself as a strong ___ or not so strong ?
- 2. Would you describe your political views in general as very conservative, somewhat conservative, neither conservative nor liberal, somewhat liberal, or very liberal?

Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree with the statement?

- 3. The government should guarantee that basic health care is available for all Americans.*
- 4. The government should lower taxes.

5. The government has taken over too many things that should be handled by individuals, families, and private businesses.

Opposition to affirmative action ($\alpha = N/A$)

Please tell me if you strongly support, somewhat support, somewhat oppose, strongly oppose, or have you never heard of affirmative action?

1. In general, do you support or oppose affirmative action?

1 = strongly support to 4 = strongly oppose

Protestant work ethic ($\alpha = .70$)

Please tell me whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree with these statements:

- Although there was discrimination in the past, today members of all groups have an equal opportunity to succeed.
- 2. Success, or one's achievement, in American society depends primarily on individual merit.

Symbolic racism ($\alpha = .67$)

Please tell me if you strongly agree, somewhat agree, somewhat disagree, or strongly disagree with the following statements:

- If blacks work hard they almost always get what they want.
- Hard work offers little guarantee of success for blacks.*
- 3. Blacks are getting too demanding in their push for equal rights.
- 4. The Irish, Italians, Jews and many other minorities overcame prejudice and worked their way up. Blacks should do the same without any special favors.

Sample 5

SDO-D Criterion Variables.

Old-fashioned prejudice toward Mizrachi Jews ($\alpha = .58$)

- Mizrachim are less intellectually able than Ashkenazim.
- Mizrachim have lower motivation to succeed than Ashkenazim.

Zero-sum competition with Mizrachi Jews ($\alpha = .70$)

Appendix (continued)

- Better jobs for Mizrachim means fewer good jobs for Ashkenazim.
- 2. The economic advancement of the Mizrachim threatens the advancement of the Ashkenazim.

Nationalism ($\alpha = .47$)

- 1. Since Israel is far from perfect, the country has many things to learn from other countries.*
- 2. For the most part, Israel is no more superior than any other industrialized country in the world.*
- 3. For me, there is no culture in the world that is superior to ours.

Denial of Palestinian right to land ($\alpha = .89$)

1. What are you willing to give up in the West Bank in order to reach a peace agreement with the Palestinians?

Everything _____
The majority _____
A certain part _____
A small part _____
Nothing at all _____

Different solutions have been put forth for the future of the territories so that Israel will achieve peace and security. To what extent do you support or oppose each of the following solutions:

- 2. Do you support or oppose Israel's forcing the Arabs to leave the territories in exchange for compensation, as stated by the transfer plan?
- 3. Do you support or oppose annexation of the territories without giving equal rights to the Palestinians?
- 4. Do you support or oppose the establishment of a Palestinian state?*

Jewish right over all of Israel ($\alpha = .77$)

- 1. I believe in the right of the Jewish people over all the Land of Israel.
- 2. The Palestinians have no right to demand territories from the Land of Israel.

Giving Palestinian land threatens security ($\alpha = .92$)

- Giving land to the Palestinians threatens the security of Israel.
- 2. A Palestinian state threatens the security of Israel.

War support ($\alpha = N/A$)

 To maintain Israel's superiority, war is sometimes necessary.

Negative affect toward Palestinians ($\alpha = N/A$)

Using the scales provided, please indicate how positively or negatively you feel toward the following groups:

1. Palestinians*

1 = Very negatively to 7 = Very positively

Right-wing political identification ($\alpha = N/A$)

On the following scale, 7 represents identification with the political right and 1 represents identification with the political left. Where do place yourself on this scale?

1 = Left to 7 = Right

SDO-E Criterion Variables.

System legitimacy between Jewish groups ($\alpha = .56$)

- Israel is a just society where differences in status between ethnic groups reflect actual group differences.
- 2. Differences in status between ethnic groups are
- 3. Differences in status between ethnic groups are the result of injustice.*

Opposition to income redistribution ($\alpha = .51$)

- 1. We must give greater assistance to the poor.*
- 2. We must increase taxation of the rich.*

Negative affect toward Mizrachi Jews ($\alpha = N/A$)

Using the scales provided, please indicate how positively or negatively you feel toward the following groups:

1. Mizrachim*

1 = Very negatively to 7 = Very positively

Denial of ethnic discrimination ($\alpha = .82$)

- 1. Israel is an open society where individuals of any ethnicity can achieve higher status.
- 2. Advancement in Israeli society is possible for individuals of all ethnic groups.

