Group-Based Dominance and Opposition to Equality as Independent Predictors of Self-Esteem, Ethnocentrism, and Social Policy Attitudes among African Americans and European Americans

John T. Jost

Graduate School of Business, Stanford University

and

Erik P. Thompson

Washington University

Adopting a multidimensional approach to the measurement and conceptualization of "social dominance orientation" (Pratto, Sidanius, Stallworth, & Malle, 1994), we argue for the existence of two related ideological factors, one that measures general opposition to equality (OEQ) and another that measures support for group-based dominance (GBD). Because of status differences between European and African Americans, it was hypothesized that the two factors would be differentially related to each other and to variables of psychological well-being, ethnocentrism, and social policy attitudes. Integrating results from four studies involving 1675 research participants, we found that (a) a correlated two-factor solution of the 16-item SDO scale provided a better comparative fit than a one-factor solution; (b) the two factors were more highly intercorrelated for European American than for African American respondents; (c) OEQ was related negatively to self-esteem and ethnocentrism for African Americans, but it was related positively to self-esteem and ethnocentrism for European Americans; (d) GBD related positively to

ethnocentrism for both groups; (e) attitudes toward conservative social policy and affirmative action were predicted more by OEQ than by GBD for both groups; (f) the relation between OEQ and neuroticism was positive for African Americans but negative for European Americans, whereas the relation between GBD and neuroticism was positive for European Americans but negative for African Americans; and (g) economic system justification was related to OEQ but not GBD, and it also predicted political conservatism and racial attitudes.   © 2000 Academic Press

Most social orders are distinguished by the manner and extent of differentiation between groups and by the forms of inequality that prevail (e.g., Dumont, 1970; Hofstede, 1984; Sidanius, 1993). Insofar as social institutions are maintained in part through attitudes and beliefs that support them, conscious and unconscious ideological thought processes play a pivotal role in the acceptance or rejection of particular modes of inequality (e.g., Bem & Bem, 1970; Eyerman & Jamison, 1991; Jost, 1995). According to recent proposals, social attitudes differ in the extent to which they serve "system justifying" ends (Jost & Banaji, 1994) that are "hierarchy enhancing" as opposed to "hierarchy attenuating" (Pratto, Sidanius, Stallworth, & Malle, 1994). Such ideologies may take the form of broad-based opposition to egalitarian social systems in general, or they may take the specific form of justifying acts of dominance or control undertaken by one social group against another. Past research on white racism has indicated that egalitarianism and group self-interest are related but distinct attitudinal systems that differentially impact social policy preferences (e.g., Bobo & Kluegel, 1993; Tuch & Hughes, 1996).

Various scales of "social dominance orientation" (SDO) have been developed to measure individuals' general attitudes toward egalitarianism and group-based dominance. Scores on SDO scales have been found to predict, among other things, political and economic conservatism, nationalism, "cultural elitism," anti-Black racism, sexism, and the belief in a just world (e.g., Pratto et al., 1994). The scale validated by Pratto et al. (1994) has also been found to correlate reliably with social policy attitudes that are supportive of "law and order," military spending, and capital punishment, as well as attitudes that are unsupportive of women's rights, racial equality, gay and lesbian rights, and environmental action. Social dominance orientation scores have also been associated with increased ambivalence on the part of women toward a female plaintiff in a sexual discrimination case (Jost & Burgess, 2000, Study 2). It has also been demonstrated by Pratto et al. (1994) that SDO differentiates people who pursue occupations that are "hierarchy enhancing" (law enforcement, politics, business) from people who pursue occupations that are "hierarchy attenuating" (social work, counseling).

The notion that SDO captures elements of both group-based dominance and general anti-egalitarianism is implicit in various definitions that have been offered for the concept of "social dominance." At times, the concept is associated with the need to establish a position of dominance for the in-group as against out-groups. Sidanius (1993), for instance, refers to SDO as a "generalized imperial imperative" and a "will to group dominance" whereby "individuals

desire social dominance and superiority for themselves and their primordial groups over other groups" (p. 209). Pratto et al. (1994) provide a similar definition of SDO as "the extent to which one desires that one's in-group dominate and be superior to out-groups" (p. 742). At least one study finds that scores on the individual difference measure of SDO correlate positively with in-group favoritism and out-group distancing (Sidanius, Pratto, & Mitchell, 1994).

Eight of the statements on Pratto et al.'s (1994) 16-item scale address attitudes toward group-based dominance, aggression, or control: "To get ahead in life, it is sometimes necessary to step on other groups"; "If certain groups of people stayed in their place, we would have fewer problems"; "In getting what your group wants, it is sometimes necessary to use force against other groups"; "Inferior groups should stay in their place"; "Superior groups should dominate inferior groups"; "Some groups of people are just more worthy than others"; "It's probably a good thing that certain groups are at the top and other groups are at the bottom"; and "Sometimes other groups must be kept in their place." At least half of these items refer to the need to dominate "other groups," which suggests that this factor (or at least some of the items) would be related positively to ethnocentrism and in-group favoritism, even among members of low-status groups.

At other times, however, the need for social dominance is equated with a preference for unequal social relations, whether the inequality favors the in-group or not. Sidanius, Pratto, and Rabinowitz (1994), for example, defined SDO as "an individual difference variable expressing very generalized, group-relevant anti-egalitarianism and the desire to establish hierarchical, dominant/subordinate relationships among social groups" (p. 195). These authors conclude that "those belonging to low-status groups and who have high levels of SDO are likely to display *particularly low levels of ingroup attachment*" (p. 210, emphasis added). This formulation is much closer to Jost and Banaji's (1994) concept of "system justification," which has been used to explain in-group derogation and out-group favoritism among members of low-status groups (e.g., Jost & Burgess, 2000; Sidanius, Levin, Federico, & Pratto, in press).

Half of the questions on the 16-item version of the SDO scale do appear to measure disagreement with attitude statements that are supportive of efforts to achieve equality in general. These items are: "Group equality should be our ideal"; "We should strive to make incomes more equal"; "We should do what we can to equalize conditions for different groups"; "No one group should dominate in society"; "Increased social equality would be a good thing"; "We would have fewer problems if we treated different groups more equally"; "All groups should be given an equal chance in life"; "It would be good if all groups could be equal"; and "We should strive to make incomes more equal." All but one of these items contain the word "equal" or "equality," whereas none of the first type do.

For members of high-status groups, an opposition to equality may be seen as a reflection of group self-interest (e.g., Bobo & Kluegel, 1993). Among members of low-status groups, an opposition to equality may be viewed as a sign of

internalized inferiority (Lewin, 1941), an example of system justifying "false consciousness" (Jost & Banaji, 1994), or perhaps even a "sour grapes" kind of reaction formation against the possibility of an egalitarian system, which may be seen as extremely unlikely and, therefore, ultimately undesirable (Lane, 1962). If this is indeed the case, then (a) anti-egalitarianism should be more closely related to group-based dominance among members of high-status groups than among members of low-status groups and (b) anti-egalitarianism should be related negatively to self-esteem and other indices of well-being for members of low-status groups but not (necessarily) for members of high-status groups. Lane (1962) argues that political attitudes are affected substantially by a system justifying "fear of equality," which is a different account than one that emphasizes group dominance (see also Kluegel & Smith, 1986).

