

## **Social dominance theory and the dynamics of intergroup relations: Taking stock and looking forward**

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This chapter reviews the last 15 years of research inspired by social dominance theory, a general theory of societal group-based inequality. In doing so, we sketch the broad outlines of the theory and discuss some of the controversies surrounding it, such as the “invariance hypothesis” regarding gender differences in social dominance orientation (SDO) and the effect of social context on the expression of SDO. We also discuss the central role of gender in the construction and maintenance of group-based inequality, and review some of the new research inspired by the social dominance perspective. Finally, we identify and discuss some of the most important theoretical questions posed by social dominance theory that are yet to be researched.

Despite progress in the extension of civil and human rights to broader segments of the world, the problems of intergroup discrimination, bigotry, genocide, and the oppression of women and sexual minorities are still painfully with us. Regardless of a society’s form of government, the contents of its fundamental belief system, or the complexity of its social and economic arrangements, human societies tend to organise as group-based social hierarchies in which at least one group enjoys greater social status and

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power than other groups. Members of dominant social groups tend to enjoy a disproportionate share of *positive social value*, or desirable material and symbolic resources such as political power, wealth, protection by force, plentiful and desirable food, and access to good housing, health care, leisure, and education. *Negative social value* is disproportionately left to or forced upon members of subordinate groups in the form of substandard housing, disease, underemployment, dangerous and distasteful work, disproportionate punishment, stigmatisation, and vilification. Although the degree, severity, and definitional bases of group-based hierarchical organisation vary across societies and within the same society over time, the fact of group-based hierarchical organisation appears to be a human universal (e.g., Brown, 1991; Lenski, 1984; Tilly, 1998).

Social dominance theory was developed in an attempt to understand how group-based social hierarchy is formed and maintained. Unlike most other theories of prejudice, stereotypes, and discrimination in social psychology (e.g., realistic group conflict theory, social identity theory, self-categorisation theory, stereotype content model), social dominance theory assumes that we must understand the processes producing and maintaining prejudice and discrimination at *multiple* levels of analysis, including cultural ideologies and policies, institutional practices, relations of individuals to others inside and outside their groups, the psychological predispositions of individuals, and the interaction between the evolved psychologies of men and women (e.g., Pratto, 1999; Sidanius, 1993; Sidanius & Pratto, 1999; Sidanius, Pratto, van Laar, & Levin, 2004). Moreover, because social dominance theory views human societies as *systems*, it theorises how processes at different levels work together to produce systemic effects.

In addressing the processes structuring human societies, social dominance theory is more general than theories that focus only on capitalism, empires, gender, immediate self- or group interest, social identity, or individual differences. Social dominance theory is as ambitious as it is because it attempts to integrate insights from a number of earlier perspectives, with the most influential being: (a) cultural theories of ideology (Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950; Johnson, 1994), (b) realistic group conflict theory (e.g., Blumer, 1960; Sherif, Harvey, White, Hood, & Sherif, 1961), (c) neoclassical elitism theory (e.g., Michels, 1911/1962; Mosca (1896/1939; Pareto, 1901/1979), (d) social identity theory (e.g., Tajfel & Turner, 1986), (e) Marxism (Engels, 1884/1902; Marx & Engels, 1846), (f) feminist anthropological analyses of family and labour (Collier, 1988; Sanday, 1981), and (g) evolutionary psychology (e.g., Wilson & Daly, 1992).

We discuss social dominance theory in five major sections. First, we summarise the theory and evidence for its basic claims. Second, we discuss the construct of social dominance orientation, its psychometric properties and determinants, and some of the controversies surrounding the construct.

Third, we discuss the central role gender plays in group-based hierarchy. Fourth, we review some of the new research inspired by social dominance theory. Finally, we step back from empirical details to regain a larger view of what social dominance theory is trying to accomplish, and to identify theoretical issues that remain to be empirically researched.

## AN OVERVIEW OF SOCIAL DOMINANCE THEORY

### The trimorphic structure of group-based social hierarchy

Social dominance theory argues that societies producing stable economic surplus contain three qualitatively distinct systems of group-based hierarchy: (1) an *age system*, in which adults have disproportionate social power over children; (2) a *gender system*, in which men have disproportionate social, political, and military power compared to women; and (3) an *arbitrary-set* system, in which groups constructed on “arbitrary” bases, that is, on bases not linked to the human life-cycle, have differential access to things of positive and negative social value. Arbitrary-set groups may be defined by social distinctions meaningfully related to power, such as (in various contexts) nationality, “race”, ethnicity, class, estate, descent, religion, or clan. Parallel trimorphic structures (based on age, sex, and coalitions) are found in chimpanzees, bonobos, gorillas, and baboons (Kawanaka, 1982, 1989; Nadler, 1988; Rowell, 1974; Strier, 1994). Such a social organisation may help primate societies transmit skills, knowledge, and ideas, while also transmitting roles and power.

Although the trimorphic *form* of human societies is universal, the hierarchical severity of these three systems can vary quite dramatically across different societies and within a given society over time. There are substantial cultural and class differences in what ages are defined as “childhood” and whether marriage, sexuality, labour, and freedom are expected of or prohibited from children. There are radically different degrees of gender inequality across different societies (though no differences in *form* such that women dominate men). For example, women living under Shar’ia law may be stoned to death for adultery, but women in Sweden now enjoy near political and economic, though not military, parity with men, although this was not true in the 1920s. Definitions of arbitrary-set categories and the permeability of category boundaries also vary across societies and historical periods. For example, the US racial hierarchy is largely dichotomous (Black/White) and rigid, but the racial hierarchy in the Dominican Republic contains approximately six distinct, yet relatively permeable, categories (Sidanius, Peña, & Sawyer, 2001b).

Despite several structural and functional similarities among the age, gender, and arbitrary-set systems of group-based social hierarchy, social

dominance theory argues that each system is qualitatively different, and hence one system cannot be regarded as merely a special case of another. Specifically, aside from their function in societal reproduction, there are three critical differences among these systems (Sidanius & Pratto, 1999; Sidanius & Veniegas, 2000): *flexibility*, *level of violence*, and *focus*. The age and gender systems have some flexibility as to who is defined as a “child” versus an “adult” and who is “male” versus “female”. But the arbitrary-set system is distinguished by a very high degree of plasticity, both in terms of which group distinctions become socially significant and in the permeability of the group boundaries. Second, although coercion and violence are used to maintain the age and gender hierarchies, the degree of lethality associated with the arbitrary-set system is often orders of magnitude greater than that associated with either the age or gender system. Arbitrary-sets are the only type of system in which total annihilation is found. That is, there are cases in which one clan or race or ethnic group has exterminated another. There are no known cases in which adults killed all the children, or men killed all the women, in a society. Finally, while by definition, the age system is focused on the control of children by adults, and the gender system is focused on men’s control of women, social dominance theory argues that arbitrary-set hierarchy primarily focuses on the control of subordinate males by coalitions of dominant males. This, in fact, is a primary reason that arbitrary-set hierarchy is associated with extraordinary levels of violence.

The masculine focus of arbitrary-set conflict can be seen in several ways. Men are the most frequent perpetrators of both lethal interpersonal violence (e.g., Archer, 2000; Daly & Wilson, 1988) and of intergroup violence (see Goldstein, 2001; Wrangham & Peterson, 1996). Indeed, collective violence ranging from military campaigns to gangs to lynchings are almost exclusively instigated, organised, and controlled by men (Edgerton, 2000; Keegan, 1993). Equally important, men are not only the primary perpetrators of intergroup violence, but also the primary lethal targets. For example, 69% of Black US lynching victims between 1882 and 1927 (White, 1969) and over 80% of US homosexual hate crime victims (e.g., Federal Bureau of Investigation, 2003) were men. Even the widespread practice of raping enemy women during war often appears intended to dishonour and humiliate the rape victim’s male relatives (United Nations, 2002). This is not to diminish the suffering of women and children in arbitrary-set conflicts, which is often atrocious. Rather, it is to emphasise that violence in the gender and age systems may stem from arbitrary-set conflict (see United Nations, 2002).

The male-on-male focus of arbitrary-set conflict can be seen in everyday forms of group discrimination as well. At the level of social stereotypes, Eagly and Kite (1987) found that negative national stereotypes are really differentiated stereotypes of men in those nations; stereotypes of women, regardless of their nationality, reflect women’s nurturing roles across

nations. At the level of individual discrimination, the assumption that arbitrary-set prejudice primarily concerns men seems implicit in the fact that most studies of race discrimination use only men as targets (e.g., Correll, Park, Judd, & Wittenbrink, 2002). At the level of institutional discrimination, there is substantial cross-cultural evidence that men rather than women are the primary and most ill-treated targets of arbitrary-set discrimination across a range of domains, including the labour market, the criminal justice system, the housing market, and the retail market (see Sidanius & Pratto, 1999). The thesis that both arbitrary-set violence and arbitrary-set discrimination are primarily male-on-male projects is known as the “subordinate male target hypothesis” (see Sidanius & Pratto, 1999; Sidanius & Veniegas, 2000).

### Mechanisms producing and maintaining group-based social hierarchy

According to social dominance theory, group-based social hierarchy is produced by the net effects of discrimination across multiple levels: institutions, individuals, and collaborative intergroup processes. Discrimination across these levels is coordinated to favour dominant groups over subordinate groups by *legitimising myths*, or societal, consensually shared social ideologies.

*Legitimising myths.* Following classical scholars of social power (e.g., Mosca, 1896; Pareto, 1901), social dominance theory assumes that group-based inequality is not simply the result of the naked use of force, intimidation, and discrimination on the part of dominants against subordinates. Rather, as suggested by contemporary scholars of group dominance and shared representations (e.g., Johnson, 1994, Sanday, 1981, van Dijk, 1987), social dominance theory states that the decisions and behaviours of individuals, the formation of new social practices, and the operations of institutions are shaped by legitimising myths. Legitimising myths are consensually held values, attitudes, beliefs, stereotypes, and cultural ideologies.

Social dominance theory distinguishes between two functional types of legitimising myths. *Hierarchy-enhancing legitimising myths (HE-LMs)* provide moral and intellectual justification for group-based oppression and inequality. Examples include myriad forms of racism, sexism, heterosexism, stereotypes, notions of “fate”, just world beliefs, nationalism, Confucianism, the doctrine of meritorious karma, classism, the Divine Rights of Kings, Manifest Destiny, and internal attributions for poverty. Such disparate myths have been used to argue that inequality is fair,

legitimate, natural, or moral. Hierarchy-enhancing legitimising myths not only organise individual, group, and institutional behaviour in ways that sustain dominance, they often lead subordinates to collaborate with dominants in the maintenance of oppression.

However, dominance is seldom uncontested. Ideologies that counter dominance are called *hierarchy-attenuating legitimising myths (HA-LMs)*. Examples of hierarchy-attenuating legitimising myths are political doctrines such as social democracy, socialism, and communism, religious doctrines such as the preferential option for the poor or inclusive and egalitarian themes in the New Testament, and humanist doctrines such as the universal rights of man, feminism, and human rights. Both hierarchy-enhancing and hierarchy-attenuating myths are tied to the cosmologies, patterns of behaviour, and relations that constitute culture.

One factor determining the potency of a legitimising myth to either enhance or attenuate group-based social hierarchy is the degree to which it is consensual, particularly across members of both subordinate and dominant groups. While social dominance theory assumes that, everything else being equal, dominants will generally show greater endorsement of hierarchy-enhancing legitimising myths than will subordinates, and subordinates will display greater endorsement of hierarchy-attenuating legitimising myths than will dominants, within stable hierarchies the theory assumes that there will be greater ideological *consensus* rather than dissension across groups. In other words, within stable social systems, dominants and subordinates will agree with respect to these legitimising myths more than they will disagree (see Sidanius & Pratto, 1999, Ch. 4 for a more detailed argument and empirical evidence).

### Institutional discrimination

Like legitimising myths, many institutions can be classified as either hierarchy enhancing or hierarchy attenuating. Hierarchy-enhancing (HE) institutions promote and sustain inequality by allocating disproportionately more positive social value or less negative social value to dominant groups than to subordinate groups. Powerful hierarchy-enhancing institutions include profit-maximising financial institutions, transnational corporations, internal security organisations (e.g., Gestapo, KGB, SAVAK, FBI), and criminal justice systems. Criminal justice systems are viewed as important mechanisms of group dominance and control because, compared to dominants, subordinates are over-represented in prison cells, torture chambers, and execution chambers across many different societies, even after accounting for differential rates of criminality between groups (see Sidanius & Pratto, 1999, Ch. 8). For example, in the United States, African-Americans are imprisoned at more than six times the rate of

European-Americans, and African-American men have about a one-third chance of being imprisoned during their lifetimes. A portion of this differential imprisonment can be attributed to higher rates of criminal culpability among African-American men, but a substantial portion is difficult to attribute to anything other than institutional discrimination (e.g., Mauer, 1999; Miller, 1996; Nelson, 2000). This has systematic effects on the African-American community in terms of lost wages, absent family members, mistrust of public institutions, and low life expectations (e.g., Mauer, 1999).

Reducing the consequences of hierarchy-enhancing institutions, but rarely balancing their impact, are hierarchy-attenuating (HA) institutions. These disproportionately aid members of subordinate social groups (e.g., the poor, ethnic and religious minorities) and attempt to open access to resources otherwise restricted to dominants (e.g., public services). Prominent hierarchy-attenuating institutions include human rights, civil rights, and civil liberties groups; welfare organisations; and religious organisations devoted to the protection of the poor, the vulnerable, and the oppressed. Such institutions often lack substantial and permanent funding, force, legal precedent, or other bases of power. In contrast to the criminal justice and employment sectors, which regularly allocate negative social value such as prison terms and dangerous work situations to subordinates, hierarchy-attenuating institutions rarely allocate negative social value to dominants. Those that do are often wilfully opposed, delegitimised, and shut down. This asymmetry in power between the discriminatory elements of hierarchy-enhancing institutions and counterbalancing efforts of hierarchy-attenuating institutions maintains hierarchy.