- 3. Individual members of a low status ethnic groups find it difficult to achieve higher status.*
- 4. Mizrachim usually don't get fair treatment (in the labor market, education, and politics).*
- Ashkenazim and Mizrachim have the same chances of finding jobs that match their skills.
- 6. Ashkenazim and Mizrachim with the same qualifications have the same chances of getting into college.
- 7. People often discriminate against Mizrachim.*
- 8. Although there was discrimination in the past, today members of all ethnic groups have equal opportunities.

Sample 6

SDO-D Criterion Variables.

Zero-sum competition (with Mizrachi Jews) ($\alpha = .75$)

- Better jobs for Mizrachim means fewer good jobs for Ashkenazim.
- The economic advancement of Mizrachim threatens the advancement of Ashkenazim.

Nationalism ($\alpha = .55$)

- 1. Since Israel is far from perfect, the country has many things to learn from other countries.*
- 2. For the most part, Israel is no more superior than any other industrialized country in the world.*

Giving Palestinian land threatens security ($\alpha = .92$)

- Giving land to the Palestinians threatens the security of Israel.
- 2. A Palestinian state threatens the security of Israel.

War support ($\alpha = N/A$)

1. To maintain Israel's superiority, war is sometimes necessary.

"Strong-arm" policy toward Arabs ($\alpha = N/A$)

1. I am in favor of a strong-arm policy toward Arab citizens of Israel.

Negative affect toward Palestinians in Israel ($\alpha = N/A$)

Using the scales provided, please indicate how positively or negatively you feel toward the following groups:

1. Arab citizens of Israel*

1 = Very negatively to 7 = Very positively

Right-wing political identification ($\alpha = N/A$)

1. On the following scale, '7' represents identification with the political right and '1' represents identification with the political left. Where do place yourself on this scale?

$$1 = Left$$
 to $7 = Right$

System legitimacy between Arabs and Jews ($\alpha = .71$)

- Differences in status between Arab and Jewish citizens of Israel are fair.
- 2. Differences in status between Arab and Jewish citizens of Israel are the result of injustice.*

SDO-E Criterion Variables.

Negative affect toward Mizrachi Jews ($\alpha = N/A$)

Using the scales provided, please indicate how positively or negatively you feel toward the following groups:

1. Mizrachim*

1 = Very negatively to 7 = Very positively

Sample 7

SDO-D Criterion Variables.

Old-fashioned racism ($\alpha = .95$)

- 1. Blacks are inherently inferior.
- 2. Chicanos/Latinos are inherently inferior.
- 3. African Americans are less intellectually able than other groups.
- 4. African Americans are lazier than other groups.
- 5. Latinos are less intellectually able than other groups.
- 6. Latinos are lazier than other groups.

Zero-sum competition ($\alpha = .89$)

- 1. More good jobs for Blacks means fewer good jobs for members of other groups.
- 2. The more influence Blacks have in local politics the less influence members of other groups will have in local politics.
- 3. The more good housing and neighborhoods go to Blacks, the fewer good houses and neighborhoods there will be for members of other groups.
- 4. Many Blacks have been trying to get ahead economically at the expense of members of other groups.

Nationalism ($\alpha = .89$)

In view of America's moral and material superiority, it is only right that we should have the biggest say in deciding United Nations policy.

Appendix (continued)

- This country must continue to lead the "Free World."
- 3. We should do anything necessary to increase the power of our country, even if it means war.
- 4. Sometimes it is necessary for our country to make war on other countries for their own good.
- 5. The important thing for the U.S. foreign aid program is to see to it that the U.S. gains a political advantage.
- 6. Generally, the more influence America has on other nations, the better off they are.

Support for immigrant persecution ($\alpha = .93$)

Now, suppose that the American government some time in the future passed a law outlawing immigrant organizations in the US. Government officials then stated that the law would only be effective if it were vigorously enforced at the local level and appealed to every American to aid in the fight against these organizations.