The purpose of the present research, then, is to investigate the possibility that group-based dominance and generalized anti-egalitarianism are distinct ideological constructs and that they lead to separate social psychological outcomes for African Americans, who are relatively low in social and economic status, and European Americans, who are relatively high in social and economic status. It stands to reason that in general African Americans would be more supportive of equality (or less opposed to equality) than would European Americans, insofar as the former group would benefit more from institutionalized equality, relative to the status quo. It also makes sense that African Americans would be less supportive of group-based dominance than would European Americans, insofar as the former group has been victimized by group-based dominance while the latter group has benefited from it. Taking these two points together, it is easy to see why European Americans tend to score higher on measures of SDO than do African Americans (e.g., Sidanius, 1993), which may or may not be the case with regard to individual or personal dominance or aggression.

The first hypothesis addressed by the present research is that the SDO scale is comprised of two factors or subscales, one of which measures group-based dominance and the other of which measures anti-egalitarianism. In statistical terms, it was predicted that confirmatory factor analysis of the SDO scale would indicate that a correlated two-factor solution provides a better comparative fit of the data than a one-factor solution. Items having to do with attitudes toward egalitarianism in social systems were expected to load heavily on one factor, whereas items having to do with attitudes toward group-based dominance were expected to load heavily on a separate factor. Pratto et al. (1994, p. 747) mention that a 14-item version of the SDO scale is unidimensional, but this conclusion is based on a principal components analysis of only one of their 13 samples, and this particular sample was composed of only 5% African Americans. Informal conversations over the past 3–4 years with Professor Jim Sidanius and various members of his research team have confirmed that the 16-item version of the SDO scale has been found to be two-dimensional in nature, but it has been heretofore assumed that this was due to the fact that half of the items were worded positively (so that agreement would be associated with higher SDO), whereas the other half were worded negatively (so that *dis*agreement would be

associated with higher SDO). The present research indicates that not only are there two correlated factors on the SDO scale, but that (a) the two factors are differentially related to each other and to other important social and psychological variables for European and African Americans and (b) these differences persist even after "balancing" the subscales for positive vs negative wordings of the items.

Past research has identified an "ideological asymmetry effect" such that SDO scores tend to be more internally consistent among members of high-status than low-status groups (Levin, Sidanius, Rabinowitz, & Federico, 1998; Rabinowitz, 1999; Sidanius, Pratto, & Rabinowitz, 1994). The present analysis provides a more detailed account of why the ideological integration of European Americans with regard to SDO would be greater than the ideological integration of SDO beliefs among African Americans. If it is true that the SDO scale independently captures group-based dominance and generalized anti-egalitarianism, it is easy to see why these two ideological components would be more highly intercorrelated among high-status groups like European Americans. Support for group-based dominance and opposition to equality, for members of high-status groups, are two sides of the same coin. For members of low-status groups like African Americans, however, support for group-based dominance and its relation to the achievement of egalitarianism is somewhat more ambiguous; it could mean support for the in-group (which, up to a point, would be consistent with achieving equality), or it could mean support for other groups dominating the in-group (which would be inconsistent with equality). Thus, our second hypothesis was that the two SDO factors (group-based dominance and anti-egalitarianism) would be more highly intercorrelated for members of a higher status group compared with members of a lower status group.

A third hypothesis derived from the proposition that group-based dominance and generalized anti-egalitarianism are logically and empirically distinct is that they are differentially related to self-esteem among European and African Americans. Specifically, it follows from Lewin's (1941) analysis of "group self-hatred," Lane's (1962) analysis of the "fear of equality," and Jost and Banaji's (1994) analysis of "false consciousness" and "system justification" that among members of low-status groups, opposition to equality should be associated with lowered self-esteem. By contrast, members of high-status groups may oppose equality as a way of preserving their own sense of superiority, in which case it would be associated with heightened self-esteem. Thus, it was hypothesized that race would interact with SDO type (group-based dominance vs anti-egalitarianism) to predict self-esteem scores. In Study 4, we added a measure of neuroticism to capture yet another way in which the fear of equality might impact negatively on the psychological functioning of low-status group members.

A fourth hypothesis was conceptually parallel to the third. Insofar as opposition to equality is consistent with group motivations and interests for members of higher status groups, but it is inconsistent with group motivations and interests for members of lower status groups, it was hypothesized that race and SDO type would interact to predict in-group favoritism or ethnocentrism. Specifically, it

was expected that anti-egalitarianism would be related positively to ethnocentrism for European Americans, but it would be related negatively to ethnocentrism among African Americans. Group-based dominance, in general, was expected to relate positively to ethnocentrism for both groups.

Another way in which attitudes concerning group-based dominance might be expected to diverge from general beliefs about equality has to do with political attitudes and social policy preferences. Thus, in Study 4, we explored the possibility that opposition to equality would be a better predictor than group-based dominance of social policy attitudes associated with political conservatism and opposition to affirmative action. Insofar as the fear of equality (Lane, 1962) reflects a system justifying ideology adopted even by members of disadvantaged groups (Jost & Banaji, 1994; Kluegel & Smith, 1986), one would expect that opposition to equality would be positively associated with the tendency to justify and rationalize economic systems among members of high- and low-status groups.

These hypotheses were investigated in four studies involving a total of 1675 participants. In Study 1, European- and African American research participants completed the version of the SDO scale published by Pratto et al. (1994) and the Rosenberg (1965) self-esteem scale, so that hypotheses 1–3 could be addressed. In Study 2, new samples of European Americans and African Americans completed the SDO scale and measures of ethnocentrism to assess hypotheses 1, 2, and 4. In Studies 3 and 4, participants completed a new version of the SDO scale along with measures of self-esteem and ethnocentrism, so that these hypotheses could be assessed using a "balanced" version of the scale that included equal numbers of positively and negatively worded group-based dominance and anti-egalitarianism items.[1] In Study 4, additional questions concerning neuroticism, political orientation, social policy preferences, and the general tendency to justify economic differences were administered, with the hope that a more complex and differentiated understanding of the structure of ideological systems of thought might be achieved (e.g., McGuire, 1989).

STUDY 1

Method

Participants. Four hundred twenty-six introductory psychology students (334 European Americans and 92 African Americans) at the University of Maryland completed the survey materials and, in so doing, partially fulfilled a course requirement.

Procedure. All participants completed two instruments that were used to assess the hypotheses for Study 1. These were the social dominance orientation scale and the Rosenberg self-esteem scale (see below). Both were administered via computer during the course of hour-long mass-testing sessions.

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[1] All of the studies presented here make use of a general SDO scale that was constructed with unidimensionality as a goal, which means that the use of this scale provides a conservative test of hypotheses concerning the separation of the two factors.