The discrimination perpetrated by hierarchy-enhancing institutions is a particularly potent cause of group hierarchy for several reasons. First, institutions can mobilise and allocate vastly larger amounts of resources than individuals can. Second, large institutions, such as national governments and multinational corporations, have a larger “reach” in systematic influence across locales. Third, because institutions perpetuate themselves, the discrimination they engage in operates over generations, and when individuals or groups try to fight those practices, institutions typically defend their discriminatory practices as part of defending the institution itself. Fourth, institutions establish their own internal norms, which coordinate the people who work in them and homogenise individual differences. Fifth, individuals in many institutions, including the military and corporations, are frequently exempted from personal culpability for their institutional actions because the institution has special legal status. All this implies that institutional behaviour is a very influential determinant of the level of social hierarchy in societies. Institutional discrimination against arbitrary-set subordinates and women is plentiful across societies in

domains including employment, housing, retail markets, health care, and education (see Sidanius & Pratto, 1999, Chs 5–8).

### Individual discrimination

Discrimination perpetrated by individuals in these domains abounds as well. Discrimination by individuals occurs when an employer decides not to hire or promote a given job applicant, a real-estate agent decides not to sell or rent to a potential client, or a prosecutor decides to charge a defendant with a less serious offence, all due to the target individual's ethnicity, nationality, social class, sexual orientation, or gender. Which groups are generally favoured and which are disfavoured in such decisions depends in part on the contents of legitimising myths. Further, social structure often affords hierarchy-maintaining behaviour more than hierarchy-attenuating behaviour. For example, recommending friends for jobs favours dominants when unemployment rates differ by group and friendship patterns are segregated. Tutoring neighbourhood children favours dominants when education levels differ by group and neighbourhoods are segregated. These, of course, are typical conditions in hierarchical societies. When thousands of such individual acts of discrimination are aggregated over time, they stabilise group-based social inequality.

The structure of society itself, then, facilitates discrimination by individuals. People in high-power groups usually have more things of positive social value they can allocate to others, and more power to ensure that things of negative social value are allocated to people in other groups. For example, rich people have more means than poor people to prevent or contest zoning [planning] decisions that locate undesirable things near their homes. Group segregation and gender role differentiation also mean that privileges and responsibilities are allocated unequally across arbitrary-set groups and gender. This does not mean that people's actions are *determined* by their position in the social structure. Rather, a hierarchical structure implies that the *ease* of performing actions that maintain or enhance inequality is greater than the ease of performing actions that attenuate the hierarchy.

One piece of evidence that people's actions are not just determined by their position in the social structure is that there are robust differences among individuals in the same social positions in terms of which groups their actions favour, how much they discriminate, how much group prejudice they hold, and how much they favour discriminatory versus egalitarian policies. These kinds of differences are not just random or contextual. Rather, they are associated with an identifiable psychological orientation concerning hierarchical group relations, namely *social*

*dominance orientation* (SDO). (SDO is discussed in detail in the following section.)

### Collaborative intergroup processes in discrimination

Group-based social inequality is also partly produced and maintained by intergroup processes; specifically, the collaborative activities of dominants and subordinates. This collaboration is achieved by *behavioural asymmetry*, or coordinated differences in the behavioural repertoires of dominants and subordinates that produce better outcomes for dominants than for subordinates. Three major types of behavioural asymmetry are asymmetrical ingroup bias, self-debilitating behaviours among subordinates, and ideological asymmetry.

*Asymmetrical ingroup bias.* The fact that people tend to favour their own groups over others has been known since before Sumner coined the term ethnocentrism in 1906, and has been largely confirmed by the voluminous research inspired by social identity theory. However, because social dominance theory considers group dominance to be a dynamic system, it predicts that the degree of ingroup bias differs systematically across levels of status and power. Within stable group-based dominance systems, dominants will usually display more ingroup favouritism vis-à-vis subordinates than will members of subordinate groups vis-à-vis dominants, especially with respect to dimensions of power and privilege (see Sidanius & Pratto, 1999, pp. 233–234; see also Fang, Sidanius & Pratto, 1998). In its more extreme form, this asymmetrical ingroup bias is manifested as outgroup favouritism among subordinates.

Asymmetrical ingroup bias favouring dominants is exaggerated by people's endorsement of legitimising myths. The more legitimate the social system is perceived to be, the greater the degree to which dominants will display ingroup favouritism compared to subordinates. For example, using a large random sample of American adults, Sidanius and Pratto (1999, pp. 237–238) found that among those who regarded American society as fair and just, dominants (Whites) showed higher levels of ethnic ingroup favouritism than did subordinates (i.e., Blacks and Latinos). In contrast, among those regarding American society as unjust and unfair, subordinates showed distinctly higher levels of ethnic ingroup favouritism than did dominants. This is just one example of the importance of legitimising myths in helping to regulate the degree of advantage that dominants have over subordinates.

*Self-debilitation.* When subordinates engage in self-destructive and ingroup-damaging behaviours at significantly higher levels than do

dominants, they contribute to their own group's subordination. We call this process *self-debilitation*. Self-debilitating behaviours include higher levels of criminality, in-group directed violence, harmful substance abuse (e.g., cigarette smoking, drug and alcohol abuse), truancy, and school attrition (Sidanius & Pratto, 1999, Ch. 9).

One example of the role of legitimising myths in self-debilitating behaviour is that stereotypes of group inferiority lead members of subordinate groups to under-perform on intellectual tasks in self-evaluative situations. Such "stereotype threat" has been found for African-Americans (Steele & Aronson, 1995), women (Spencer, Steele, & Quinn, 1999), people with lower social class (Croizet & Claire, 1998), and many other subordinate groups even when they do not endorse stereotypes of their own group's inferiority, and even though they can perform as well as equally competent members of dominant groups when relieved of the threat. In contrast, members of dominant groups often get a "stereotype lift" in terms of better performance because of these same stereotypes (e.g., Walton & Cohen, 2003).

Consider another general legitimising myth: that women should be sexually attractive to men. Research shows that women's test performance and eating habits can be debilitated by making them aware of themselves as sexual objects (e.g., Fredrickson, Roberts, Noll, Quinn, & Twenge, 1998). Yet many women devote considerable time and expense, and even endure pain, to present themselves as sexual objects. Much of the power of legitimising myths is that they can influence one's behaviour and outcomes whether one endorses them or not, and whether they are good for one or not.

From a social dominance perspective, hierarchy-enhancing legitimising myths are important not only because of the discriminatory behaviour they induce among dominants and the rationales they provide for institutional discrimination, but also because of the debilitating and self-destructive behaviours they induce among subordinates. Stereotypes and other ideologies that subordinates carry in their heads induce them to behave in ways that reinforce these stereotypes, thus becoming *self-fulfilling prophecies*. Through their influence on the actions of both dominants and subordinates, hierarchy-enhancing legitimising myths contribute to the maintenance of group-based hierarchy.

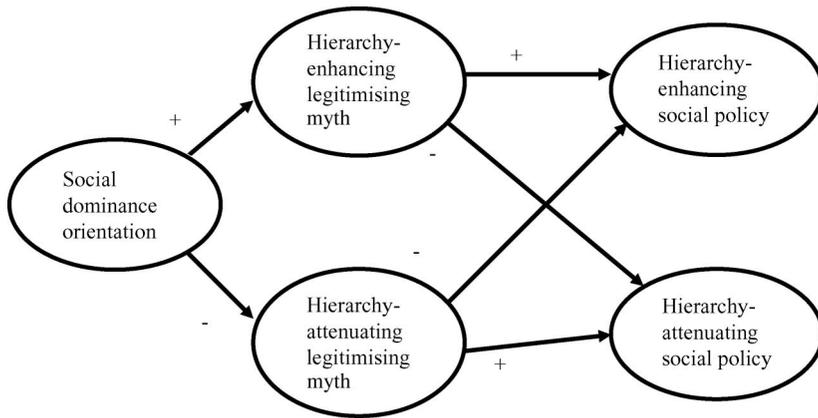
*Ideological asymmetry.* Consistent with social dominance theory's view that social dominance systems serve dominants more than subordinates, many of the psychological and ideological forces that help sustain group dominance work better for people in dominant than in subordinate groups. For example, although hierarchy-enhancing legitimising myths influence the behaviours of both dominants and subordinates, they are often easier for

people in dominant groups to endorse (e.g., Sidanius & Pratto, 1999, Ch. 4). In addition, for people in dominant groups, SDO feels more compatible with one's status position (e.g., Pratto, 1999), group and system justification motives are congruent (e.g., Jost & Burgess, 2000), and there is no conflict between attachment to superordinate groups, such as the nation, and attachment to other groups, such as one's ethnic group (Sidanius, Feshbach, Levin, & Pratto, 1997). The hypothesis that there is generally greater compatibility between psychological processes, beliefs, attitudes, and behaviours that facilitate group dominance among dominant group members than among subordinate group members is called *ideological asymmetry*.

In line with the ideological asymmetry hypothesis, SDO (i.e., the desire for group-based dominance and inequality) relates more strongly to support for legitimising myths among dominant than among subordinate groups (Sidanius & Pratto, 1999). There is also asymmetry in the relationship between SDO and ingroup identification as a function of group position: the two constructs are positively associated among dominants and negatively associated among subordinates (e.g., Levin & Sidanius, 1999; Pratto, 1999; Sidanius & Pratto, 1999; Sidanius, Pratto, & Rabinowitz, 1994d). Moreover, the combination of high SDO and high ingroup identification among dominants produces especially strong derogation and discrimination against subordinates (Overbeck, Jost, Mosso, Flizik, 2004; Sidanius, Pratto, & Mitchell, 1994c), as predicted by ideological asymmetry. We turn now to a more detailed discussion of the construct of social dominance orientation.

## THE CONSTRUCT OF SOCIAL DOMINANCE ORIENTATION

The construct of *social dominance orientation* captures the extent of individuals' desires for group-based dominance and inequality. These desires for social dominance are expressed in individual acts of discrimination and participation in intergroup and institutional processes that produce better outcomes for dominants than for subordinates. One way in which individuals high in SDO justify their discriminatory actions is by supporting a wide variety of legitimising myths that have in common the notion that dominant and subordinate groups deserve their relative positions of superiority and inferiority in the social hierarchy. Specifically, relative to their low-SDO counterparts, high-SDO individuals show more support for hierarchy-enhancing legitimising myths and less support for hierarchy-attenuating legitimising myths, and through these legitimising myths they show more support for hierarchy-enhancing social policies (e.g., restrictive immigration policies) and less support for hierarchy-attenuating social policies (e.g., affirmative action; see Figure 1). According to social dominance theory, hierarchical relationships among groups are both a partial



**Figure 1.** Model of hierarchy-enhancing and hierarchy-attenuating legitimising myths mediating the relationships between SDO and social policies (Source: Sidanius & Pratto, 1999, p. 105).

*cause* and a partial *result* of these processes (e.g., Pratto, 1999). Societies that are structured more hierarchically are likely to have larger mean differences in SDO between dominant and subordinate groups, and hierarchy-enhancing legitimising myths and social policies that are more powerful than hierarchy-attenuating alternatives. Social hierarchy is also reinforced by SDO and legitimising myths: The higher the levels of SDO, especially among dominants, the greater the support for hierarchy-enhancing relative to hierarchy-attenuating legitimising myths and social policies, and the greater the resulting level of social hierarchy.

By emphasising how SDO functions in this way, social dominance theory highlights the role that individuals' value orientations towards inequality play in both affecting and being affected by social hierarchy. While our initial conceptualisation of SDO defined it as the extent to which people desire dominance of the ingroup over outgroups (Pratto, Sidanius, Stallworth, & Malle, 1994), SDO has been refined as expressing a generalised orientation towards and desire for unequal and dominant/subordinate relations among salient social groups, regardless of whether this implies ingroup domination or subordination (Sidanius, Levin, Federico, & Pratto, 2001a; for a critique of this position, see Rubin & Hewstone, 2004).

Social dominance orientation is usually measured by the 14-item SDO<sub>5</sub> Scale or the 16-item SDO<sub>6</sub> Scale and consists of items such as: (a) "Superior groups should dominate inferior groups" and (b) "Inferior groups should stay in their place" (see SDO<sub>6</sub> Scale in the Appendix). The original explorations of the psychometric properties of the SDO scales have shown them to have high levels of internal and cross-time reliability, construct validity,

and discriminant validity (Pratto et al., 1994). For example, SDO is both conceptually distinct from and empirically orthogonal to interpersonal dominance in Americans (see Pratto et al., 1994). Sidanius and Pratto (1999) found a median reliability for the SDO<sub>5</sub> scale of .82 across 16 independent samples of 2150 respondents from four different nations (i.e., USA, Canada, Taiwan, and Mexico). The SDO<sub>6</sub> Scale has been found to have a median reliability of .83 across 14 independent samples of 4827 respondents from six different nations (USA, Israel, Palestine, the People's Republic of China, New Zealand, and Canada).

In terms of its high levels of construct validity, SDO has been found to be related to sexism (average  $r = .51$ ) and ethnic prejudice against a range of different minority groups across a number of different countries and cultures, including the USA, Canada, Mexico, Israel, Taiwan, the People's Republic of China, and New Zealand (average  $r = .41$ ). In addition, SDO has been found to be related to a range of hierarchy-enhancing ideologies and policies such as rape myths (e.g., rape victims are partly to blame for being raped;  $r = .43$ ); nationalism ( $r = .51$ ); patriotism ( $r = .35$ ); political conservatism ( $r = .28$ ); support for the war against Iraq ( $r = .48$ ), the death penalty ( $r = .31$ ), torture ( $r = .27$ ), and suspension of civil liberties ( $r = .45$ ); and opposition to both immigration ( $r = .30$ ) and extending civil and economic rights to gays and women ( $r = .38$ ,  $r = .39$ , respectively; see e.g., Pratto et al., 1994; Sidanius & Pratto, 1999). People higher in SDO maintain beliefs and endorse policies and practices that maintain group dominance in a variety of ways, whereas people lower in SDO favour ideologies and practices that ameliorate inequality.<sup>1</sup>

SDO is also a powerful predictor of socio-political attitudes even when other potential predictors are controlled. For example, McFarland and Adelson (1996) defined a construct of latent prejudice as a composite of prejudice against Blacks, gays, women, and an index of pseudo-patriotism. Latent prejudice was then regressed upon a long array of independent variables in a sample of college students and a sample of adults from the southern USA. The independent variables included the following: (1) right-wing authoritarianism (RWA), (2) attributional complexity, (3) need for structure, (4) self-esteem, (5) collective self-esteem, (6) neuroticism, (7) psychoticism, (8) just world beliefs, (9) impression management, (10) self-deception, (11) hostile aggressiveness, (12) life satisfaction, (13) self-direction, (14) universalism, (15) traditionalism, (16) conformity, (17) security, (18) SDO (SDO<sub>5</sub> scale), and (19) several demographic variables. SDO had the strongest product-moment correlation with the latent prejudice measure in both

<sup>1</sup>We use "low SDO" to refer to people who are lower than their peers and "high SDO" to refer to people who are higher than their peers in SDO, regardless of the level of their absolute scores on SDO scales.

samples (i.e., adults:  $r = .53$ ; students:  $r = .48$ ). RWA and SDO were only marginally related (i.e.,  $r < .22$  in both samples), and multiple regression showed that only RWA, gender, universalism, and SDO made strong and independent contributions to the prediction of latent prejudice, accounting for over half the variance in both samples (see Table 1).