Please indicate how much you agree or disagree with the following statements:

- 1. I would tell my friends and neighbors that it was a good law.
- 2. I would tell the police about any immigrant organizations that I knew.
- 3. If asked by the police, I would help hunt down and arrest members of immigrant organizations.
- 4. I would participate in attacks on the immigrant headquarters organized by the proper authorities.
- 5. I would support physical force to make members of immigrant organizations reveal the identity of other members.
- 6. I would support the execution of leaders of immigrant organizations if the government insisted it was necessary to protect the U.S.

War support ($\alpha = .89$)

- 1. The war against Iraq was absolutely justified.
- 2. War against Iran would be completely justifiable.
- 3. The USA should maintain a strong military presence in the Middle East.
- 4. The USA must leave countries in the Middle East alone to decide their own futures.*
- 5. The USA should overthrow the regime in Iran.
- 6. President Bush was justified in attacking Iraq to ensure our continued supply of oil.
- 7. The USA should only go to war if directly attacked by a foreign power.*

War legitimacy beliefs ($\alpha = .78$)

- 1. Most of the terrorists in the world today are Arabs.
- 2. Historically, Arabs have made important contributions to world culture.*
- 3. Iraqis have little appreciation for democratic values
- 4. People of the Muslim religion tend to be fanatical.
- 5. Muslims value peace and love.*

Death penalty support ($\alpha = .97$)

- 1. I support the use of capital punishment.
- 2. I favor the death penalty.
- 3. I favor a law which permits the execution of convicted murderers.
- 4. We must have capital punishment for some crimes.
- 5. Capital punishment should be used more often than it is.
- 6. No offense is so serious that it deserves to be punished by death.*
- I do not believe in capital punishment in any circumstances.*
- 8. Capital punishment is never justified.*

Punitiveness ($\alpha = .85$)

- 1. I support harsher police measures.
- 2. If we let the police get tough, the crime problem in this country will be solved.
- 3. Harsher treatment of criminals is not the solution to the crime problem.*

Hierarchy-enhancing jobs ($\alpha = .90$)

Please indicate how attractive you find the following careers:

- 1. Criminal prosecutor
- 2. Police officer
- 3. FBI agent
- 4. Working to enforce the law & prevent crime
- 1 = Strongly unattractive to 7 = Strongly attractive

SDO-E Criterion Variables.

Political conservatism ($\alpha = .87$)

- 1. How would you describe your political party preference?
- $1 = Strong\ Democrat$ to $7 = Strong\ Republican$
- 2. In terms of economic issues, how would you describe your political attitudes and beliefs?

- $1 = very \ liberal \ to \ 7 = very \ conservative$
- 3. In terms of social issues, how would you describe your political attitudes and beliefs?

 $1 = very \ liberal \ to \ 7 = very \ conservative$

System legitimacy ($\alpha = .81$)

- 1. In general, you find society to be fair.
- In general, the American political system operates as it should.
- 3. American society needs to be radically restructured.*
- 4. The U.S. is the best country in the world to live in.
- 5. Most policies serve the greater good.
- 6. Everyone has a fair shot at wealth and happiness.
- 7. Our society is getting worse every year.*
- 8. Society is set up so that people usually get what they deserve.

Opposition to affirmative action ($\alpha = .83$)

How do you personally feel about different kinds of affirmative action? For each of the following policies, please indicate the extent to which you support or oppose the policy using the scale below.

- 1. Quotas, that is, setting aside places for certain groups.
- Using group membership as one of several considerations.
- 3. Using membership in certain groups as a tiebreaker when applicants are equally qualified.
- 4. Giving training to certain groups so they can compete equally.
- 5. Making a special effort to find qualified people from certain groups.
- 6. Giving preference to members of certain groups who are less qualified than someone else.
- 1 = *strongly support the policy* to 7 = *strongly oppose the policy*

Opposition to racial policy ($\alpha = .83$)

- 1. Government should see to it that minorities get fair treatment in jobs.*
- 2. Government should not pass laws concerning the hiring of ethnic minorities.
- Government should ensure that Whites and minorities go to the same school.*
- 4. Government has no business trying to ensure racial integration in schools.
- 5. Government should do what it can to improve the economic condition of poor ethnic minorities.*

6. Government has no business trying to improve the economic condition of poor ethnic minorities.

Opposition to welfare ($\alpha = .79$)

- 1. Greater assistance to the poor*
- 2. Reduced public support for the homeless
- 3. Reduced benefits for the unemployed