Measures

Social dominance orientation. One of the instruments included in the mass-testing battery was the 16-item social dominance orientation (SDO) scale published by Pratto et al. (1994). In the present study, participants were asked to use an 11-point scale (such that "0 = disagree strongly, 5 = neither agree nor disagree, 10 = agree strongly") to indicate their level of agreement or disagreement with each of the SDO items [e.g., "Some groups of people are just more worthy than others"; "It would be good if all groups could be equal" (reverse-scored)]. Items were administered in the same order as that reported by Pratto et al. (1994). Negatively worded (disagree) items were reverse-scored before any analyses were conducted.

Self-esteem. In order to measure individual differences with regard to self-esteem, the Rosenberg self-esteem scale (Rosenberg, 1965) was also administered. This 10-item self-report measure has been used frequently in personality and social psychological research, and it is considered to be both a reliable and a stable measure of self-esteem. Consistent with typical administrative practices, responses to each item on the scale [e.g., "I feel that I am a person of worth, at least on an equal basis with others"; "I wish I could have more respect for myself" (reverse-keyed)] could range from 1 = "disagree strongly" to 4 = "agree strongly." A mean score was calculated by aggregating across the 10 items.

Results

Evidence for a two-factor solution. Based upon our theoretical analysis of item content in the SDO scale, it was expected that responses to items 1, 3, 6, 8, 9, 11, 13, and 16 would reflect support for group-based dominance (e.g., "Some groups of people are just more worthy than others"), whereas responses to items 2, 4, 5, 7, 10, 12, 14, and 15 would indicate an opposition to equality [e.g., "We should do what we can to equalize conditions for different groups" (reverse-keyed)]. We used EQS confirmatory factor analysis (Bentler, 1995) to test the adequacy of the proposed correlated two-factor solution for the 16 SDO items against the one-factor solution assumed in previous research. Factor loadings are presented in Table 1.

For the total sample of 426 respondents, the correlated two-factor model fit the data well ($CFI = .908$), and it provided a significantly better fit than the one-factor model (CFI = .781, $\chi^2 = 332.29$, $df = 1$, $p < .001$). This was true not only for the whole sample, but also for the African American sample ($CFI's = .889$ vs $.655$, $\chi^2 = 102.10$, $df = 1$, $p < .001$) and the European American sample ($CFI's = .907$ vs $.785$, $\chi^2 = 259.90$, $df = 1$, $p < .001$). Thus, hypothesis 1 concerning the multidimensionality of the SDO scale was supported for both of the groups.

Correlations between the two factors. To test the hypothesis that the strength of the relation between group-based dominance (GBD) and opposition to equality (OEQ) would be weaker for members of lower status groups than for members of higher status groups, correlations between the subscales were cal-

TABLE 1

Factor Loadings from the Standardized Solution of a Confirmatory Analysis of the Correlated
Two-Factor Model (European and African Americans Combined, Studies 1 and 2)

| | Study 1 | | Study 2 | |
SDO item	GBD	OEQ	GBD	OEQ
11. It's probably a good thing that certain groups are at the top and other groups are at the bottom. (GBD)	.78	—	.77	—
13. Inferior groups should stay in their place. (GBD)	.72	—	.80	—
6. Superior groups should dominate inferior groups. (GBD)	.70	—	.71	—
16. Sometimes other groups must be kept in their place. (GBD)	.67	—	.74	—
8. To get ahead in life, it is sometimes necessary to step on other groups. (GBD)	.63	—	.67	—
9. If certain groups of people stayed in their place, we would have fewer problems. (GBD)	.63	—	.74	—
1. Some groups of people are just more worthy than others. (GBD)	.48	—	.61	—
3. In getting what your group wants, it is sometimes necessary to use force against other groups. (GBD)	.46	—	.49	—
4. Group equality should be our ideal. (OEQ)	—	.79	—	.78
7. We should do what we can to equalize conditions for different groups. (OEQ)	—	.75	—	.80
10. Increased social equality would be a good thing. (OEQ)	—	.72	—	.87
2. It would be good if all groups could be equal. (OEQ)	—	.72	—	.67
12. We would have fewer problems if we treated different groups more equally. (OEQ)	—	.66	—	.82
5. All groups should be given an equal chance in life. (OEQ)	—	.62	—	.73
15. No one group should dominate in society. (OEQ)	—	.51	—	.60
14. We should strive to make incomes more equal. (OEQ)	—	.42	—	.50

Note. GBD indicates group-based dominance items; OEQ indicates opposition to equality items.

culated for each group. Correlations between GBD and OEQ were indeed lower for the African American sample ($r = .47$) than for the European American sample ($r = .69$). In support of hypothesis 2, this difference was statistically reliable ($Z = 2.83$, $p < .005$, one-tailed). The two factors were significantly more highly correlated among European Americans, for whom group and system justification tendencies are complementary, than among African Americans, for whom group and system justification tendencies are in conflict (see Jost & Burgess, 2000). Means and standard deviations for major variables for Studies 1 and 2 are presented in Table 2.

Relations to self-esteem. The third hypothesis was that anti-egalitarianism should be more negatively related to self-esteem for members of lower status groups than for members of higher status groups because supporting inequality implies defending and rationalizing a social hierarchy that confers on the lower status group a sense of inferiority (Jost & Banaji, 1994; Kluegel & Smith, 1986; Lane, 1962; Lewin, 1941). Opposition to equality, in other words, runs counter to the personal and group interests of lower status group members, but it is consistent with the personal and group interests of higher status group members.

TABLE 2
Means (and Standard Deviations) for Major Variables by Race of Respondent

	European Americans	African Americans	t tests
Study 1	n = 334	n = 92	df = 424
Group-Based dominance (GBD)	3.08	2.42	2.79*
	(2.08)	(1.82)	(p < .01)
Opposition to equality (OEQ)	2.49	1.39	5.45***
	(1.83)	(1.33)	(p < .001)
Self-esteem	3.21	3.48	4.67***
	(0.51)	(0.39)	(p < .001)
Study 2	n = 248	n = 65	df = 311
Group-Based dominance (GBD)	3.61	2.67	3.97***
	(1.75)	(1.46)	(p < .001)
Opposition to equality (OEQ)	2.43	1.43	4.45***
	(1.67)	(1.52)	(p < .001)
Ethnocentrism	16.07	17.74	n.s.
	(20.17)	(17.50)	

To test this hypothesis, we used multiple regression to investigate the relation between race of respondent and standardized (Z-transformed) GBD and OEQ scores, which were computed as means of the items loading on the respective factors verified earlier. Both indices demonstrated good internal reliability (αs = .84 and .85, respectively). Participants' self-esteem scores were then predicted on the basis of their race (which was recoded and centered around zero), their GBD and OEQ scores, and the interactions between race and each of the SDO types in a multiple-regression analysis. A main effect of race ($\beta = -.19$, $p < .001$) indicated that when controlling for variations in GBD and OEQ scores African Americans were found to score higher in self-esteem than European Americans (see Table 2); this replicates results summarized by Crocker and Major (1989). The analysis also yielded an interaction between race and OEQ ($\beta = .18$, $p < .05$), such that opposition to equality was related negatively (albeit marginally) to self-esteem for African Americans ($\beta = -.21$, $p < .07$), but it was related positively to self-esteem for European Americans ($\beta = .14$, $p < .05$). These results provide support for our third hypothesis. Group-based dominance was unrelated to self-esteem for both groups.