Altemeyer (1998) reached similar conclusions using Anglophile Canadian samples and composite indices of prejudice assessing attitudes towards homosexuals, Blacks, women, Canadian Aboriginals, Quebecois, and generalised ethnocentrism. Controlling for a large array of other variables (including RWA), SDO had the largest correlation with the global prejudice measure. Similar to the results of McFarland and Adelson (1996), Altemeyer (1998) found that SDO and RWA alone accounted for 50% of the variance in global prejudice. Research using Swedish respondents confirms this picture. Ekehammar, Akrami, Gylje, and Zakrisson (2004) regressed a measure of generalised prejudice—consisting of prejudice against gays, Blacks, women, and the mentally handicapped—upon RWA and SDO. The results showed that, even though RWA and SDO were strongly correlated in this sample ( $r = .52$ ), and both RWA and SDO were strongly correlated with generalised prejudice ( $r = .55$  and  $r = .65$ , respectively), RWA and SDO both made independent and significant contributions to the prediction of generalised prejudice (i.e.,  $\beta = .30$  and  $\beta = .65$ , respectively). Although in some countries (e.g., Germany, Belgium) SDO and RWA correlate substantially (e.g., Duriez & van Hiel, 2002; Wagner, van Dick, & Zick, 2001),

TABLE 1  
Latent prejudice as a function of SDO, RWA, universalism, and gender  
in two independent samples

<i>Predictors</i>	<i>Simple r</i>	<i>Multiple <math>\beta</math></i>
<i>Student sample (N = 438)</i>		
SDO	.48**	.29
RWA	.47**	.42
Universalism	-.30**	-.21
Gender (female)	-.31**	-.21
$R^2 = .53$		
<i>Adult sample (N = 283)</i>		
SDO	.53**	.29
RWA	.47**	.44
Universalism	-.40**	-.19
Gender (female)	-.24**	-.17
$R^2 = .55^a$		

<sup>a</sup>This equation also includes attitude complexity, just world beliefs, and hostile aggression.

\*\* $p < .01$ . Source: McFarland and Adelson (1996).

in many countries (e.g., Canada, USA) they correlate very little (e.g., Altemeyer, 1998; McFarland & Adelson, 1996). Regardless, SDO and RWA both robustly contribute independently to predicting prejudice and political attitudes (e.g., McFarland & Adelson, 1996).

Research has also shown SDO to be related to resource allocation decisions. For example, in one recent study using a large sample of UCLA undergraduates, Sidanius, Haley, Molina, and Pratto (in press) employed Tajfel allocation matrices to explore the tendency for people to allocate relatively fewer economic resources to the ethnic outgroup than to the ethnic ingroup, even at the cost of lower absolute profit to the ingroup. The results showed that whereas the tendency to make such “costly” discriminatory allocations was positively correlated with respondents’ level of identification with their ethnic group (i.e., identification with Whites), when several different control variables were considered simultaneously (i.e., gender, degree of ethnic identification, perceived intergroup competition, and economic conservatism), only the perceived level of intergroup competition and SDO were found to be associated with the tendency towards costly discriminatory social allocations. Thus, the more European-American students perceived ethnic groups to be in zero-sum conflict with one another, and the higher the students’ levels of SDO, the greater the degree to which they made relatively fewer positive allocations to the outgroup than to the ingroup, even at the cost of lower absolute profit to the ingroup (see also Sidanius et al., 1994c).

Research comparing reactions to the events of 11 September 2001 among respondents in the United States and Lebanon shows that SDO is not just a measure of outgroup aggression, but as proposed by Sidanius et al. (2001a), a desire for a *hierarchical* relationship among groups (Henry, Sidanius, Levin, & Pratto, 2005). Congruent with much other research, RWA and SDO were found to make independent and positive contributions to support for aggressive anti-terrorism measures against people in the Arab and Muslim worlds among American respondents (i.e.,  $\beta = .15$  and  $\beta = .30$ , respectively). However, in Lebanon, while RWA was also positively associated with support of terrorist activity against the West ( $\beta = .26$ ), SDO was *negatively* associated with support of terrorism against the West ( $\beta = -.36$ ,  $p < .01$ ). This *negative* relationship makes perfect theoretical sense when one remembers that the type of terrorism involved is aggressive action by the weak (i.e., the Arab and Muslim protagonists) against the strong (i.e., Israeli and especially Americans targets). Thus, those high in SDO will side with the strong against the weak, regardless of their own group membership, consistent with the notion of ideological asymmetry.

SDO relates not only to support for discriminatory policies in correlational studies, but to discriminatory perceptions and judgements in experimental research as well. In a jury simulation experiment, Kimmelmeier

(2005) explored perceptions of guilt and severity of punishment in a rape trial as functions of race of the defendant (Black vs White) and level of SDO. There were theoretically consistent and significant interactions between defendant race and SDO. In the Black defendant condition SDO was positively associated with perceptions of defendant guilt, whereas in the White defendant condition SDO was *negatively* associated with perception of defendant guilt. A similar, statistically significant interaction was found with respect to sentence severity. In the Black defendant condition SDO was *positively* correlated with sentence severity, whereas in the White defendant condition SDO was *negatively* correlated with sentence severity. In other words, as we have seen in the context of terrorism research, people with high levels of SDO tend to make decisions that reinforce the dominance hierarchy, while those with low levels of SDO tend to make decisions that undermine the dominance hierarchy.

Other experimental evidence shows that SDO scores are predictive of how much people discriminate in job allocation decisions. Michinov, Dambrun, and Guimond (2005) told 90 White French university students to assume they were part of an office staff of six employees, plus themselves. Four of these other employees were light-skinned and European, and two of these other employees were dark-skinned and of North African ancestry. Participants placed photographs of the employees in a hierarchical organisational chart in which the top position was labelled "Group Leader". Discrimination was measured by the placement and order of assigning the North African employees. Participants with high SDO scores hired light-skinned applicants first. More importantly, while those with low SDO scores tended to assign the North African employees at random across the hierarchical organisation, those with high SDO scores assigned North African employees to lower levels in the organisational chart.

SDO also influences how much people actually discriminate in minimal group experiments. In one such experiment, Pratto (1999) pre-selected participants to be in the top or bottom third of the SDO distribution. Those with relatively low SDO scores used the strategy of maximising joint gain for the groups more than did participants with relatively high SDO scores. In conditions that increased the salience of group boundaries, those with high SDO scores used the strategy of maximising relative gain more than did those with low SDO scores. Other minimal group experiments have also shown that highly identified high-SDO participants are the most discriminatory (Amiot & Bourhis, 2003; Perreault & Bourhis, 1998; Sidanius et al., 1994c).

Most minimal group research has focused on the distribution of positive outcomes (e.g., money or symbolic points) to ingroup and outgroup members, rather than the distribution of negative outcomes such as punishments and salary cuts (Mummendey & Otten, 1998). However,

Amiot and Bourhis (2005) found that SDO measured one month before a minimal group experiment could predict both positive discriminatory allocations to ingroup and outgroup members (in the form of salary increases and cuts in hours of unpaid work) and negative discriminatory outcomes (in the form of salary cuts and increases in unpaid work; see also Altemeyer, 2003). In experimental contexts with more mundane realism, high-SDO participants allocate resources to favour the meritorious, who already have more, and low-SDO participants favour the needy (Pratto, Tatar, & Conway-Lanz, 1999, Expts 1–3). The kind of discrimination performed by high-SDO people, then, is not just ingroup favouritism. Numerous experiments show that high-SDO people discriminate in ways to promote hierarchy more than low-SDO people do.

Finally, recent experimental research has also shown SDO to be related to “stereotype lift” effects in theoretically expected directions. As noted above, “stereotype lift” can be said to occur when members of dominant groups actually perform better on performance tasks when hierarchy-enhancing racial stereotypes or images of subordinates (e.g., Blacks) are primed. For example, Danso and Esses (2001) randomly assigned 100 White Canadian undergraduates to have a Black experimenter or a White experimenter while performing arithmetic tests. Consistent with much of the stereotype lift literature (see Walton & Cohen, 2003), students in the Black experimenter condition performed significantly better than did students in the White experimenter condition. In addition, SDO scores were positively and significantly correlated with test performance. More to the point, SDO was *only* correlated with test performance in the Black experimenter condition, and not in the White experimenter condition. These results are thus consistent with the notion that members of dominant groups will put in extra effort to maintain dominance when primed with members of subordinate groups who happen to be in positions of authority, especially when individuals in the dominant group have relatively high levels of SDO, or the desire to maintain group-based social inequality.

### Where does SDO come from?

One point of confusion regarding social dominance theory concerns the theoretical importance of the origins of differences in SDO. Some assume that social dominance theory should be centrally concerned with the origins of this orientation. In fact, however, the theory is a theory of social dominance, not a theory of social dominance orientation. We view measures of SDO to be a theoretical tool, rather than viewing SDO as a root cause of social hierarchy. One way in which measures of SDO have been used is as a metric for assessing the hierarchy-enhancing and hierarchy-attenuating functions of ideologies. Specifically, social dominance theory argues that

one can test whether a particular ideology is serving as a legitimising myth and what type of myth it is by examining whether the ideology in question mediates the relationship between SDO and endorsement of concrete social policies with clear hierarchy-enhancing or hierarchy-attenuating outcomes (see Figure 1). For example, the notion that the American criminal justice system is free of racial bias and fair can be regarded as a hierarchy-enhancing legitimising belief if it can be shown to *positively* mediate the relationship between SDO and support for hierarchy-enhancing social policies (e.g., the death penalty), and to *negatively* mediate the relationship between SDO and hierarchy-attenuating social policies (e.g., legal aid to indigent prisoners; see also Pratto et al., 2000; Pratto, Stallworth, & Conway-Lanz, 1998).

Although we have focused on testing broader tenets of the theory rather than on the origins of SDO, we have posited that it is influenced by at least five broad forces: (1) group position, (2) social context, (3) stable individual differences in temperament and personality, (4) gender, and (5) socialisation.

### The role of group position

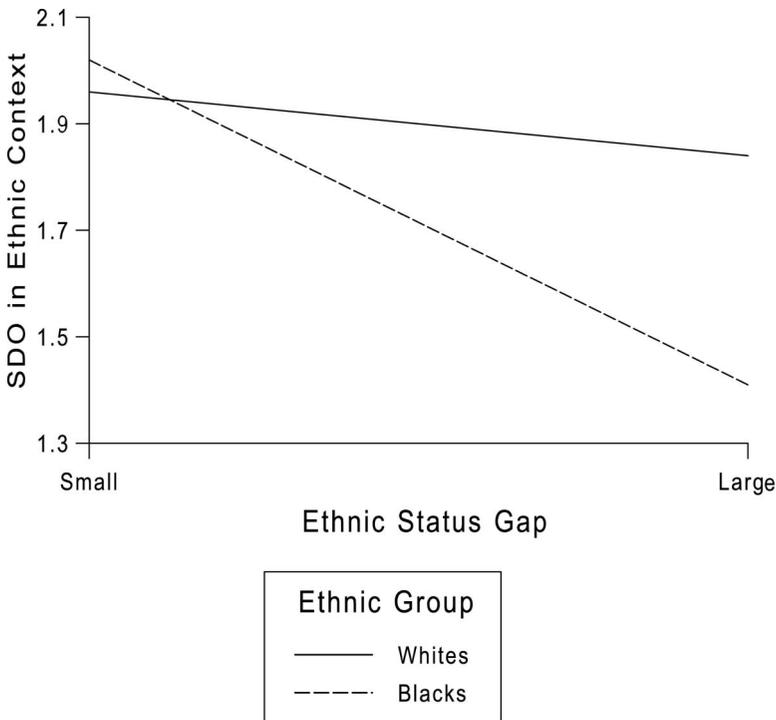
One robust finding in the social dominance literature is that dominants have higher levels of SDO than subordinates (e.g., European-Americans have higher levels of SDO than African-Americans, and people with higher socioeconomic status have higher levels of SDO than those with lower socioeconomic status; Sidanius, Levin, Liu, & Pratto, 2000). According to social dominance theory, members of dominant arbitrary-set groups are expected to have higher levels of SDO than members of subordinate groups because they want to sustain the privileged access to social and economic resources that their dominant position affords.

### The importance of social context

Despite its description as a broad theory of intergroup relations, some critics have mistakenly classified social dominance theory as a personality theory (e.g., Kreindler, 2005; Rubin & Hewstone, 2004; Schmitt, Branscombe & Kappen, 2003; Turner & Reynolds, 2003), and thus a model that ignores context. However, as we emphasised at the beginning of this essay and have discussed at length elsewhere (Sidanius et al., 2004), rather than being a strict “personality theory” of prejudice, social dominance theory operates at several levels of analysis, encompassing the level of individual differences (e.g., attitudinal and behavioural predispositions), the level of social groups in context, the level of institutions, and the level of competing ideologies within the social system as a whole. In contrast to Schmitt et al. (2003) and Turner and Reynolds (2003), the context-specific nature of people’s SDO

levels is not only something that we have never denied, it is something we have both argued and empirically demonstrated.