Symbolic racism ($\alpha = .84$)

- 1. It's really a matter of some people not trying hard enough; if blacks would only try harder they could be just as well off as whites.
- 2. Irish, Italian, Jewish and many other minorities overcame prejudice and worked their way up. Blacks should do the same.
- 3. Some say that black leaders have been trying to push too fast. Others feel that they haven't pushed fast enough. What do you think?*
- 1 = trying to push very much too fast, 2 = going too slowly, 3 = moving at about the right speed
- 4. How much of the racial tension that exists in the U.S. today do you think blacks are responsible for creating?*
- $1 = all \ of \ it$, 2 = most, 3 = some, $4 = not \ much \ at \ all$
- 5. How much discrimination against blacks do you feel there is in the U.S. today, limiting their chances to get ahead?
- 1 = a lot, 2 = some, 3 = just a little, 4 = none at all
- 6. Generations of slavery and discrimination have created conditions that make it difficult for blacks to work their way out of the lower class.*
- 7. Over the past few years, blacks have gotten less than they deserve.*
- 8. Over the past few years, blacks have gotten more economically than they deserve.

Except where specified otherwise, the following scale was used:

1 = strongly disagree, 2 = somewhat disagree, 3 = somewhat agree, 4 = strongly agree

Unequal distribution of university resources ($\alpha = .77$)

Imagine the University of Massachusetts is building a new campus. It has to decide how to fund its various schools (e.g., the law school, the medical school, the engineering school etc.). Specifically, one option would be to adopt a model in which each school would

(continued)

Appendix (continued)

be responsible for its own fundraising and expenses. While such a model may give schools more freedom, it is likely that the schools would be unevenly funded, resulting in some schools with large operating budgets and many resources, and other schools with minimal budgets and limited resources. Another model would entail fundraising at the level of the university, and distributing resources equally between schools. Please indicate which of these two models you would prefer by using the scale below for each of the following statements.

- 1. I would prefer schools to be responsible for their own funding.
- 2. I would prefer the university to distribute resources equally rather than have each school fund itself.*
- 3. It would be unfair if schools had unequal budgets.*
- It would be fair for each school to get the budget it earns.

Hierarchy-attenuating jobs ($\alpha = .87$)

Please indicate how attractive you find the following careers:

- 1. Public defender
- 2. Civil rights lawyer
- 3. Human rights advocate
- 4. Working to improve the welfare of the poor, ill and elderly
- 5. Social worker

1 = Strongly unattractive to 7 = Strongly attractive

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Notes

- Although a partial correlation examines the correlation between an independent variable (IV) and dependent variable (DV) after controlling for the effects of a third variable on both the IV and DV, a semipartial or part correlation examines the correlation between an IV and DV controlling for the effects of a third variable on the IV only.
- 2. See Table 3 for details concerning modifications.

3. The *p* values for the semipartial correlations are based on significance tests of the *B* coefficients produced in the regression analyses, which in principle provide the same information.

References

- Altemeyer, B. (1996). *The authoritarian specter*. Cambridge, MA: Harvard University Press.
- Amiot, C., & Bourhis, R. (2005). Ideological beliefs as determinants of discrimination in positive and negative outcome distributions. *European Journal of Social Psychology*, *35*, 581-598.
- Buhrmester, M. D., Kwang, T., & Gosling, S. D. (2011). Amazon's Mechanical Turk: A new source of inexpensive, yet high-quality, data? *Perspectives on Psychological Science*, 6(1), 3-5.
- Christie, R., & Cook, P. (1958). A guide to published literature relating to the authoritarian personality through 1956. *Journal of Psychology*, 45, 1717-1799.
- Cohrs, J. C., Moschner, B., Maes, J., & Kielmann, S. (2005). The motivational bases of right-wing authoritarianism and social dominance orientation: Relations to values and attitudes in the aftermath of September 11, 2001. *Personality and Social Psychology Bulletin*, 31, 1425-1434.
- Eagly, A. H., Diekman, A. B., Johannesen-Schmidt, M. C., & Koenig, A. G. (2004). Gender gaps in sociopolitical attitudes: A social psychological analysis. *Journal of Personality and Social Psychology*, 87, 796-816.
- Essex, T. R. (n.d.). Real reasons to oppose affirmative action.

 National Leadership Network of Conservative African-Americans.