Discussion

Results from the first study provided support for all three hypotheses that were assessed. In particular, it was found that (a) SDO items tapping support for group-based dominance and opposition to equality loaded onto separate factors, and a correlated two-factor solution was superior to a one-factor solution; (b) group-based dominance and opposition to equality were more highly intercorre-lated for European Americans than for African Americans; and (c) race and SDO type interacted to predict levels of individual self-esteem, such that opposition to

equality (but not group-based dominance) was related positively to self-esteem for European Americans, but it was related negatively to self-esteem for African Americans. A follow-up study was conducted to confirm the apparent factor structure of the SDO scale, to replicate hypotheses pertaining to race differences on the two SDO components, and to explore effects of group-based dominance and opposition to equality on measures of ethnocentrism for new samples of African and European Americans.

STUDY 2

Method

Participants. Three hundred thirty-five introductory psychology students (264 European Americans and 71 African Americans) at the University of Maryland completed the materials for Study 2 in exchange for partial course credit.

Procedure. As in the first study, research instruments were administered in the context of computerized mass-testing sessions at the beginning of the semester. All participants completed the social dominance orientation scale, a social desirability scale, and a measure of ethnocentrism.

Measures

Social dominance orientation. The same 16-item SDO scale was used in Studies 1 and 2, according to the same order and procedure (see Pratto et al., 1994).

Social desirability. An 11-item social desirability scale was administered so that the final sample could be trimmed to exclude people who demonstrate a proclivity toward responding in an artificially desirable way. This is especially important when potentially controversial attitudes about racial in-groups and out-groups are being assessed, as in the present research. Examples of items included in the scale are "I have never hurt another person's feelings," "I have never known someone that I did not like," and "I have never been late for work or for an appointment." Alpha reliability for this measure was reasonably high (.74). People who scored in the top 10% of the sample in terms of social desirability were excluded from all analyses reported here. The final sample size, then, was 313 (65 African Americans and 248 European Americans).

Ethnocentrism. Early in the testing session, respondents completed four "feeling thermometer" items modeled after those used by Sidanius, Pratto, and Bobo (1996, Study 2) to assess respondents' generalized affect toward several ethnic groups. Participants indicated on scales ranging from 0 to 100 the warmth of their feelings toward "Asians," "Blacks," "Hispanics," and "Whites"; where 0 = "very cold and unfavorable" and 100 = "very warm and favorable." From these ratings an index of in-group favorability (ratings of "Whites" for European American respondents, ratings of "Blacks" for African American respondents) and an index of out-group favorability (mean ratings for the remaining three groups) were computed. Finally, an "in-group favoritism" or ethnocentrism score was calculated by subtracting for each participant ratings of out-group favorability from ratings of in-group favorability.

Results

Evidence for a two-factor solution. The EQS confirmatory factor analysis procedure used in Study 1 was repeated (see factor loadings in Table 1). For this sample of 313 European American and African American respondents, the correlated two-factor solution provided a good fit (*CFI* = .895) and a reliably better fit than the one-factor solution (*CFI* = .811) for the overall sample (χ^2 = 235.60, *df* = 1, *p* < .001), for the African American sample (*CFI's* = .723 vs .622, χ^2 = 56.27, *df* = 1, *p* < .001), and for the European American sample (*CFI's* = .903 vs .808, χ^2 = 217.27, *df* = 1, *p* < .001). Alpha reliabilities for both factors were quite high (αs = .88 for GBD and .89 for OEQ). Separate scores for GBD and OEQ were again calculated by taking the means of aggregated items (see means in Table 2).

Correlations between the two factors. To test the hypothesis that the correlation between the two SDO factors would be weaker for members of lower status groups than for members of higher status groups, correlations between GBD and OEQ were again computed for the African American sample (*r* = .66) and for the European American sample (*r* = .77). This difference was found to be marginally significant (*Z* = 1.60, *p* < .06, one-tailed).

Relations to ethnocentrism. It was hypothesized that anti-egalitarianism would be related positively to ethnocentrism for European Americans, but it would be related negatively to ethnocentrism among African Americans, insofar as it is consistent with group interest for the former group but inconsistent with group interest for the latter group. It was hypothesized further that scores on group-based dominance would be related positively to ethnocentrism for both groups, insofar as it is an ideology that can serve as a justification for in-group bias among members of low-status as well as high-status groups. To investigate these hypotheses, multiple-regression analyses were conducted to predict ethnocentrism scores simultaneously from (standardized) OEQ and GBD scores for African- and European American participants. An interaction effect was obtained between race (which was recoded and centered around zero) and OEQ (β = .21, *p* < .02). Opposition to equality was negatively associated with ethnocentrism for African Americans (β = −.45, *p* < .005), providing support for the fourth hypothesis. No statistically reliable relation was obtained between OEQ and ethnocentrism for European Americans. Group-based dominance was associated positively with ethnocentrism for African Americans (β = .29, *p* < .05) and for European Americans (β = .42, *p* < .001).

Discussion

Although the evidence for group-based dominance and opposition to equality as distinct components of social dominance orientation from the first two studies seems to be quite strong, there is a methodological complication that is addressed by Studies 3 and 4. On the original scale published by Pratto et al. (1994), all of the items having to do with generalized anti-egalitarianism are worded so that agreement with these items is associated with lower SDO

scores, whereas all of the items having to do with intergroup attitudes (or group-based dominance) are worded so that agreement is associated with higher SDO scores. This confound between the wording (agree vs disagree) of items and the SDO subscales (GBD vs OEQ) could be at least partially responsible for the results of the confirmatory factor analyses. In other words, items on the SDO scale might be loading separately on two (correlated) factors, not because of the attitudinal contents of the items *per se,* but because the items on group-based dominance are worded positively and the anti-egalitarian items are worded negatively. (Indeed, this appears to have been the assumption of previous researchers.) It should be pointed out that this potential confound could not be used to account for the fact that interfactor correlations are stronger for European than for African Americans, nor for any of the findings that GBD and OEQ factor scores differentially predict self-esteem and ethnocentrism for European and African Americans. Nevertheless, a "balanced" scale was constructed so that the two subscales would have equal numbers of "agree" and "disagree" items, and this scale was used in Studies 3 and 4 to replicate and expand on major findings pertaining to the structure and consequences of social dominance attitudes.

STUDY 3

Method

Participants. Four hundred twenty-eight introductory psychology students (93 African Americans and 335 European Americans) at the University of Maryland completed the materials for Study 3 in exchange for partial course credit.