For example, we have never interpreted evidence that European-Americans tend to have higher SDO scores than African-Americans as reflecting inherent differences between the personalities and/or genetic make-up of the people within these groups. Rather, we have attributed SDO differences between arbitrary-set groups to their hierarchical relationship to one another (e.g., Fang et al., 1998). Moreover, we have demonstrated that as the size of the status/power gap between arbitrary-set groups (e.g., ethnicities, social classes, religious groups) increases, so does the average SDO difference between the groups (e.g., Levin, 2004; Sidanius et al., 2000). For example, as shown in Figure 2, Levin (2004) found that when the status difference between European- and African-Americans is perceived to be small, there is no group difference in SDO. But when the status gap in favour of Whites is perceived to be large, the group difference in SDO is large as well.



**Figure 2.** SDO as a function of ethnic group and perceived ethnic status gap in the United States (Source: Levin, 2004).

According to social dominance theory, when the status gap between dominant and subordinate arbitrary-set groups varies, group differences in SDO should vary as well, as higher group status elicits greater desires to maintain a hierarchical social system in which the ingroup is more advantaged, and lower group status elicits greater desires to oppose such a system (see also Guimond, Dambrun, Michinov, & Duarte, 2003; Schmitt et al., 2003). In an extreme case, as when the status of the groups *reverses*, social dominance theory would expect the SDO differences among the groups to reverse as well. This phenomenon was found by Levin (2004) in Northern Ireland. Among those who viewed Protestants as having higher social status than Catholics, Protestants had higher average levels of SDO than Catholics. However, among those who viewed Catholics as having higher social status than Protestants, Catholics had higher SDO levels than Protestants. This same dynamic may explain why higher SDO scores are found among Blacks than Whites in South Africa at present (Meyer, 2003). Conversely, if status differences between arbitrary-set groups are not salient (either chronically or because another group-based distinction has been primed instead), then we would not expect to find substantial differences in SDO between the groups (see also Huang & Liu, 2005).

This reasoning also implies that the SDO levels of *individuals* should change as a function of the intergroup hierarchy and social identities implied within different social contexts (see also Sidanius & Pratto, 1999). This thesis was confirmed in a quasi-experiment among Israeli Jews conducted by Levin (1996). Levin reasoned that if group position partly drives SDO, then when SDO is measured after Israeli Jews are primed to think about ethnic relations among Ashkenazi and Mizrahi Jews (i.e., ethnic prime), Ashkenazi Jews (high-status Jews) should be higher in SDO than Mizrahi Jews (low-status Jews). However, when SDO is measured after Israeli Jews are primed to think about Israeli Arab–Jewish relations (i.e., national prime), Ashkenazi and Mizrahi Jews should have similar SDO scores because both groups—as Jews—enjoy equally high status relative to Israeli Arabs. Furthermore, given the fact that the Israeli Arab–Jewish national conflict is substantially more severe and threatening than the Ashkenazi–Mizrahi ethnic conflict, the SDO levels of both groups of Jews should be substantially higher when SDO is measured after the national prime than after the ethnic prime.

Levin (1996) tested these hypotheses using a sample of 309 Jewish Israeli participants (205 Ashkenazi and 104 Mizrahi Jews; 113 males and 196 females). SDO was measured in the context of the Ashkenazi–Mizrahi (ethnic) conflict and the Israeli Arab–Jewish (national) conflict. Context was established by priming respondents with a series of survey items about each conflict situation immediately before they completed the SDO scale. For this purpose, the 16-item SDO scale was split into two counterbalanced 8-item

scales. One of these sets of eight SDO items was placed in the survey instrument after respondents received the ethnic prime ( $SDO_{\text{ethnic}} \alpha = .79$ ), and the second set of eight SDO items appeared in the questionnaire after respondents received the national prime ( $SDO_{\text{national}} \alpha = .84$ ). Five attitudes towards Israeli Arabs and the Jewish character of Israel were also measured.

As shown in Figure 3, results indicated that there was a significant main effect of context, as expected, such that SDO measured in the national context was significantly higher than SDO measured in the ethnic context,  $F(1, 272) = 80.52, p < .001$ . Furthermore, the two-way interaction between ethnic group and context was reliable,  $F(1, 272) = 4.25, p < .05$ , indicating that Ashkenazi Jews had higher SDO scores than Mizrachi Jews in the ethnic context—Ashkenazi Jews:  $M = 2.31, SD = 1.10$ ; Mizrachi Jews:  $M = 1.98, SD = .80$ ;  $F(1, 300) = 8.54, p < .01$ —but there was no difference between the SDO levels of the two Jewish groups in the national context: Ashkenazi Jews:  $M = 2.75, SD = 1.17$ ; Mizrachi Jews:  $M = 2.68, SD = 1.00$ ;  $F(1, 278) < 1$ .

In addition to influencing mean levels of SDO, strong intergroup contexts should enhance the degree to which SDO correlates with hierarchy-enhancing attitudes. For example, perceived threat from subordinates is one way to justify discrimination against subordinates by dominants. In Levin's (1996) Israeli study, social dominance theory would expect that SDO would be related to perceived threat from subordinate group members among the Jewish participants in both the ethnic and national contexts in Israel. That is, the theory expects that high-SDO individuals will perceive

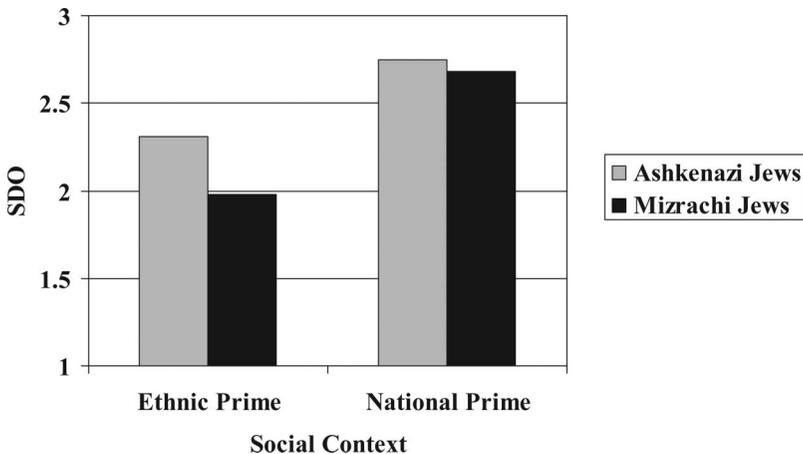


Figure 3. SDO as a function of ethnic group and social context in Israel (Source: Levin, 1996).

that subordinate groups (i.e., Mizrahi Jews in the ethnic context and Israeli Arabs in the national context) pose a greater threat to the dominant group (Ashkenazi Jews and all Israeli Jews, respectively) than low-SDO individuals perceive them to pose. However, these correlations should be stronger when SDO is measured in the context most relevant to the legitimising myth. Thus, SDO should correlate with perceived threat from Israeli Arabs more when SDO is measured in the Israeli Arab–Jewish national context than when it is measured in the Ashkenazi–Mizrahi ethnic context. Consistent with these expectations, Levin’s (1996) data showed that correlations between SDO and each of five attitudes about Israeli Arabs and Jews were stronger when SDO was measured in the Israeli Arab–Jewish national context than in the Ashkenazi–Mizrahi ethnic context (see Table 2).

In sum, contrary to the claims of Schmitt et al. (2003), there is a wide body of empirical evidence that SDO is a general orientation that predicts prejudice against many different groups and across many different inter-group contexts, not just the contexts that are primed in a particular situation. However, as a general orientation that functions to maintain hierarchies among groups in society, SDO is also sensitive to situational primes that make some group-based distinctions more salient than others. That is, when a particular group-based distinction is made salient by a situational prime, then SDO will relate especially strongly with that particular group prejudice as a way of attempting to legitimise the hierarchical relations that exist between these particular groups. Thus, SDO is a good barometer not only for measuring individuals’ support for hierarchy, and the functional nature of legitimising myths, but the salience of hierarchy in social context as well.

TABLE 2  
Correlations of five attitudes about Israeli Arabs and Jews

<i>Israeli Arab–Jewish group-relevant attitude</i>	<i>SDO context (within-participants)</i>		<i>p &lt;</i>
	<i>SDO<sub>ethnic</sub> correlation</i>	<i>SDO<sub>national</sub> correlation</i>	
Perceived Israeli Arab threat	.21	.45	.001
Negative affect towards Israeli Arabs	.22	.43	.001
Support for a strong-arm policy towards Israeli Arabs	.27	.52	.001
Desires that Israel be a Jewish state with Jewish character	.02	.25	.001
Opposition to equal rights for Israeli Arabs	.27	.57	.001

Correlations of five attitudes about Israeli Arabs and Jews with SDO<sub>ethnic</sub> and SDO<sub>national</sub>, and *p* values for tests of significant differences in these relationships. Correlations greater than .20 are significant at the .001 alpha level. *Source:* Levin (1996).

## SDO as a reflection of individual differences in temperament and personality

Besides these situationally contingent social identities, SDO scores may also be influenced by individuals' temperaments and personalities. For example, SDO has been found to be negatively related to empathy for others and the personality factors of Openness and Agreeableness (two of the Big Five personality dimensions), while being positively associated with aggressivity, vindictiveness, coldness, and tough-mindedness (e.g., Altemeyer, 1998; Duckitt, Wagner, du Plessis, & Birum, 2002; Ekehammar et al., 2004; Heaven & Bucci, 2001; Lippa & Arad, 1999; Pratto et al., 1994).

At the same, however, and contrary to some recent criticisms of social dominance theory (e.g., Reynolds, Turner, & Veenstra, 2004; Reynolds, Turner, Haslam, & Ryan, 2001; Rubin & Hewstone, 2004) and the empirical evidence, viewing a characteristic as a partial reflection of personality and temperament does *not* imply situational invariance. Rather, it implies that while the absolute levels of SDO might go up or down as a function of situational influences (e.g., threat, one's group status, the salience of group identities), *everything else being equal*, those with relatively high levels of SDO in one situation will also have relatively high levels of SDO in another situation. Thus, when we allude to the relative *stability* of SDO scores we are, of course, referring to stability in the *z*-score, standard score, or relative sense, and not to absolute constancy. One impressive example of this relative stability was shown in a 5-year panel study of approximately 2000 UCLA undergraduates. These students' SDO scores were assessed annually from the time of their graduation from high school until their graduation from college 4–5 years later (Sidanius, Levin, van Laar, & Sears, 2006a). The test–retest stability coefficients of the SDO scale (i.e., stability of SDO in the *z*-score sense) were quite substantial (1-year interval: stability = .84; 2-year interval: stability = .83; 3-year interval: stability = .80; 4-year interval: stability = .76; 5-year interval: stability = .74; see also Pratto et al., 1994).

In addition to this evidence of relative stability across time, there is evidence of *relative stability across situations*. For example, using Levin's (1996) Israeli data, described above, we found that, even though SDO scores showed reliable mean differences across the primed ethnic and national contexts, these scores were nonetheless strongly *correlated* across these contexts. Among Ashkenazi Jews, those with relatively high SDO scores in the Ashkenazi–Mizrachi ethnic context also had relatively high SDO scores in the Israeli Arab–Jewish national context ( $r = .64, p < .001$ ). The relative cross-situational stability was lower but still substantial and significant among Mizrachi Jews ( $r = .38, p < .001$ ). Thus, we see a tendency for people

who are relatively high in SDO when focusing on their group's subordinate status (i.e., Mizrahi Jews in the Ashkenazi–Mizrahi ethnic context) to also be relatively high in SDO when focusing on their group's dominant status (i.e., as Jews in the Israeli Arab–Jewish national context). Such results imply that individuals do have habitual predispositions towards group-based hierarchy in general.

In summary, there is evidence that SDO is both a general orientation, in the sense that it is associated with prejudice towards many different types of groups across various cultures, and is responsive to relevant social contexts. Systematic variance between individuals across situations has been considered a hallmark of personality—not evidence against personality—for decades (e.g., Mischel & Shoda, 1995).

### The effects of gender and socialisation

A fourth factor theorised to be associated with SDO is gender. It is argued that, *everything else being equal*, men will have significantly higher levels of SDO than women. In contrast to SDO differences between arbitrary-set groups, which are theorised to be *completely* context dependent, the average gender difference in SDO is argued to be substantially less context dependent, if at all. Reasons and evidence for this “*invariance hypothesis*” are provided in the next section on “Gender in Social Dominance Theory”.

Fifth, we expect that SDO is affected by an as yet poorly understood series of life and socialisation experiences. For example, Duckitt (2001) proposed that unaffectionate socialisation indirectly leads to SDO. Other socialisation experiences that may affect SDO include socialisation into specific doctrines, exposure to traumatic life experiences, multicultural experiences, observing the competence of members of denigrated groups, and education.

In conclusion, rather than claim that SDO scores are *just* a function of group position and situationally contingent social identities (e.g., Schmitt et al., 2003) or *just* a function of stable individual differences, or *just* a function of gender or socialisation experiences, we are making the rather unremarkable claim that all of these factors are involved in determining people's orientation towards group-based social inequality. Determining how such influences interact is a challenge for future research. More importantly, however, it would be a total misreading of social dominance theory to believe that finding the causes of SDO will identify the causes of group-based dominance. As mentioned previously, SDO should be seen as both a partial *result* of hierarchical relationships among groups, and a partial *cause* of those relationships (e.g., Pratto, 1999). Its utility is as a research tool for understanding some of the processes that contribute to group hierarchy.

## GENDER IN SOCIAL DOMINANCE THEORY

Given its centrality to the social and material facts of human life and to social reproduction, it is no surprise that gender is also integral to understanding social hierarchy. All societies require some regular domestic labour (e.g., food preparation), and children and the sick need care. Societies organise the fulfilment of these two basic needs through families, and nearly all families, regardless of size or forms, imply asymmetric obligations from men and women. Women are obliged to provide more care for children than men are because of both marriage laws and customs and restrictions on women's access to resources outside their relationships with men (Pratto & Walker, 2004). Hence, the gender system links with the age system largely through the family. Given arbitrary-set and gender inequalities in access to wealth, dominants are more likely to be able to hire subordinate females as domestic workers than subordinates are to hire dominant females. Hence, arbitrary-set inequality is linked to gender inequality through the family.

Men and women play different roles with respect to group-based hierarchy. Cross-culturally, men predominate in roles and institutions that enhance hierarchy, such as police, military, lawyers, judges, and business executives, whereas women are over-represented in roles that attenuate hierarchy, such as teachers, social workers, charity volunteers, and the like (see Pratto & Walker, 2004). This role assortment is driven by both institutional discrimination at work (e.g., barring women from military and justice jobs), which is legitimised by sex stereotypes, and by psychological gender differences, which lead men and women who have choice to differentially choose hierarchy-enhancing or hierarchy-attenuating occupations for themselves, respectively (Pratto, Stallworth, Sidanius, & Siers, 1997b).