 Retrieved from http://www.nationalcenter.org/P21NVEssex-AAction104.html
- Federico, C. M., & Sidanius, J. (2002). Racism, ideology, and affirmative action, revisited: The antecedents and consequences of "principled objections" to affirmative action. *Journal* of Personality and Social Psychology, 82, 488-502.
- Freeman, D., Aquino, K., & McFerran, B. (2009). Overcoming beneficiary race as an impediment to charitable donations: Social dominance orientation, the experience of moral elevation, and donation behavior. *Personality and Social Psychology Bulletin*, 35, 72-84.
- Guimond, S., Dambrun, M., Michinov, N., & Duarte, S. (2003). Does social dominance generate prejudice? Integrating individual and contextual determinants of intergroup cognitions. *Journal of Personality and Social Psychology*, 84, 697-721.
- Haley, H., & Sidanius, J. (2005). Person-organization congruence and the maintenance of group-based social hierarchy: A social dominance perspective. Group Processes & Intergroup Relations, 8, 187-203.
- Heller, J. (2010, November 11). Clinton offers Netanyahu security pledge on peace talks. Retrieved from http://www.reuters.com/ article/idUSTRE6AA57F20101111
- Hittner, J. B., Finger, M. S., Mancuso, J. P., & Silver, N. C. (1995).
 A Microsoft FORTRAN 77 program for contrasting part correlations and related statistics. *Educational and Psychological Measurement*, 55, 777-784.

- Ho, A. K., Sidanius, J., Levin, D. T., & Banaji, M. R. (2011). Evidence for hypodescent and racial hierarchy in the categorization and perception of biracial individuals. *Journal of Personality and Social Psychology*, 100(3), 492-506.
- Jackman, M. (1994). The velvet glove: Paternalism and conflict in gender, class, and race relations. Berkeley: University of California Press.
- Jost, J. T., & Thompson, E. P. (2000). Group-based dominance and opposition to equality as independent predictors of self-esteem, ethnocentrism, and social policy attitudes among African Americans and European Americans. *Journal of Experimental Social Psychology*, 36, 209-232.
- Katz, I., & Hass, R. (1988). Racial ambivalence and American value conflict: Correlational and priming studies of dual cognitive structures. *Journal of Personality and Social Psychology*, 55, 893-905.
- Kraus, V. (1982). Ethnic origin as a hierarchical dimension of social status and its correlates. *Sociology and Social Research*, 66, 50-71.
- Kteily, N., Sidanius, J., & Levin, S, (2011). Social dominance orientation: Cause or "mere effect"? Evidence for SDO as a causal predictor of prejudice and discrimination against ethnic and racial outgroups. *Journal of Experimental Social Psychology*, 47(1), 208-214.
- Kugler, M. B., Cooper, J., & Nosek, B. A. (2010). Group-based dominance and opposition to equality correspond to different psychological motives. *Social Justice Research*, 23, 117-155.
- Levin, S., & Sidanius, J. (1999). Social dominance and social identity in the U.S. and Israel: Ingroup favoritism or outgroup derogation? *Political Psychology*, 20, 99-126.
- Little, T. D., Cunningham, W. A., Shahar, G., & Widaman, K. F. (2002). To parcel or not to parcel: Exploring the question and weighing the merits. *Structural Equation Modeling*, 9, 151-173.
- Loevinger, J. (1957). Objective tests as instrument of psychological theory. *Psychological Reports*, *3*(Suppl. 9), 635-694.
- Peña, Y., & Sidanius, J. (2002). U.S. patriotism and ideologies of group dominance: A tale of asymmetry. *Journal of Social Psychology*, 142, 782-790.
- Pratto, F., & Glasford, D. (2008). Ethnocentrism and the value of a human life. *Journal of Personality and Social Psychology*, 95, 1411-1428.
- Pratto, F., Sidanius, J., & Levin, S. (2006). Social dominance theory and the dynamics of intergroup relations: Taking stock and looking forward. *European Review of Social Psychology*, 17, 271-320.
- Pratto, F., Sidanius, J., Stallworth, L. M., & Malle, B. F. (1994). Social dominance orientation: A personality variable predicting social and political attitudes. *Journal of Personality and Social Psychology*, 67, 741-763.
- Reyna, C., Henry, P., Korfmacher, W., & Tucker, A. (2006). Examining the principles in principled conservatism: The role of responsibility stereotypes as cues for deservingness in racial policy decisions. *Journal of Personality and Social Psychology*, 90, 109-128.