Procedure. As in Studies 1 and 2, the research instruments were administered in the context of computerized mass-testing sessions at the beginning of the semester. All participants completed a "balanced" version of the social dominance orientation scale as well as measures of self-esteem and ethnocentrism.

Measures

Social dominance orientation. As mentioned above, Pratto et al.'s (1994) original measure of SDO confounds the distinction between GBD and OEQ with item wording (positive vs negative). Because this aspect of scale construction introduces some ambiguity with regard to interpreting the separate factors identified in the first two studies as reflecting substantive differences in response tendencies as opposed to methodological artifact, several of the items were reworded slightly so that half of the items identified as OEQ items were worded positively as "agree" items and half of the items identified as GBD items were worded negatively as "disagree" items. For example, in the new "balanced" scale, we changed the OEQ item "We would have fewer problems if we treated different groups more equally" to "Treating different groups more equally would create more problems than it would solve"; the GBD item "In getting what your

TABLE 3

Factor Loadings from the Standardized Solution of a Confirmatory Analysis of the Correlated Two-Factor Model (European and African Americans Combined, Studies 3 and 4)

	Study 3		Study 4	
SDO item	GBD	OEQ	GBD	OEQ
11. Inferior groups should stay in their place. (GBD)	.65	—	.63	—
16. Sometimes other groups must be kept in their place. (GBD)	.63	—	.60	—
14. It's a real problem that certain groups are at the top and other groups are at the bottom. (GBD)	.63	—	.48	—
8. If certain groups of people stayed in their place, we would have fewer problems. (GBD)	.57	—	.55	—
3. No group of people is more worthy than any other. (GBD)	.55	—	.53	—
2. To get ahead in life, it is sometimes necessary to step on other groups. (GBD)	.51	—	.48	—
10. Superior groups should not seek to dominate inferior groups. (GBD)	.46	—	.39	—
5. In getting what your own group wants, it should never be necessary to use force against other groups. (GBD)	.44	—	.42	—
9. We should do what we can to equalize conditions for different groups. (OEQ)	—	.75	—	.63
15. No one group should dominate in society. (OEQ)	—	.72	—	.48
6. Increased social equality would be a bad thing. (OEQ)	—	.66	—	.70
12. Treating different groups more equally would create more problems than it would solve. (OEQ)	—	.61	—	.53
4. It would be good if all groups could be equal. (OEQ)	—	.60	—	.67
7. All groups should be given an equal chance in life. (OEQ)	—	.59	—	.48
13. There is no point in trying to make incomes more equal. (OEQ)	—	.55	—	.54
1. Group equality is not a worthwhile ideal. (OEQ)	—	.33	—	.35

Note. GBD indicates group based dominance items; OEQ indicates opposition to equality items.

group wants, it is sometimes necessary to use force against other groups" was changed to "In getting what your own group wants, it should never be necessary to use force against other groups." The revised wordings for the complete 16-item balanced scale appear in Table 3.

Ethnocentrism and self-esteem. We used the same ethnocentrism measure described in Study 2 and the same self-esteem measure described in Study 1. All research participants completed the self-esteem measure, but only half of the research participants (157 European Americans and 44 African Americans) completed the ethnocentrism measure. Means for study variables are presented in Table 4.

Social desirability. The 11-item social desirability scale from Study 2 was used again. Alpha reliability was again relatively high at .73. People who scored in the top 10% of the sample in terms of social desirability were excluded from all analyses, as were people who failed to complete the materials. The final sample size, then, was 394 (84 African Americans and 310 European Americans).

TABLE 4
Means (and Standard Deviations) for Major Variables by Race of Respondent

	European Americans	African Americans	t tests
Study 3	n = 310	n = 84	df = 392
Group-based dominance (GBD)	2.90	1.99	4.54***
	(1.71)	(1.32)	(p < .001)
Opposition to equality (OEQ)	2.79	1.69	5.53***
	(1.71)	(1.23)	(p < .001)
Self-esteem	3.20	3.47	4.18***
	(0.53)	(0.52)	(p < .001)
Ethnocentrism	13.93	15.30	n.s.
	(22.24)	(20.75)	
	n = 157	n = 44	
Study 4	n = 342	n = 105	df = 442
Group-based dominance (GBD)	2.71	2.08	3.53***
	(1.63)	(1.53)	(p < .001)
Opposition to equality (OEQ)	2.42	1.65	4.39***
	(1.61)	(1.45)	(p < .001)
Self-esteem	3.32	3.42	n.s.
	(0.55)	(0.54)	
Ethnocentrism	9.98	16.94	3.80***
	(15.71)	(19.23)	(p < .001)
Political orientation	3.55	3.14	2.93**
	(1.30)	(1.14)	(p < .005)
Support for affirmative action	2.59	3.73	14.56***
	(.64)	(.64)	(p < .001)
Economic system justification	4.92	4.33	5.50***
	(.90)	(.80)	(p < .001)

Results

Evidence for a two-factor solution. The same EQS confirmatory factor analysis was conducted on participants' responses to the 16 items on the "balanced" version of the social dominance scale. Factor loadings are displayed in Table 3. As in the previous studies, the correlated two-factor model provided an adequate fit and a slightly better fit for the data than did the one-factor solution for the entire sample (*CFI's* = .851 vs .850, χ^2 = 3.89, df = 1, p < .05) as well as for African Americans alone (*CFI's* = .775 vs .721, χ^2 = 15.14, df = 1, p < .001) and European Americans alone (*CFI's* = .833 vs .831, χ^2 = 3.56, df = 1, p < .05, one-tailed). Scores on OEQ and GBD scores were calculated again as aggregated item means (αs = .81 and .78, respectively). Means and standard deviations for the major study variables are presented in Table 4, according to race of respondent.

Correlations between the two factors. Correlations between respondents' GBD and OEQ scores were computed for the African American sample (*r* = .58) and for the European American sample (*r* = .77). A test for the difference between correlations for independent samples with unequal *n*'s (Cohen, 1987) revealed

that the two factors were significantly more intercorrelated for the latter group than for the former ($Z = 2.86$, $p < .005$, one-tailed). Thus, hypothesis 2 was replicated using a balanced version of the scale.

Relations to self-esteem. Following standardization and centering of predictor variables, the same regression analysis procedure used in Study 1 to examine the effects of GBD and OEQ on self-esteem was employed here. A main effect of race ($\beta = -.14$, $p < .02$) indicated that when controlling for variations in GBD and OEQ scores African Americans were found to score higher in self-esteem than European Americans (see means in Table 4), again replicating results summarized by Crocker and Major (1989). Although the interaction between race and OEQ did not attain statistical significance ($\beta = .14$, $p = .17$), opposition to equality was related negatively (but nonsignificantly) to self-esteem for African Americans ($\beta = -.14$, *ns*), and it was related positively (but nonsignificantly) to self-esteem for European Americans ($\beta = +.06$, *ns*). These results provide only weak support for the third hypothesis. There were no effects of GBD on self-esteem for either group.