Compatible with their fundamentally different roles in social hierarchy, men and women on average also have different social and political attitudes (see Pratto, Stallworth, & Sidanius, 1997a; Sidanius & Pratto, 1999, Ch. 10 for a review). In general, women support social equality, inclusive traditions, and policies that protect or care for the most downtrodden, and they favour progressive policy changes, are less xenophobic, and oppose war more than men. Men are robustly more supportive of generalised group inequality than are women (e.g., Ekehammar & Sidanius, 1982; Heaven, 1999; Marjoribanks, 1981; Pratto, 1996; Pratto et al., 1994; Sidanius & Ekehammar, 1980; Sidanius, Pratto, & Bobo, 1994b). Consistent with social dominance theory's invariance hypothesis, men also have higher average levels of SDO than women, *everything else being equal* (Levin, 2004; Sidanius et al., 2000; Sidanius & Pratto, 1999; Sidanius et al., 1994b; Sidanius, Sinclair, & Pratto, 2006b).

It is important to point out two critical and often overlooked qualifications to the invariance hypothesis. The first has to do with the “*all other factors being equal*” caveat. Because gender is merely one of several factors associated with an individual’s level of SDO, when testing the invariance hypothesis, it is critical that other important correlates of SDO be controlled or at least not confounded with gender (e.g., the hierarchy-enhancing vs hierarchy-attenuating nature of the social role one occupies). Unlike some recent attempts to test the invariance hypothesis (e.g., Wilson & Liu, 2003; see comments by Sidanius & Pratto, 2003), one must compare men and women under the same situational conditions. For example, it would obviously make no sense to compare the SDO levels of female members of death squads to those of male social workers, or, less dramatically, to compare the SDO levels of men identifying with female gender roles to those of women identifying with male gender roles.

The second qualification to the invariance hypothesis highlights one of the main differences between the nature of arbitrary-sets and gender regarding SDO. As already discussed above, social dominance theory assumes that SDO differences between any two arbitrary-set groups should be *completely* context dependent. That is, such group differences should only emerge when there are perceived power differences between groups, and group distinctions are at least minimally salient. In contrast, the invariance hypothesis asserts that, while the *degree* to which males have higher SDO scores than females *might* be contingent upon certain contextual factors (e.g., the salience of gender), these contextual factors should not be able to completely eliminate the gender difference in SDO. This implies that even if the gender difference is moderated by other factors, this moderation should result in *ordinal* rather than *disordinal* interaction. In other words, conditions may affect the size of the gender difference in SDO, but women will not be higher than men, *all else being equal*.

While evidence of the gender difference in SDO is now incontrovertible, the origin of this difference remains highly contested. Most critics of social dominance theory have suggested that the gender difference in SDO should be subject to the same situational contingencies as are the SDO differences between different races, ethnic groups, and social classes discussed above. Social dominance theorists first began addressing these potential criticisms by exploring the degree to which gender differences in SDO were invariant across a wide number of contextual and situational factors. In their first major exploration of this issue, Sidanius et al. (1994b) used a large random sample of Los Angeles adults to test whether the size of the gender difference in SDO was contingent upon the following factors: age, political party affiliation, attitudes about abortion rights, religious affiliation, cultural region of origin (i.e., USA, Europe and Canada, Latin America, Asia and the Middle East), ethnicity, education level, income level, and racial

attitudes. Not only were men found to have higher average SDO levels than women, but also these gender differences were not moderated by any of the potential moderators listed above. Similarly, using two general samples (college students and members of the public called to jury duty), Sidanius and Pratto (1999, pp. 278–280) tested whether the gender difference in SDO was the same size for those in hierarchy-enhancing and hierarchy-attenuating criminal justice roles. As expected, those in hierarchy-enhancing social roles had higher average levels of SDO than those in hierarchy-attenuating social roles. However, the gender difference in SDO remained essentially constant across social roles, showing that the gender difference in SDO was essentially the same for those in hierarchy-enhancing social roles as for those in hierarchy-attenuating social roles.

This type of analysis has been recently extended in a large-scale longitudinal study. Sidanius et al. (2006b) followed a sample of UCLA undergraduates in a panel study. Consistent with previous findings, those students with hierarchy-enhancing college majors (e.g., business, economics, marketing) had significantly higher SDO scores than those with hierarchy-attenuating college majors (African studies, anthropology, ethnomusicology), across all five waves of the study (i.e., from pre-college high-school graduates to college seniors). More importantly, the gender difference in SDO was reliable across students' year in college, and was not moderated by the distinction between hierarchy-enhancing and hierarchy-attenuating majors. That is, the gender difference in SDO was the same magnitude among students with hierarchy-enhancing majors, hierarchy-attenuating majors, and neutral majors, despite the general trend of decreasing SDO scores over the course of university exposure (see Table 3). The gender difference in SDO was not attenuated or socialised away through college education. Furthermore, inspection of the effect sizes for gender and academic major (see partial  $\eta$  in Table 3) showed that while gender and academic major had essentially the same power to predict SDO scores among freshmen (i.e., partial  $\eta = .08$  in both cases), the effect of gender was consistently stronger than the effect of academic major among the students when they were pre-college, sophomores, juniors and seniors.

The most popular explanation for this gender difference is that it is due to the differential status and power of men over women (e.g., Eagly, Diekmann, Johannesen-Schmidt, & Koenig, 2004; Ward, 1995). If this is the case, then gender differences in SDO should be reduced when men and women are more equal, just as with arbitrary-set SDO differences. To test the robustness of the invariance hypothesis across different cultures and as a function of differential status and power differences between arbitrary-set groups and genders, Sidanius et al. (2000) examined over 7000 respondents from nine independent samples from six different nations (USA, the former USSR, Israel, Palestine, the People's Republic of China, and New Zealand).

TABLE 3  
SDO as a function of gender, academic sector, and year in college

Gender		Pre-college (N = 1956)	Freshmen (N = 2015)	Sophomores (N = 1667)	Juniors (N = 1358)	Seniors (N = 1213)
<i>Means</i>						
Hierarchy-attenuators	Men	2.20	1.93	2.03	2.13	1.99
	Women	1.87	1.68	1.70	1.77	1.67
Neutrals	Men	2.52	2.14	2.23	2.25	2.19
	Women	1.99	1.91	1.94	1.99	1.79
Hierarchy-enhancers	Men	2.55	2.25	2.30	2.28	2.25
	Women	2.10	2.03	1.90	1.95	1.85
<i>Effects</i>						
F-ratio (Sector)		3.97*	7.46***	11.10***	3.82*	4.73**
F-ratio (Gender)		36.87***	14.49***	35.16***	33.67***	45.19***
F-ratio (Gender × Sector)		<1	<1	<1	<1	<1
Partial $\eta$ (Gender)		.13	.08	.14	.15	.19
Partial $\eta$ (Sector)		.06	.08	.11	.08	.09

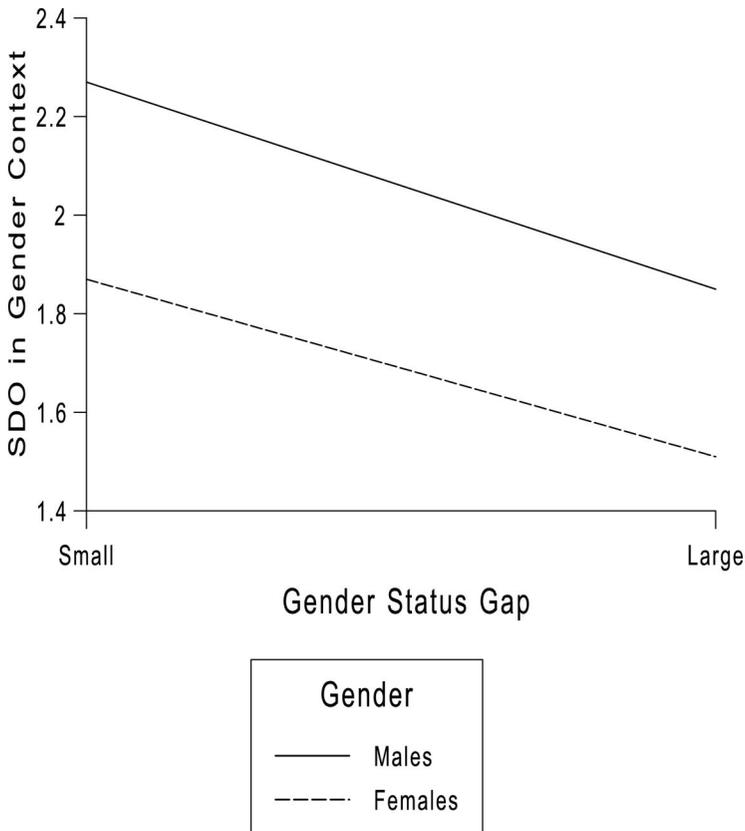
\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ . Source: Augmented from Sidanius et al. (2006b).

Consistent with social dominance theory's assertion of the qualitative difference between arbitrary-set and gendered systems of social inequality, SDO differences between arbitrary-set groups systematically changed as a function of the differential status and power gaps between these groups across nations. For example, when objective status differences between arbitrary-set groups in different nations were larger (e.g., larger social-class distinctions in the USA versus the former USSR), there were larger differences in SDO between the groups (i.e., the working class and the middle class). However, despite archival data documenting differences in gender power and status gaps across different nations (e.g., the smaller gender power/status gap in the USA vs Palestine), gender did not interact with nation. That is, gender differences in SDO were essentially invariant across nation (for similar results, see Sidanius & Pratto, 1999, Ch. 10).<sup>2</sup>

Levin (2004) also demonstrated the differential sensitivity of arbitrary-set and gender differences in SDO to power and status differentials. Using respondents from the United States, Israel, and Northern Ireland, she showed

<sup>2</sup>For exceptions to the general trend of finding that gender differences do not interact with other factors, see Huang and Liu (2005) and Sidanius et al. (1995). In the latter study, however, while men had significantly higher SDO scores than women across the four nations of Australia, Russia, Sweden, and the USA, the gender differences were significantly greater in Sweden and Russia than they were in Australia or the USA.

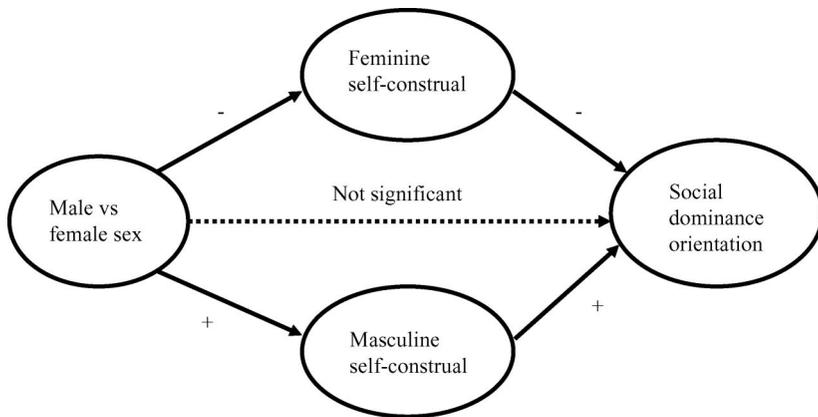
that SDO differences between arbitrary-set groups (European-Americans vs African-Americans, Ashkenazi vs Mizrahi Israelis, and Catholic vs Protestant Northern Irish) increased when the status differences between these arbitrary-set groups were perceived to be larger (the data for European-Americans vs African-Americans are shown in Figure 2). However, using the same American data that were used to compare European-Americans and African-Americans, no such moderation as a function of perceived status was found with respect to gender differences in SDO. As shown in Figure 4, men had higher levels of SDO than women, and to approximately the same degree, when the status differences between the sexes were perceived to be small and when they were perceived to be large.



**Figure 4.** SDO as a function of gender and perceived gender status gap in the United States (Source: Levin, 2004).

Some critics of the invariance hypothesis have proposed that the gender difference in SDO can be explained in terms of the gendered social identities and self-construals that men and women adapt (e.g., Dambrun, Duarte, & Guimond, 2004; Foels & Pappas, 2004; Wilson & Liu, 2003). For example, Foels and Pappas (2004) have argued that SDO differences between men and women are accounted for by the differential gendered identities of men and women. Thus, once these gender identities are considered, participant sex is no longer associated with SDO (see Figure 5).

In this type of argument, gender identity is usually operationalised by use of the Bem Sex Role Inventory (Bem, 1974), which asks respondents to indicate the degree to which they regard masculine, feminine, and neutral characteristics as being true of themselves. These characteristics include the following: forceful, competitive, assertive, dominant, aggressive, sympathetic, warm, tender, and gentle—all characteristics that have been found to be related to SDO (see Sidanius & Pratto, 1999). Now, it is clear that, on average, men will tend to rate themselves as higher on the masculine characteristics, while women will rate themselves as being higher on the feminine characteristics. The question is why? Cultural determinists (e.g., Dambrun et al., 2004; Foels & Pappas, 2004; Wilson & Liu, 2003) would argue that the reason men have self-construals as aggressive, competitive, and dominant, while women have self-construals as sympathetic, warm, and tender, is predominantly due to the culturally determined and essentially arbitrarily assigned social roles given to men and women. This is a plausible explanation, but it is also possible that these SDO-related and gendered construals of self are not *just* due to arbitrarily assigned roles, but are



**Figure 5.** Model of masculine and feminine self-construals as mediators of the relationship between sex and SDO (adapted from Foels & Pappas, 2004).

somewhat accurate perceptions of how men and women act and think. If the latter is closer to the truth, then rather than being a refutation of the invariance hypothesis, the model depicted in Figure 5 is quite consistent with the invariance hypothesis, and merely specifies the mediating mechanisms connecting sex with SDO. Because there is no definitive means of determining the degree to which gendered self-construals are the result of arbitrarily assigned and socialised social roles or the expressions of behavioural and attitudinal predispositions of men and women, the degree to which the model in Figure 5 is either a refutation or a confirmation of the invariance hypothesis is indeterminate.