- Reynolds, K., Turner, J., Haslam, S., Ryan, M., Bizumic, B., & Subasic, E. (2007). Does personality explain in-group identification and discrimination? Evidence from the minimal group paradigm. *British Journal of Social Psychology*, 46, 517-539.
- Schuman, H., Steeh, C., Bobo, L., & Krysan, M. (1997). *Racial attitudes in America: Trends and interpretations* (Rev. ed.). Cambridge, MA: Harvard University Press.
- Sears, D. O., Haley, H., & Henry, P. J. (2008). Cultural diversity and sociopolitical attitudes at college entry. In J. Sidanius, S. Levin, C. van Laar, & D. O. Sears (Eds.), *The diversity challenge* (pp. 65-99). New York, NY: Russell Sage.
- Sears, D. O., & Henry, P. J. (2005). Over thirty years later: A contemporary look at symbolic racism. In M. P. Zanna, M. P. Zanna (Eds.), *Advances in experimental social psychology*, Vol. 37 (pp. 95-150). San Diego, CA US: Elsevier Academic Press.
- Sears, D. O., Henry, P. J., & Kosterman, R. (2000). Egalitarian values and contemporary racial politics. In D. O. Sears, J. Sidanius, & L. D. Bobo (Eds.), *Racialized politics* (pp. 75-117). Chicago, IL: University of Chicago Press.
- Sidanius, J., Mitchell, M., Haley, H., & Navarrete, C. D. (2006). Support for harsh criminal sanctions and criminal justice beliefs: A social dominance perspective. *Social Justice Research*, 19, 433-449.
- Sidanius, J., & Pratto, F. (1993). The inevitability of oppression and the dynamics of social dominance. In P. Sniderman & P. Tetlock (Eds.), *Prejudice*, *politics*, *and the American dilemma* (pp. 173-211). Palo Alto, CA: Stanford University Press.
- Sidanius, J., & Pratto, F. (1999). Social dominance: An intergroup theory of social hierarchy and oppression. New York, NY: Cambridge University Press.
- Sidanius, J., Pratto, F., Martin, M., & Stallworth, L. (1991). Consensual racism and career track: Some implications of social dominance theory. *Political Psychology*, 12, 691-721.
- Sidanius, J., Pratto, F., & Mitchell, M. (1994). In-group identification, social dominance orientation, and differential intergroup social allocation. *Journal of Social Psychology*, 134(2), 151-167.
- Smooha, S. (1992). Arabs and Jews in Israel: Change and continuity in mutual intolerance. Boulder, CO: Westview.
- Thernstrom, S., & Thernstrom, A. (1997). *America in Black and White: One nation, indivisible.* New York, NY: Simon & Shuster.
- Thomsen, L., Green, E. G. T., Ho, A. K., Levin, S., van Laar, C., Sinclair, S., & Sidanius, J. (2010). Wolves in sheep's clothing: SDO asymmetrically predicts perceived ethnic victimization among White and Latino students across three years. *Personality* and Social Psychology Bulletin, 36, 225-238.
- Thomsen, L., Green, E. G. T., & Sidanius, J. (2008). We will hunt them down: How SDO and RWA fuels ethnic persecution of immigrants in fundamentally different ways. *Journal of Experimental Social Psychology*, 44, 1455-1464.
- Tyler, T. R. (2006). Psychological perspectives on legitimacy and legitimation. *Annual Review of Psychology*, *57*, 375-400.
- Wakslak, C., Jost, J., Tyler, T., & Chen, E. (2007). Moral outrage mediates the dampening effect of system justification on

- support for redistributive social policies. *Psychological Science*, 18, 267-274.
- Wing, N. (2010, November 9). Joyce Kaufman, Allen West's chief of staff, advocated hanging illegal immigrants who commit crimes. *Huffington Post*. Retrieved from http://www
- $. huffing ton post.com/2010/11/09/joyce-kaufman-allen-west-chief-of-staff_n_781178.html$
- Yoshimura, K., & Hardin, C. D. (2009). Cognitive salience of subjugation and the ideological justification of U.S. geopolitical dominance in Japan. *Social Justice Research*, 22, 298-311.