Relations to ethnocentrism. We hypothesized that OEQ scores would be related positively to ethnocentrism for European Americans, but they would be related negatively to ethnocentrism among African Americans, insofar as opposition to equality reflects convictions about in-group superiority on the part of high-status group members (e.g., Bobo & Kluegel, 1993) and feelings of in-group inferiority on the part of low-status group members (e.g., Kluegel & Smith, 1986; Lane, 1962; Lewin, 1941). It was hypothesized that GBD scores would be related positively to ethnocentrism for both groups. Regression analyses revealed main effects of both GBD ($\beta = +.34$, $p < .005$) and OEQ ($\beta = -.29$, $p < .05$) as well as an interaction between race and OEQ ($\beta = .25$, $p < .05$). Opposition to equality was related negatively and significantly to ethnocentrism for African Americans ($\beta = -.38$, $p < .03$), but the relation approached zero for European Americans ($\beta = -.04$, *ns*). Group-based dominance was related positively to ethnocentrism for European Americans ($\beta = +.45$, $p < .001$) and for African Americans ($\beta = .19$, *ns*), but only the former relation attained statistical significance, due to the sample sizes involved.

Discussion

It was demonstrated in Study 3 that differences between group-based dominance and opposition to equality persist even after addressing the methodological issue of positive vs negative wordings of the items contained on Pratto et al.'s (1994) SDO scale. Specifically, the items on the scale were reworded so that an equal number of "agree" and "disagree" items exist for each of the two subscales. Results indicated that a correlated two-factor solution is still superior to a one-factor solution, that the two factors are more highly intercorrelated for European Americans than for African Americans, and that opposition to equality is differentially related to ethnocentrism for the two groups. A fourth and final study was conducted in order to assess the generalizability of these findings involving the "balanced" scale and to examine divergences between group-based

dominance and opposition to equality with regard to political attitudes, social policy preferences, and psychological functioning. With these goals in mind, additional measures having to do with attitudes toward affirmative action, political conservatism, neuroticism, and economic system justification tendencies were included in Study 4.

STUDY 4

Method

Participants. Four hundred eighty-six introductory psychology students (122 African Americans and 364 European Americans) at the University of Maryland completed the materials for Study 4 in exchange for partial course credit.

Procedure. As in the prior studies, the research instruments were administered in the context of computerized mass-testing sessions at the beginning of the semester. All participants completed a "balanced" version of the social dominance orientation scale as well as measures of self-esteem, ethnocentrism, neuroticism, political conservatism, and attitudes toward affirmative action.

Measures

Social dominance orientation. The "balanced" version of the SDO scale used in Study 3 was used again here.

Ethnocentrism and self-esteem. The same measures of ethnocentrism and self-esteem used in the previous studies were administered here.

Neuroticism. Also administered was the neuroticism scale from Costa and McCrae's (1992) NEO-FFI measure of the "Big Five" personality traits. According to their framework, neuroticism involves "the general tendency to experience negative affects such as fear, sadness, embarrassment, anger, guilt, and disgust . . . susceptibility to psychological distress . . . [and a tendency] to cope more poorly than others with stress" (p. 14). The NEO-FFI neuroticism scale contains 12 items (e.g., "I often feel inferior to others" and "I often feel helpless and want someone else to solve my problems"), each with a 5-point, Likert-type response format, labeled from "Strongly Disagree" to "Strongly Agree." The scale has a proven track record of reliability and validity, and it was found to be highly reliable for the current sample as well ($\alpha = .85$).

Political orientation. Respondents were asked to locate themselves on two continua, one of which was labeled "Liberal" vs "Conservative," and the other of which was labeled "Democrat" vs "Republican." These items were completed on 7-point scales (1 = "Very Liberal"/"A Strong Democrat" and 7 = "Very Conservative"/"A Strong Republican"). A mean based on the two items, which correlated with one another at $r = .50$ ($p < .001$), was used as the measure of political orientation.

Issue-based conservatism. In addition to self-reported political orientation, we investigated attitudes toward 11 specific sociopolitical issues or policies. On scales ranging from −4 ("Oppose Strongly") to +4 ("Support Strongly"), respondents were asked to indicate their position on a constitutional amendment

requiring a balanced federal budget, death penalty for murder, limits on public assistance to 5 years per recipient, a ban on assault weapons (reverse-scored), a freeze on immigration, reduced spending on social programs, reduced military spending (reverse-scored), organized prayer in public schools, marital benefits for homosexual couples (reverse-scored), affirmative action for women and minorities (negatively scored), and a law barring illegal immigrants from schools, hospitals, and social services. A mean score was calculated by aggregating support for conservative positions across these different issues ($\alpha = .61$).

Attitudes toward affirmative action. Four items were used to tap the degree of support for affirmative action policies: (1) "Affirmative action for Blacks is unfair to whites"; (2) "Affirmative action in education gives an opportunity to qualified Blacks who might not have had a chance without it" (reverse-scored); (3) "Affirmative action for Blacks may force employers to hire unqualified people"; (4) "Affirmative action in the workplace for Blacks helps make sure that the American work force and economy remain competitive" (reverse-scored). Responses were given on 5-point scales ranging from 1 ("Strongly Disagree") to 5 "Strongly Agree"). An index of opposition to affirmative action was calculated by averaging across these four items ($\alpha = .82$).

Economic system justification. In order to measure the general ideological tendency to legitimize economic inequality (e.g., Jost & Banaji, 1994), an "economic system justification" (ESJ) attitude scale was administered here.[2] Respondents were asked to indicate their levels of agreement or disagreement on a scale ranging from 1 to 9 with each of the following attitude statements: (1) "If people work hard, they almost always get what they want"; (2) "The existence of widespread economic differences does not mean that they are inevitable" (reverse-scored); (3) "Laws of nature are responsible for differences in wealth in society"; (4) "There are many reasons to think that the economic system is unfair" (reverse-scored); (5) "It is virtually impossible to eliminate poverty"; (6) "Poor people are not essentially different from rich people" (reverse-scored); (7) "Most people who don't get ahead in our society should not blame the system; they have only themselves to blame"; (8) "Equal distribution of resources is a possibility for our society" (reverse-scored); (9) "Social class differences reflect differences in the natural order of things"; (10) "Economic differences in the society reflect an illegitimate distribution of resources" (reverse-scored); (11) "There will always be poor people, because there will never be enough jobs for everybody"; (12) "Economic positions are legitimate reflections of people's achievements"; (13) "If people wanted to change the economic system to make things equal, they could" (reverse-scored); (14) "Equal distribution of resources is unnatural"; (15) "It is unfair to have an economic system which produces extreme wealth and extreme poverty at the same time" (reverse-scored); (16) "There is no point in trying to make incomes more equal"; and (17) "There are no inherent differences between rich and poor; it is purely a matter of the

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circumstances into which you are born" (reverse-scored). Alpha reliability was found to be acceptable for the scale (.73). Consistent with prior theorizing on the topic of system justification, it was expected that this scale would relate to political conservatism, anti-Black attitudes, and opposition to equality among members of high- and low-status groups.