### Gender and reproductive strategies

Although we continue to believe that it is important to examine those aspects of hierarchical environments and context that might contribute to gender differences in SDO, the very large set of null findings have also led us to consider what might be common about gender across social environments. Trivers' (1972) parental investment theory suggests that males and females in sexually reproducing species will exhibit differing reproductive behaviours to the extent that they invest differentially in their offspring. Women usually invest more of their time and physical resources to achieve reproductive success (a child who survives to reproduce) than men do. As a result, women are more selective about potential mates and mating conditions than men (e.g., Buss, 1989). In contrast, men are more concerned with not investing in children they have not conceived (e.g., Buss, 1989), invent ways to guard women's sexuality (e.g., Dickemann, 1979, 1981; Wilson & Daly, 1992), and are more sexually jealous (e.g., Buunk & Dijkstra, 2004) than women. Compared to women, men may also accrue greater reproductive benefit by having access to multiple sexual partners and using more "short-term" mating strategies (Buss & Schmitt, 1993). Such greater reproductive benefit in men, however, may be contingent on the extent to which men are able to exert control over and monopolise sexual access to multiple women, and expropriate other men's labour for their own families (Betzig, 1993). Social dominance theory suggests that this differential reproductive benefit resulting from the control over both women and the resources of other men is one of the primary reasons for the apparently universal tendency for men to display higher levels of aggression and SDO than women.

Evolutionary adaptation is, of course, the product of the interplay of organisms and their environment over time. Hence it should come as no surprise that gender differences in this suite of reproductive strategies are both afforded by stratified societies (e.g., Gailey, 1987) and help to recreate the inequality that exists in such societies both among men and between men

and women (Betzig, 1993). For this reason, Pratto and Hegarty (2000) hypothesised that in hierarchical societies these gendered reproductive strategies would be more strongly associated with SDO in each sex to the extent that parental investment theory implies that the strategy would be more successful for each sex. Specifically, they predicted that sexual jealousy, opposition to adoption, and own expected infidelity should be more strongly related to SDO among men than among women, whereas desire for a high-status and economically powerful mate should be more strongly associated with SDO among women than among men. In four American samples and using multiple measures, these hypotheses were confirmed. Among contemporary adults, then, SDO facilitates reproductive strategies and gender differences in those strategies that are sexist and dominating. Men and women low in SDO, in contrast, have more similar ideals regarding their own heterosexual relationships and would be expected to have less jealous and less gender-stereotypic relationships.

Pratto and Hegarty's (2000) results are consistent with the idea that the *predisposition* for SDO is, in part, one aspect of a suite of reproductive strategies. A poorly understood point is why such a process could result in men being predisposed to be higher in SDO than women. For example, Dambrun et al. (2004) believe that Pratto and Hegarty's (2000) finding that SDO is associated with "women's" reproductive strategies more in women and is associated with "men's" reproductive strategies more in men "goes against the argument that SDO leads to reproductive fitness in men but not in women" (p. 295). When a species is characterised by heavier female than male investment in offspring, parental investment theory implies that women will be more selective about choosing a mate than men, resulting in the stronger selection of traits that women desire in men than in the selection of traits that men desire in women. These stronger selection pressures for men than women may be the reason why the predisposition for dominance could be selected more in men than in women.

Nonetheless, as there is almost no evidence of any prehistoric behavioural and psychological state, Pratto and Hegarty's results are far from definitive proof of *past* evolutionary processes. They do imply, however, that gendered SDO is at work in determining the nature of contemporary societies, especially the confluence of gender and arbitrary-set inequality. The contemporary role of gender and of gender differences in SDO in hierarchical societies is, in our view, too important to overlook. Moreover, to the extent that gender-role socialisation and gender identification contribute to gender differentiation in SDO, then culture is *augmenting* the reproduction of group hierarchy through the disparate attitudes and roles of men and women.

## Examining gender in hierarchical societies is not naturalising inequality

Our theorising about the evolutionary basis of gender predispositions for SDO does not imply that nothing can be done about gender inequality or group hierarchy. On the contrary, social dominance theory implies that changing legitimising myths, reducing institutional discrimination against both subordinate groups and women, constraining male violence, and making women's access to resources independent of their relationships with men would greatly reduce gender inequality as well as inequality among men. Such changes are, of course, an important part of the feminist and progressive agendas. Social dominance theory contributes to this process by helping to identify the particularly problematic behaviours of both men (e.g., refusing to care for children) and women (e.g., underpaying domestic labour), and the particularly problematic institutional and cultural practices that lock gender, age, and arbitrary-set inequality together. Such an open-eyed analysis cannot be gained by ignoring the fact that children need substantial care, that the gender system is largely what addresses this need, and that dominant arbitrary-set women also have a stake in arbitrary-set inequality. This is not "naturalising" inequality, nor is it pretending that it does not exist or that it is a special case of something else. The proximate factors that help create gender inequality, including job discrimination, marriage and divorce laws, child-rearing customs, and war, are all consequences of collective decisions and deliberate human action.

### NEW RESEARCH ON SOCIAL DOMINANCE THEORY

In addition to stimulating new research examining basic theoretical propositions, including explanations for gender differences in SDO, social dominance theory has generated new research on the nature and correlates of SDO and on SDO as a theoretical tool to understand other phenomena, as well as on the group, intergroup, institutional, and societal processes that are more faithful to the multi-levelled nature of the theory.

When we introduced well-tested scales to measure SDO, we argued that it should correlate with culturally consistent prejudice against salient groups, regardless of the definition of the group and the contents of the ideology that legitimised such prejudice (Pratto et al., 1994). Since the publication of this earlier work, SDO has been shown to correlate with prejudice against a wide range of subordinate arbitrary-set groups defined by religion, race, and ethnicity (e.g., Duriez & van Hiel, 2002; Heaven & Quintin, 2003; Levin, 2004; Pratto et al., 2000) and with prejudice against foreigners and immigrants in several nations (e.g., Esses, Dovidio, Jackson, & Armstrong, 2001;

Pratto & Lemieux, 2001; Wagner et al., 2001). SDO also robustly correlates with many kinds of sexist beliefs, behaviours, and policies (e.g., Bates & Heaven, 2001; Heaven, 1999; Lippa & Arad, 1999; Pratto et al., 2000; Russell & Trigg, 2004), with prejudice against gays and lesbians, with opposition to gay rights (e.g., Davies, 2004; Whitley, 2001; Whitley & Ægisdottir, 2000), and with membership in right-wing political parties (e.g., Aiello, Chirumbolo, Leone, & Pratto, 2005; Altemeyer, 2004, Pratto et al., 1997a; van Hiel & Mervielde, 2002).

As we had hoped, personality researchers have augmented our conceptual understanding of SDO and distinguished it further from RWA (e.g., Altemeyer, 1998; Roccato & Ricolfi, 2005). People high in authoritarianism perceive the world to be a dangerous place, are easily threatened, and value security (e.g., Duckitt & Fisher, 2003; Duckitt et al., 2002; Duriez & van Hiel, 2002; Heaven & Connors, 2001). In contrast, people high in SDO believe the world is a zero-sum game and, because they desire power (Altemeyer, 2004; Duriez & van Hiel, 2002), they will use others to get ahead (Altemeyer, 1998; Duckitt et al., 2002; Lippa & Arad, 1999; Pratto, 1999). This belief is compatible with the relative *meanness* of those high in SDO: they believe that harming people is legitimate, are observably disagreeable, cold, and vindictive, are low in benevolence, and do not hesitate to humiliate others (Altemeyer, 1998; Duriez & van Hiel, 2002; Lippa & Arad, 1999; Pratto, 1999; Thomas & Esses, 2004; Wilson, 2003). Their dog-eat-dog mentality leads them to support economic competition and war over social welfare programmes (e.g., Duriez & van Hiel, 2002; Pratto et al., 1997a). Rather than being basically frightened like people high in authoritarianism, people high in SDO tend to be callous, confident, and cruel.

Pratto et al. (1994) also posited that SDO has to do with the inclusiveness of one's basic relations to others. They predicted that low-SDO people would have more inclusive identities than those high in SDO, who would want to distance themselves from inferior others. As such, they reasoned that SDO should correlate negatively with empathic concern (see also Pratto, Lemieux, Glasford, & Henry, 2003). Research in other paradigms confirms this way of understanding SDO in terms of inclusiveness of identity. SDO correlates negatively with the value of universalism (Duriez & van Hiel, 2002). Manipulations to increase common ingroup identity with immigrants decrease prejudice in low-SDO people, but not in high-SDO people (Esses et al., 2001). Threats to naturally high group status make high-SDO people more implicitly prejudiced, whereas they make low-SDO people lose their implicit prejudice (Pratto & Shih, 2000). Fundamentally, those low in SDO desire connections with other people, whereas those high in SDO want to rank superior to others (see also Pratto, 1999; Sidanius, Cling & Pratto, 1991a). In a related extension, Frey and Powell (2005) conceptualise perceptions of justice as stemming from either an interdependent, connected,

and empathic worldview, like low SDO, or an independent, competitive, and status-conscious one, like high SDO.

Social dominance theory has also expanded understandings of how people in different groups relate. For example, Fang et al. (1998) argued that the psychological bias to preserve hierarchy should be manifested in more opposition to interracial marriage as the status of the partner's ethnic group decreases. As expected, in a large Los Angeles random sample, the rank order of interest in intermarriage followed social status ratings such that Whites were most preferred as partners, followed by Asians, Hispanics, and then Blacks. Moreover, the degree and sign of the relation of SDO to opposition to interracial marriage depended on group status. For dominants, SDO related to opposition to interracial marriage, but for subordinates, SDO related to support for interracial marriage. Such differences imply that Blacks and Whites with compatible SDO levels are unlikely to form romantic relationships because they do not agree on the desirability of interracial marriage. These kinds of behavioural asymmetries in relationship formation help to maintain group boundaries.

Social dominance theory has also been employed to understand why people in different groups lack consensus on the existence of group inequality. Whereas SDO serves to divide attitudes between arbitrary-set groups such that members of these different groups would not form close relationships, SDO unites people in different arbitrary-set groups in blinding them to structural inequality. As a case in point, Shorey, Cowan, and Sullivan (2002) found that Whites perceive more discrimination against their group, and Hispanics perceive less discrimination against their group, to the extent that they are high in SDO. In a related line of research, Eibach and Ehrlinger (2006) showed that European-Americans and African-Americans spontaneously use different reference points in deciding whether enough racial equality has been achieved. Because European-Americans use a reference point of a more unequal past, they believe that racial equality has largely been achieved, whereas African-Americans, who hold an ideal of true equality, perceive current race relations as falling short. In further experiments, Eibach and Keegan (2006) showed that majorities, especially when they are high in SDO, perceive intergroup change to represent more of a loss to the ingroup than do minorities. In turn, they judge such changes as unfair. These kinds of studies show the utility of understanding the roles that both the power position of individuals and their own predilections play in determining intergroup attitudes and behaviour.

Social dominance theory has also refined the idea of "person-organisation fit" (e.g., Furnham, 2001), the notion developed from research in organisational psychology (e.g., Adkins, Russell, & Werbel, 1994; Holland, 1996) that there is congruency between the basic values, orientations, and behavioural predispositions of *individuals* and the functional character of

the *social institutions* in which these individuals work. Specifically, social dominance theory argues that for hierarchy-enhancing and hierarchy-attenuating institutions to enact their respective hierarchical functions well, the psychological character of individuals, especially their levels of SDO and their endorsement of legitimising myths, should match the hierarchical character of the institutions in which they work. In fact, in a survey of California voters, Pratto et al. (1997b) found that voters' SDO levels matched their occupations: SDO scores were highest among those in hierarchy-enhancing occupations, followed by those in neither hierarchy-enhancing nor hierarchy-attenuating occupations, and were lowest among those in hierarchy-attenuating occupations. Furthermore, using a large sample of university students, Sidanius, van Laar, Levin, and Sinclair (2003) found that those students showing congruency between their SDO attitudes and their college majors (i.e., high-SDO/hierarchy-enhancing majors and low-SDO/hierarchy-attenuating majors) enjoyed greater institutional rewards (i.e., higher grades) than those showing incongruency between their SDO and their college majors (i.e., low-SDO/hierarchy-enhancing majors and high-SDO/hierarchy-attenuating majors), everything else being equal. These data reinforce the idea that people are differentially rewarded for holding situationally and institutionally congruent attitudes towards group-based inequality (see also Kimmelmeier, Danielson, & Basten, 2005).

Because of the importance of this type of congruency for the functioning of institutions, we have speculated that there should be several redundant mechanisms that produce it. Thus far, five such mechanisms have been proposed and substantiated empirically: (a) self-selection, or people choosing jobs in institutions that are congruent with their SDO levels (see Pratto et al., 1997b; Sidanius, Levin, & Pratto, 1996; Sidanius et al., 2003; see also Umphress, Smith-Crowe, Brief, Dietz, & Watkins, in press); (b) institutional selection, or the tendency for institutions to hire personnel whose SDO levels match the hierarchy-enhancing or hierarchy-attenuating function of the institution (e.g., Pratto & Espinoza, 2001; Pratto et al., 1997b); (c) institutional socialisation, transforming individuals' values and ideologies to be more congruent with the hierarchy-enhancing or hierarchy-attenuating functions of the institutions in which people work (e.g., Sidanius, Pratto, Martin, & Stallworth, 1991b); (d) differential reward, or the tendency for individuals to be rewarded by institutions more if they match the institution's hierarchy-enhancing or hierarchy-attenuating function (e.g., Leitner & Sedlcek, 1976; van Laar, Sidanius, Rabinowitz, & Sinclair, 1999); and (e) differential attrition of individuals out of incongruent social institutions (see Haley & Sidanius, 2005).

These processes have systemic causes and consequences. People select institutions, and institutions select people, whose preferred legitimising

myths and values are compatible. This implies that people's co-workers are likely to reflect back and affirm their own prejudices, beliefs, and values. People in hierarchy-enhancing institutions are not likely to be challenged by people who hold hierarchy-attenuating beliefs and attitudes because such people work in different institutions and jobs. Institutions inculcate functionally compatible ideologies through their own institutional culture and norms, and give employees practice at using such ideologies in their work. For example, Pratto et al. (1999, Expt. 4) showed that having people role-play a hierarchy-attenuating job or a hierarchy-enhancing job induced people to make allocations usually associated with being low or high in SDO, respectively. The tendencies to enhance hierarchy or to attenuate it are all coordinated through legitimising myths among individuals, their local work-groups, institutions, and how the institution allocates resources.