Social desirability. The same 11-item social desirability scale was used. Alpha reliability was again reasonably high at .70. People who scored in the top 10% of the sample in terms of social desirability were excluded from all analyses. The final sample size, then, was 447 (105 African Americans and 342 European Americans).

Results

Evidence for a two-factor solution. Factor loadings resulting from the EQS confirmatory analysis on the "balanced" SDO scale are displayed in Table 3. The correlated two-factor model once again provided a reliably better fit for the data than did the one-factor solution for African Americans (*CFI's* = .800 vs .787, $\chi^2 = 4.64$, *df* = 1, *p* < .05), European Americans (*CFI's* = .815 vs .793, $\chi^2 = 32.77$, *df* = 1, *p* < .001), and the overall sample (*CFI's* = .820 vs .805, $\chi^2 = 27.64$, *df* = 1, *p* < .001). Indices of OEQ and GBD again were calculated as aggregated item means (αs = .77 and .73, respectively). Means and standard deviations for the major variables are presented in Table 4, according to race of respondent.

Correlations between the two factors. Correlations between GBD and OEQ were again computed for the African American sample (*r* = .62) and for the European American sample (*r* = .68). Although the correlations differed in the predicted direction, the comparison did not attain statistical significance in this study.

Effects of Group-Based Dominance and Opposition to Equality

Relations to self-esteem. Following standardization of predictor variables, the same regression analysis procedure used earlier to examine the relations among GBD, OEQ, and self-esteem was employed here. This time, only the OEQ × race interaction attained statistical significance (β = .16, *p* < .01). As hypothesized, anti-egalitarianism was related negatively to self-esteem for African Americans (β = −.20), but it was related positively to self-esteem for European Americans (β = .11). Group-based dominance was not related to self-esteem for African American respondents, but a negative relation between GBD and self-esteem was obtained for European Americans (β = −.19, *p* < .01). This is suggestive of the interesting possibility that members of high-status groups are especially likely to turn to group-based dominance as a way of dealing with low self-esteem (e.g., Fein & Spencer, 1997).

Relations to ethnocentrism. We hypothesized that OEQ scores would be related differentially to ethnocentrism for European Americans and African Americans, insofar as opposition to equality should be associated with increased ethnocentrism on the part of high-status groups and decreased ethnocentrism on

the part of low-status groups. Group-based dominance, on the other hand, should be related positively to ethnocentrism for high- and low-status groups, to the extent that it captures the desire for in-group superiority. Regression analyses revealed a main effect of race ($\beta = -.20$, $p < .001$), such that African Americans exhibited stronger in-group bias (see means in Table 4). There was a positive, marginal main effect of GBD on ethnocentrism ($\beta = .13$, $p < .07$), but no main effect of OEQ. The interaction effect involving race and OEQ attained marginal significance ($\beta = .14$, $p < .06$). Opposition to equality was related negatively (but nonsignificantly) to ethnocentrism for African Americans ($\beta = -.09$), whereas the relation between OEQ and ethnocentrism was positive and significant for European Americans ($\beta = .19$, $p < .01$).

Relations to neuroticism. It was expected that GBD and OEQ would be differentially related to neuroticism for African Americans and European Americans. In support of these expectations, we found that race interacted with both OEQ ($\beta = -.33$, $p < .0001$) and GBD ($\beta = .21$, $p < .008$) in predicting neuroticism. For African Americans, OEQ was associated with increased neuroticism ($\beta = .36$, $p < .005$), whereas for European Americans, it was associated with decreased neuroticism ($\beta = -.22$, $p < .005$). Conversely, GBD was associated with greater neuroticism among European Americans ($\beta = .21$, $p < .005$) and (nonsignificantly) lesser neuroticism among African Americans ($\beta = -.18$, *ns*). Thus, the two ideological components predict different psychological outcomes in terms of mental health, with system justifying beliefs about anti-egalitarianism helping the high-status group and hurting the low-status group.

Political orientation. In order to explore the relations among group-based dominance, opposition to equality, and other more established bases of political ideology, we conducted a series of multiple-regression analyses. We found that self-reported identification with "Conservative" and "Republican" labels was associated with OEQ for the sample as a whole ($\beta = .33$, $p < .0001$), for African Americans ($\beta = .47$, $p < .0001$), and for European Americans ($\beta = .20$, $p < .01$). There was no relation between GBD and political orientation for any of the samples. A main effect of race indicated that European American respondents were, in general, more conservative than African American respondents ($\beta = .19$, $p < .0005$). Thus, race and OEQ were related to political conservatism for both groups, but GBD was not; this provides additional evidence that the two components of social dominance orientation are related differentially to social attitudes.

Issue-based conservatism. There were no main or interactive effects of race on issue-based conservatism, but both GBD ($\beta = .18$, $p < .02$) and OEQ ($\beta = .20$, $p < .01$) were associated positively with conservative positions on the issues.

Attitudes toward affirmative action. Not surprisingly, African Americans were more supportive of affirmative action policies than were European Americans ($\beta = -.51$, $p < .0001$). More interestingly, we found that opposition to equality was associated with the rejection of affirmative action, but group-based dominance was not. This pattern was obtained for the sample as a whole ($\beta = -.24$, $p < .001$), for European Americans ($\beta = -.30$, $p < .0001$), and for African

Americans ($\beta = -.28$, $p < .03$). The finding that OEQ is related negatively to support for affirmative action is especially instructive given that people frequently argue against affirmative action on the grounds that they are against unequal treatment (e.g., Hochschild, 1998); in truth, it seems that people who are most opposed to equality (or least supportive of equality) are more likely to reject affirmative action, presumably because it reduces existing forms of inequality. The fact that GBD is unrelated to affirmative action attitudes even among European Americans suggests that the rejection of affirmative action is not necessarily motivated by a desire to dominate minority groups per se, but rather to an ideological opposition to egalitarianism that serves to justify the current social system.

Effects of Economic System Justification

Relations to ethnocentrism and self-esteem. In order to explore the role of system justification in racial and social policy attitudes, a series of multiple-regression analyses were conducted involving main and interactive effects of race and economic system justification. The analysis yielded a significant interaction involving race and ESJ on ethnocentrism ($\beta = .13$, $p < .05$). For European Americans, there was a strong positive relation between ESJ and ethnocentrism ($\beta = .27$, $p < .0001$), but not for African Americans ($\beta = -.003$, *ns*). No effects of ESJ on self-esteem were observed.

Group-based dominance and opposition to equality. Following Lane (1962), it was hypothesized that opposition to equality would reflect a form of system justification. In support of this notion, we found that after controlling for GBD, there was a strong positive relation between OEQ and system justification ($\beta = .26$, $p < .0001$). This was true not only for the sample as a whole, but also for African Americans considered separately ($\beta = .26$, $p < .006$) and for European Americans ($\beta = .27$, $p < .0001$). Controlling for OEQ, there was also a marginally significant relation between GBD and economic system justification ($\beta = .10$, $p < .06$).

Relations to neuroticism. A significant interaction between race and economic system justification was obtained for the measure of neuroticism ($\beta = -.19$, $p < .006$). We found that ESJ was associated with significantly more neuroticism among African Americans ($\beta = .23$, $p < .05$), and it was associated with marginally less neuroticism among European Americans ($\beta = -.10$, $p < .09$). Thus, as hypothesized, system justification was found to be detrimental to the psychological well-being of low-status group members only.

Political conservatism. Economic system justification was strongly associated with self-reported political conservatism for the entire sample ($\beta = .29$, $p < .0001$), for African Americans ($\beta = .24$, $p < .03$), and for European Americans ($\beta = .34$, $p < .0001$). It was strongly associated with issue-based conservatism for the sample as a whole ($\beta = .45$, $p < .0001$), for African Americans ($\beta = .41$, $p < .0001$), and for European Americans ($\beta = .51$, $p < .0001$). Thus, the notion that conservative ideologies promote the justification of economic inequality was supported (cf. Jost, Kruglanski, & Simon, 1999).

Attitudes toward affirmative action. As predicted, economic system justification was also associated with the rejection of affirmative action for the entire sample ($\beta = -.29$, $p < .0001$), for European Americans ($\beta = -.39$, $p < .0001$), and for African Americans ($\beta = -.28$, $p < .01$). Thus, system justification in the economic domain was found to predict attitudes concerning racial policy.

GENERAL DISCUSSION

In two studies using the original SDO scale validated by Pratto et al. (1994) and two other studies using a "balanced" version of the scale, we have suggested that social dominance orientation captures two distinct response tendencies, one of which reflects support for group-based dominance (GBD) and the other of which reflects a generalized opposition to equality in social systems (OEQ). It was hypothesized that for members of high-status groups, GBD and OEQ are complementary; to oppose egalitarian reforms is to advance in-group interests and maintain in-group superiority (e.g., Bobo & Kluegel, 1993). For members of low-status groups, however, GBD and OEQ are less intertwined. Whereas the desire for group-based dominance could be related positively to feelings of self-worth and group value, opposition to equality is related negatively to evaluations of the self and the in-group (e.g., Jost, 1995; Kluegel & Smith, 1986; Lane, 1962; Lewin, 1941).

The findings here support several hypotheses about the separation of group-based dominance and opposition to equality. For one thing, it was found that items on the SDO scale tend to separate into two correlated factors or subscales, one of which taps attitudes pertaining to in-group vs out-group competition, and the other of which taps general attitudes toward egalitarianism in the social system. Second, we found relatively consistent support for the hypothesis that GBD and OEQ scores would be more highly intercorrelated among members of a relatively high-status group (European Americans) than among members of a relatively low-status group (African Americans). This is an example of an "isotropic ideological asymmetry effect," in the language of Levin et al. (1998), because it is a difference in degree rather than in kind.

A third piece of evidence was that OEQ scores tended to be related positively to self-esteem for European Americans, but they tended to be related negatively to self-esteem for African Americans. A similar finding coming from the fourth study was that OEQ was associated with greater neuroticism among African Americans and lesser neuroticism among European Americans. Thus, we obtain support for the notion that anti-egalitarian attitudes have deleterious consequences for the psychological well-being of disadvantaged group members but not necessarily for the well-being of advantaged group members (e.g., Jost & Banaji, 1994; Kluegel & Smith, 1986; Lane, 1962; Lewin, 1941). Group-based dominance, on the other hand, was associated with lesser neuroticism among African Americans and greater neuroticism among European Americans. This provides further support for the notion that GBD and OEQ are independent predictors of psychological outcomes.

A fourth piece of evidence was that OEQ scores were generally related

negatively to in-group favoritism for African Americans, whereas they were related positively to in-group favoritism for European Americans. As expected, GBD was positively related to in-group favoritism for both groups. These results provide a strong theoretical and empirical rationale for differentiating between generalized anti-egalitarianism and group dominance in the context of intergroup relations. Although GBD and OEQ are correlated with one another, they are differentially related to ethnocentrism for European and African Americans.

Distinguishing between two response tendencies that are conflated in traditional accounts of social dominance, that is, between group-based dominance and opposition to inequality, might help to explain the so-called "ideological asymmetry effect" (Lewin et al., 1998; Rabinowitz, 1999; Sidanius, Pratto, & Rabinowitz, 1994), according to which the correlation between SDO and in-group favoritism is weaker for members of low-status than high-status groups. We have demonstrated here that for members of low-status groups, one component (GBD) is related positively to in-group favoritism, whereas another component (OEQ) is related negatively to in-group favoritism. For members of high-status groups, however, both components of SDO are related positively to in-group favoritism. The result is that the overall SDO score is a worse predictor of intergroup attitudes for members of low-status groups than members of high-status groups.

The present research also links GBD and OEQ to political orientation and social policy attitudes. Self-reported political conservatism was associated positively with OEQ for European and African Americans alike, but it was unrelated to GBD. This further specifies the connection noted by Pratto et al. (1994) between conservatism and SDO in general. Failure to support affirmative action was also associated with greater OEQ for both groups, despite the fact that a strong commitment to equality is often given as a justification for antiaffirmative action attitudes (e.g., Hochschild, 1998). There was no relation between GBD and affirmative action attitudes, suggesting that the rejection of affirmative action is motivated not so much by a desire to dominate minority groups as it is by an ideological aversion to egalitarianism. Thus, our research provides a strong empirical basis for distinguishing between opposition to equality and group-based dominance in the domain of political and racial policy preferences (e.g., Bobo & Kluegel, 1993; Tuch & Hughes, 1996).

As part of a continuing research trend linking "social dominance" and "system justification" perspectives (e.g., Jost & Burgess, 2000; Rabinowitz, 1999; Sidanius, Levin, Federico, & Pratto, in press), we also examined relations among GBD, OEQ, and the tendency to engage in justification of the economic system. A strong association between OEQ and economic system justification was observed, as was a weak association between GBD and economic system justification. Supportive of a system justification framework (e.g., Jost & Banaji, 1994), we also found that economic system justification was related positively to ethnocentrism for European but not African Americans, that it was related positively to neuroticism for African but not European Americans, that it was related positively to conservatism for both groups, and that it was related negatively to support for affirmative action for both groups. Thus, in many ways,

parallel results were obtained for OEQ and economic system justification, indicating that, as Lane (1962), Kluegel and Smith (1986), and others have argued, opposition to equality does seem to serve a system justifying ideological function. Future research would do well to explore further the convergences and divergences between opposition to equality and other forms of system justification. The present research program has been devoted to exploring the convergences and divergences between opposition to equality and group-based dominance and to demonstrate that the correlated but distinct ideological components of "social dominance orientation" are independent predictors of social and psychological outcomes for members of advantaged and disadvantaged racial groups.

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