An even deeper cross-level analysis—from individuals, to social roles, to institutions, to societal structure—can be seen in several intersecting lines of research addressing one of the most robust and proximate causes of group-based dominance, namely use of the criminal justice system to enforce social hierarchy. For the state to use its system of military/police and courts to enforce social hierarchy, three conditions must be met. First, the criminal justice system must be staffed by people with prejudicial and punitive attitudes that are consistent with their roles. In support of this contention, Guimond (2000), among others, has shown that police academy training actually increases racism, xenophobia, and other discriminatory attitudes, particularly in members of dominant groups. Dambrun, Guimond and Duarte (2002) found that French law students (hierarchy-enhancers) have higher SDO scores and more negative stereotypes of Arabs than French psychology students (hierarchy-attenuators). Sidanius, Liu, Pratto, and Shaw (1994a) found that Los Angeles police officers are higher in SDO and punitiveness than members of the public, whereas public defenders are lower than the public. Similarly, Whitehead (1998) found more support of the death penalty among district attorneys than among public defenders, who are more concerned that the death penalty is applied in a racially biased manner.

The second condition that must be met in order for the criminal justice system to enforce social hierarchy is that the public must tolerate the group prejudice of the criminal justice system. Such support would also be expected to be a function of group position. Consistent with social dominance theory, there is considerable research showing that European-Americans generally favour the police more than African-Americans do. For example, Howell, Perry, and Vile (2004) showed that Whites' support for the police stems from their assumptions about the zero-sum nature of race relations and from their racial privilege: In cities with White majorities and White mayors, Whites supported the police more than Blacks. In cities

with Black majorities and Black mayors, Whites' positive attitudes about the police fell, matching Blacks' attitudes, and did so to the extent that Whites believed that race-relations are zero-sum. In other words, Whites' greater support of the police is contingent on their being the dominant local group, consistent with social dominance theory.

Third, if the criminal justice system is effective in enforcing group dominance as we predict, then there should be more inequality where it is most forcefully applied. Because the death penalty has been repeatedly shown to be disproportionately used against members of subordinate arbitrary-set groups, the death penalty is a good marker for the operation of institutional discrimination. Mitchell and Sidanius (1995) tested whether there is more inequality in states where the death penalty is used more often. Comparing the 50 US states and comparing 147 nations around the world in separate studies, they indeed found that the greater the economic and political inequality in the state, the higher the use of the death penalty, even controlling for demographic and criminality factors. Together, this research shows how group dominance works as a *system*, infecting the attitudes of individuals, social roles, and institutional behaviour in a coordinated, interdependent, and self-perpetuating manner. Thus, social dominance theory has always examined more than individual differences and the person-group interface; it is a broad theory that generates novel hypotheses about how different aspects of group dominance systems work in conjunction with one another.

### BACK TO THE BIG PICTURE: WHERE WE HAVE BEEN AND WHERE WE GO FROM HERE

As a broad theory that addresses the hierarchical nature of societies, social dominance theory incorporates social processes that occur within societies, not just within individuals or groups. In particular, social dominance theory has emphasised the shared nature of cultural belief systems and their links to social structure and psychological processes in its subtheory of legitimising myths. It also incorporates an analysis of institutional discrimination because institutions play such a large role in perpetuating or changing social structure. For this reason, social dominance theory does not have a psychological "root cause" such as "group interest" or "system justification" or "positive identity striving" or "punitive child-rearing" or "escape from ambiguity" or "terror management" or even "SDO" to explain everything else in the theory. Instead, it tries to integrate all the useful levels of analysis within societies; for example, how individual beliefs, attitudes, and behaviours influence institutional roles and practices and vice versa, how cultural ideologies reify power and vice versa, and how gender and arbitrary-set oppression enable one another.

As a social psychological theory, social dominance theory understands individuals within their larger social-structural, cultural, and institutional contexts, but allows that, even within a given context, individuals can systematically differ from one another and have agency in affecting hierarchical outcomes. Ignoring the multiple levels that social dominance theory addresses has led some to accuse the theory of being essentialist or reductionist. In fact, our research has shown: (a) how groups differ as a function of their power, (b) how groups change, (c) how much people in different groups share ideologies, (d) how much individuals differ, and (e) how individuals who differ act the same in some situations. In conducting this research, we have relied on the fundamental assumptions of empiricism: (1) that similar consequences, such as structural inequality, have similar causes; and (2) that testing particular hypotheses derived from a well-specified theory is useful in advancing knowledge. For this reason, social dominance theory is neither an epistemology nor a political ideal. Social dominance theory has integrated theories from across the social sciences, but because it focuses on different outcomes or different levels of analysis than many of them, it should be understood more as a complement than as a rival to them.

### Major questions needing more research

Social dominance theory has been part of and helped to promote some important changes within social psychology. Unlike when we began in 1989, many scholars are now seriously researching power (e.g., Keltner, Gruenfeld, & Anderson, 2003) and how it operates in organisational settings (e.g., Vescio, Gervais, Snyder, & Hoover, 2005), not just social status, self-esteem, and self-categorisation. Researchers who once restricted their attention to individual cognitive processes are now expanding their interests to include different forms of dominance and the contents of shared stereotypes and how they legitimise structural relations (e.g., Glick & Fiske, 1996). Whereas for decades the largest interface that social psychology considered was the person–group interface, scholars now acknowledge the existence of social systems, cultural ideologies, and social institutions (e.g., Jost & Banaji, 1994; Sidanius & Pratto, 1999, pp. 213–214).

Most importantly, we believe that social dominance theory demonstrates that social psychological theories do not have to use the motivations of individuals as their main heuristic; theories can be useful across more than one or two levels of analysis (e.g., culture, person–group). Indeed, it is crucial to consider the material, cultural, institutional, gendered, and political contexts in which people live to develop truly social psychological theories. For example, in contrast to analysing gender as a function only of psychological difference, social role, or reproductive strategies, social

dominance theory has expanded all three levels to examine how gender interfaces with numerous kinds of power (Pratto & Walker, 2004) and how gender is an integral aspect of group-based hierarchies. Despite substantial evidence for the processes social dominance theory has identified, the theory and its perspective on the dynamics of systemic power suggest some new pressing questions that need to be addressed with empirical research.

*Intersection between gender hierarchy and arbitrary-set hierarchy.* Gender inequality and arbitrary-set inequality are interdependent because they are mutually enabling and linked through many factors. We need to know more about the relationships among age, gender, and arbitrary-set inequality to understand how changes to one system will affect the other systems. For example, does increasing women's political representation or economic independence change the degree of arbitrary-set inequality? Do programmes to alleviate arbitrary-set inequality affect men and women differently, and do they work equally well for both? What kinds of child-care patterns are associated with more or less gender equality? More research is also needed on the subordinate male target hypothesis, such as on how the nature of prejudice and stereotypes differ for dominant and subordinate men versus women, and on their consequences, including how differential discrimination between men and women in subordinate groups affects relationships between them.

*The creation and change of legitimising ideologies.* We have always argued that ideologies are closely linked to culture and that whether ideologies serve hierarchy-attenuating or hierarchy-enhancing functions must be ascertained with knowledge of the political-historical context (Sidanius & Pratto, 1993). But no one has yet developed a general theory of either the contents of legitimising ideologies or how to predict their function with respect to hierarchy. More detailed research on the processes of how ideologies get transmitted, on the different consequences of "knowing" versus "endorsing" a legitimising ideology, and on how conflicts between alternative ideologies are resolved promises to be fruitful.

*Determinants of the degree of hierarchy.* Social dominance theory first noted that there is a remarkable similarity among non-subsistence societies in that they are all structured as group-based dominance systems (e.g., Sidanius & Pratto, 1993), regardless of whether they are empires, democracies, or sheikdoms. There are, however, important differences in the degree to which societies are hierarchically structured, and it is important to identify and systematically investigate the factors that determine these differences. In our view, some important candidates are

how competitive the economic basis of a society is, how open and heterogeneous versus how closed and traditional the society is, how much honour (e.g., Cohen & Nisbett, 1994) versus community (e.g., Sidanius et al., 2001b) are culturally valued, the criticality and degree of scarcity of labour (Tuchman, 1978), the availability of weapons, whether critical labour can be performed by anyone or only by particular groups (e.g., Harris, 1993), and population pressure (e.g., Dickemann, 1979).

*Intersocietal dynamics and instability within societies.* As social dominance theory has focused mainly on intergroup relations within stable societies, it has yet to address power relations between societies, between groups belonging to different societies, or the dynamics of newly emerging power hierarchies in transitional societies (e.g., South Africa after apartheid; for exceptions see, e.g., Lemieux & Pratto, 2003; Levin, Henry, Pratto, & Sidanius, 2003). This very likely would require further elaboration on the meaning of dissensual and consensual ideologies, of resource control, and of the nature of force across societies, but may prove especially useful given current global dynamics. In addition, social dominance theory could contribute to understanding societal instability, for example, in terms of identifying why ideologies become less powerful, how different groups can change their positions by using new forms of power, and how external dynamics affect internal politics.

In the last 15 years, social dominance theory has inspired more expansive thinking about intergroup relations, group differences and their causes, the functions of stereotypes and other legitimising myths, gender and gender inequality, and the psychological consequences of having or lacking power. We hope in the next 15 years that considerably more attention will be devoted to the larger questions social dominance theory has identified.

## REFERENCES

- Adkins, C. L., Russell, C. J., & Werbel, J. D. (1994). Judgements of fit in the selection process: The role of work value congruence. *Personnel Psychology, 47*, 605–623.
- Adorno, T. W., Frenkel-Brunswik, E., Levinson, D. J., & Sanford, R. N. (1950). *The authoritarian personality*. New York: Norton.
- Aiello, A., Chirumbolo, A., Leone, L., & Pratto, F. (2005). Uno studio di adattamento e validazione della scala di orientamento/tendenza alla dominanza sociale (Pratto et al., 1994). [A replication and validation study of the social dominance orientation scale.] *Rassegna di Psicologia, 3*, 65–75.
- Altemeyer, B. (1998). The other "authoritarian personality." In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 30, pp. 48–92). San Diego, CA: Academic Press.
- Altemeyer, B. (2003). What happens when authoritarians inherit the earth? A simulation. *Analyses of Social Issues and Public Policy, 3*, 161–169.

- Altemeyer, B. (2004). Highly dominating, highly prejudiced personalities. *Journal of Social Psychology, 144*, 421–428.
- Amiot, C. E., & Bourhis, R. Y. (2003). Discrimination and the positive–negative asymmetry effects: Ideological and normative process. *Personality and Social Psychology Bulletin, 29*, 597–608.
- Amiot, C. E., & Bourhis, R. Y. (2005). Ideological beliefs as determinants of discrimination in positive and negative outcome distributions. *European Journal of Social Psychology, 35*, 581–598.
- Archer, J. (2000). Sex differences in aggression between heterosexual partners: A meta-analytic review. *Psychological Bulletin, 126*, 651–680.
- Bates, C., & Heaven, P. C. L. (2001). Attitudes to women in society: The role of social dominance orientation and social values. *Journal of Community and Applied Social Psychology, 11*, 43–49.
- Bem, S. L. (1974). Measurement of psychological androgyny. *Journal of Consulting and Clinical Psychology, 42*, 155–162.
- Betzig, L. (1993). Sex, succession, and stratification in the first six civilizations: How powerful men reproduced, passed power on to their sons, and used power to defend their wealth, women, and children. In L. Ellis (Ed.), *Social stratification and socioeconomic inequality: A comparative biosocial analysis* (pp. 37–74). New York: Praeger.
- Blumer, H. (1960). Race prejudice as a sense of group position. *Pacific Sociological Review, 1*, 3–5.
- Brown, D. E. (1991). *Human universals*. New York: McGraw-Hill.
- Buss, D. M. (1989). Sex differences in human mate preferences: Evolutionary hypotheses tested in 37 cultures. *Behavioural and Brain Sciences, 12*, 1–49.
- Buss, D. M., & Schmitt, D. P. (1993). Sexual Strategies Theory: An evolutionary perspective on human mating. *Psychological Review, 100*, 204–232.
- Buunk, B. P., & Dijkstra, P. (2004). Gender differences in rival characteristics that evoke jealousy in response to emotional versus sexual infidelity. *Personal Relationships, 11*, 395–408.
- Cohen, D., & Nisbett, R. E. (1994). Self-protection and the culture of honor: Explaining southern violence. *Personality and Social Psychology Bulletin, 20*, 551–567.
- Collier, J. (1988). *Marriage and inequality in classless societies*. Stanford, CA: Stanford University Press.
- Correll, J., Park, B., Judd, C. M., & Wittenbrink, B. (2002). The police officer's dilemma: Using ethnicity to disambiguate potentially threatening individuals. *Journal of Personality and Social Psychology, 83*, 1314–1329.
- Croizet, J., & Claire, T. (1998). Extending the concept of stereotype and threat to social class: The intellectual underperformance of students from low socioeconomic backgrounds. *Personality and Social Psychology Bulletin, 24*, 588–594.
- Daly, M., & Wilson, M. (1988). *Homicide*. New York: Aldine de Gruyter.
- Dambrun, M., Duarte, S., & Guimond, S. (2004). Why are men more likely to support group-based dominance than women? The mediating role of gender identification. *British Journal of Social Psychology, 43*, 287–297.
- Dambrun, M., Guimond, S., & Duarte, S. (2002). The impact of hierarchy-enhancing vs attenuating academic major on stereotyping: The mediating role of perceived social norm. *Current Research in Social Psychology, 7*, 114–136.
- Danso, H. A., & Esses, V. M. (2001). Black experimenters and the intellectual test performance of white participants: The tables are turned. *Journal of Experimental Social Psychology, 37*, 158–165.
- Davies, M. (2004). Correlates of negative attitudes toward gay men: Sexism, male role norms, and male sexuality. *Journal of Sex Research, 41*, 259–266.

- Dickemann, M. (1979). Female infanticide, reproductive strategies, and social stratification: A preliminary model. In N. A. Chagnon & W. Irons (Eds.), *Evolutionary biology and human social behaviour: An anthropological perspective* (pp. 231–367). North Scituate, MA: Duxbury.
- Dickemann, M. (1981). Parental confidence and dowry competition: A biocultural analysis of purdah. In R. D. Alexander & D. W. Tinkle (Eds.), *Natural selection and social behaviour: Recent and new theory* (pp. 439–475). New York: Chiron Press.
- Duckitt, J. (2001). A dual-process cognitive-motivational theory of ideology and prejudice. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 33, pp. 41–113). San Diego, CA: Academic Press.
- Duckitt, J., & Fisher, K. (2003). The impact of social threat on worldview and ideological attitudes. *Political Psychology*, 24, 199–222.
- Duckitt, J., Wagner, C., du Plessis, I., & Birum, I. (2002). The psychological bases of ideology and prejudice: Testing a dual process model. *Journal of Personality and Social Psychology*, 83, 75–93.
- Duriez, B., & van Hiel, A. (2002). The march of modern fascism: A comparison of social dominance orientation and authoritarianism. *Personality and Individual Differences*, 32, 1199–1213.
- Eagly, A. H., Diekmann, A. B., Johannesen-Schmidt, M. C., & Koenig, A. M. (2004). Gender gaps in socio-political attitudes: A social psychological analysis. *Journal of Personality and Social Psychology*, 87, 796–816.
- Eagly, A. H., & Kite, M. E. (1987). Are stereotypes of nationalities applied to both women and men? *Journal of Personality and Social Psychology*, 53, 451–462.
- Edgerton, R. B. (2000). *Warrior women: The amazons of Dahomey and the nature of war*. Boulder, CO: Westview Press.
- Eibach, R. P., & Ehrlinger, J. (2006). “Keep your eyes on the prize:” Reference points and racial differences in assessing progress toward equality. *Personality and Social Psychology Bulletin*, 32, 66–77.
- Eibach, R. P., & Keegan, T. (2006). Free at last? Social dominance, loss aversion, and White and Black Americans’ differing assessments of racial progress. *Journal of Personality and Social Psychology*, 90, 453–467.
- Ekehammar, B., Akrami, N., Gylje, M., & Zakrisson, I. (2004). What matters most to prejudice: Big five personality, social dominance orientation, or right-wing authoritarianism? *European Journal of Personality*, 18, 463–482.
- Ekehammar, B., & Sidanius, J. (1982). Sex differences in sociopolitical attitudes: A replication and extension. *British Journal of Social Psychology*, 21, 249–257.
- Engels, F. (1902). *The origin of the family, private property, and the state* (E. Untermann, Trans.). Chicago, IL: E. H. Kerr. [Original work published in 1884.]
- Esses, V. M., Dovidio, J. F., Jackson, L. M., & Armstrong, T. L. (2001). The immigration dilemma: The role of perceived group competition, ethnic prejudice, and national identity. *Journal of Social Issues*, 57, 389–412.
- Fang, C. Y., Sidanius, J., & Pratto, F. (1998). Romance across the social status continuum: Interracial marriage and the ideological asymmetry effect. *Journal of Cross Cultural Psychology*, 29, 290–305.
- Federal Bureau of Investigation. (2003). *Crime in the United States 2003*. Retrieved April 4, 2005 from [http://www.fbi.gov/ucr/cuis\\_03/xl03tbl2-7.xls](http://www.fbi.gov/ucr/cuis_03/xl03tbl2-7.xls)
- Foels, R., & Pappas, C. J. (2004). Learning and unlearning the myths we are taught: Gender and social dominance orientation. *Sex Roles*, 50, 743–757.
- Fredrickson, B., Roberts, T. A., Noll, S., Quinn, D., & Twenge, J. (1998). That swimsuit becomes you: Sex differences in self-objectification, restrained eating, and math performance. *Journal of Personality and Social Psychology*, 75, 269–284.

- Frey, R. A., & Powell, L. A. (2005). Beyond left–right ideology in the study of justice perception: Interdependent and independent distributive worldviews in Jamaica and New Zealand. *Journal of Cross-Cultural Psychology, 36*, 117–146.
- Furnham, A. (2001). Vocational preference and P-O fit: Reflections on Holland's theory of vocational choice. *Applied Psychology: An International Review, 50*, 5–29.
- Gailey, C. W. (1987). Evolutionary perspectives on gender hierarchy. In B. B. Hess & M. M. Ferree (Eds.), *Analysing gender* (pp. 32–67). Beverly Hills, CA: Sage.
- Glick, P., & Fiske, S. T. (1996). The Ambivalent Sexism Inventory: Differentiating hostile and benevolent sexism. *Journal of Personality and Social Psychology, 70*, 491–512.
- Goldstein, J. S. (2001). *War and gender: How gender shapes the war system and vice versa*. New York: Cambridge University Press.
- Guimond, S. (2000). Group socialisation and prejudice: The social transmission of intergroup attitudes and beliefs. *European Journal of Social Psychology, 30*, 335–354.
- Guimond, S., Dambun, M., Michinov, N., & Duarte, S. (2003). Does social dominance generate prejudice? Integrating individual and contextual determinants of intergroup cognitions. *Journal of Personality & Social Psychology, 84*, 697–721.
- Haley, H., & Sidanius, J. (2005). Person-organisation congruence and the maintenance of group-based social hierarchy: A social dominance perspective. *Group Processes and Intergroup Relations, 8*, 187–203.
- Harris, M. (1993). The evolution of gender hierarchies: A trial formulation. In D. Miller (Ed.), *Sex and gender hierarchies* (pp. 57–79). Cambridge, UK: Cambridge University Press.
- Heaven, P. C. L. (1999). Attitudes toward women's rights: Relationships with social dominance orientation and political group identities. *Sex Roles, 41*, 605–614.
- Heaven, P. C. L., & Bucci, S. (2001). Right-wing authoritarianism, social dominance orientation and personality: An analysis using the IPIP measure. *European Journal of Personality, 15*, 49–56.
- Heaven, P. C. L., & Connors, J. R. (2001). A note on the value correlates of social dominance orientation and right-wing authoritarianism. *Personality and Individual Differences, 31*, 925–930.
- Heaven, P. C. L., & Quintin, D. S. (2003). Personality factors predict racial prejudice. *Personality and Individual Differences, 34*, 625–634.
- Henry, P. J., Sidanius, J., Levin, S., & Pratto, F. (2005). Social dominance orientation, authoritarianism, and support for intergroup violence between the Middle East and America. *Political Psychology, 26*, 569–583.
- Holland, J. L. (1996). Exploring careers with a typology: What we have learned and some new directions. *American Psychologist, 51*, 397–406.
- Howell, S. E., Perry, H. L., & Vile, M. (2004). Black cities/white cities: Evaluating the police. *Political Behaviour, 26*, 45–68.
- Huang, L., & Liu, J. H. (2005). Personality and social structural implications of the situational priming of social dominance orientation. *Personality and Individual Differences, 38*, 267–276.
- Johnson, W. R. (1994). *Dismantling apartheid: A South African town in transition*. Ithaca, NY: Cornell University Press.
- Jost, J. T., & Banaji, M. R. (1994). The role of stereotyping in system-justification and the production of false consciousness. *British Journal of Social Psychology, 33*, 1–27.
- Jost, J. T., & Burgess, D. (2000). Attitudinal ambivalence and the conflict between group and system justification motives in low status groups. *Personality & Social Psychology Bulletin, 26*, 293–305.
- Kawanaka, K. (1982). Further studies on predation by chimpanzees of the Mahale mountains. *Primates, 23*, 364–384.
- Kawanaka, K. (1989). Age differences in social interactions of young males in a chimpanzee unit-group at the Mahale Mountains National Park, Tanzania. *Primates, 30*, 285–305.

- Keegan, J. (1993). *The history of warfare*. New York: Alfred A. Knopf.
- Keltner, D., Gruenfeld, D. H., & Anderson, C. (2003). Power, approach, and inhibition. *Psychological Review*, *110*, 265–284.
- Kemmelmeier, M. (2005). The effects of race and social dominance orientation in simulated juror decision making. *Journal of Applied Social Psychology*, *35*, 1030–1045.
- Kemmelmeier, M., Danielson, C., & Basten, J. (2005). What's in a grade? Academic success and political orientation. *Personality and Social Psychology Bulletin*, *31*, 1386–1399.
- Kreindler, S. A. (2005). A dual group processes model of individual differences in prejudice. *Personality and Social Psychology Review*, *9*, 90–107.
- Leitner, D. W., & Sedlacek, W. E. (1976). Characteristics of successful campus police officers. *Journal of College Student Personnel*, *17*, 304–308.
- Lemieux, A. F., & Pratto, F. (2003). Social relations and global poverty: The roles of prejudice, power, and social dominance. In S. Carr & T. Sloan (Eds.), *Community psychology and global poverty* (pp. 147–161). New York: Kluwer Academic Publishers.
- Lenski, G. E. (1984). *Power and privilege: A theory of social stratification*. Chapel Hill, NC: University of North Carolina Press.
- Levin, S. (2004). Perceived group status differences and the effects of gender, ethnicity, and religion on social dominance orientation. *Political Psychology*, *25*, 31–48.
- Levin, S., Henry, P. J., Pratto, F., & Sidanius, J. (2003). Social dominance and social identity in Lebanon: Implications for terrorism and counterterrorism support. *Group Processes and Intergroup Relations*, *6*, 353–368.
- Levin, S., & Sidanius, J. (1999). Social dominance and social identity in the United States and Israel: Ingroup favouritism or outgroup derogation? *Political Psychology*, *20*, 99–126.
- Levin, S. L. (1996). *A social psychological approach to understanding intergroup attitudes in the United States and Israel*. Unpublished doctoral dissertation, Department of Psychology, UCLA.
- Lippa, R., & Arad, S. (1999). Gender, personality, and prejudice: The display of social dominance orientation and authoritarianism in interviews with college men and women. *Journal of Research in Personality*, *33*, 463–493.
- Marjoribanks, K. (1981). Sex-related differences in socio-political attitudes: A replication. *Educational Studies*, *7*, 1–6.
- Marx, K., & Engels, F. (1846). *The German ideology*. New York: International Publishers.
- Mauer, M. (1999). *Race to incarcerate*. New York: New Press.
- McFarland, S. G., & Adelson, S. (1996, July). *An omnibus study of personality, values, and prejudice*. Paper presented at the 19th Annual Scientific Meeting of the International Society of Political Psychology, Vancouver, British Columbia, Canada.
- Meyer, I. (2003). *Race, SDO and perceptions of dominance in South Africa*. Talk given at the 26th Annual Scientific Meeting of the International Society of Political Psychology, Boston, MA.
- Michels, R. (1911/1962). *Political parties: A sociological study of the oligarchical tendencies of modern democracy*. New York: Free Press.
- Michinov, N., Dambrun, M., & Guimond, S. (2005). Social dominance orientation, prejudice, and discrimination: A new computer-based method of studying discriminatory behaviours. *Behaviour Research Methods*, *37*, 91–98.
- Miller, J. G. (1996). *Search and Destroy: African-American males in the criminal-justice system*. New York: Cambridge University Press.
- Mischel, W., & Shoda, Y. (1995). A cognitive-affective system theory of personality: Reconceptualising situations, dispositions, dynamics, and invariance in personality structure. *Psychological Review*, *102*, 246–268.

- Mitchell, M., & Sidanius, J. (1995). Social hierarchy and executions in the United States: A social dominance perspective. The death penalty: A social dominance perspective. *Political Psychology, 16*, 591–619.
- Mosca, G. (1896/1939). *The ruling class: Elements of political science*. New York: McGraw-Hill.
- Mummendey, A., & Otten, S. (1998). Positive–negative asymmetry in social discrimination. In M. Hewstone & W. Stroebe (Eds.), *European review of social psychology* (Vol. 9, pp. 107–143). Chichester, UK: Wiley.
- Nadler, R. D. (1988, August). “Sexual aggression in great apes.” Paper presented at the conference of the New York Academy of Sciences: Human sexual aggression – Current perspectives, New York. *Annals of the New York Academy of Sciences, 528*, 154–162.
- Nelson, J. (2000). *Police brutality: An anthology*. New York: W. W. Norton & Company.
- Overbeck, J. R., Jost, J. T., Mosso, C. O., & Flizik, A. (2004). Resistant versus acquiescent responses to ingroup inferiority as a function of social dominance orientation in the USA and Italy. *Group Processes and Intergroup Relations, 7*, 35–54.
- Pareto, V. (1901/1979). *The rise and fall of the elites*. New York: Arno.
- Perreault, S., & Bourhis, R. Y. (1998). Social identification, interdependence and discrimination. *Group Processes and Intergroup Relations, 1*, 49–66.
- Pratto, F. (1996). Sexual politics: The gender gap in the bedroom, the cupboard, and the cabinet. In D. M. Buss & N. M. Malamuth (Eds.), *Sex, power, conflict: Evolutionary and feminist perspectives* (pp. 179–230). New York: Oxford University Press.
- Pratto, F. (1999). The puzzle of continuing group inequality: Piecing together psychological, social, and cultural forces in social dominance theory. *Advances in Experimental Social Psychology, 31*, 191–263. New York: Academic Press.
- Pratto, F., & Espinoza, P. (2001). Gender, race, and power. *Journal of Social Issues, 57*, 763–780.
- Pratto, F., & Hegarty, P. (2000). The political psychology of reproductive strategies. *Psychological Science, 11*, 57–62.
- Pratto, F., & Lemieux, A. F. (2001). The psychological ambiguity of immigration and its implications for promoting immigration policy. *Journal of Social Issues, 57*, 413–430.
- Pratto, F., Lemieux, A. F., Glasford, D. E., & Henry, P. J. (2003). American and Lebanese college students’ responses to the events of September 11, 2001: The relation of hopes and fears to the psychology of group positions. *Psicologica Politica, 27*, 13–35.
- Pratto, F., Liu, J. H., Levin, S., Sidanius, J., Shih, M., Bachrach, H., et al. (2000). Social dominance orientation and the legitimisation of inequality across cultures. *Journal of Cross-Cultural Psychology, 31*, 369–409.
- Pratto, F., & Shih, M. (2000). Social dominance orientation and group context in implicit group prejudice. *Psychological Science, 11*, 515–518.
- 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 & Social Psychology, 67*, 741–763.
- Pratto, F., Stallworth, L. M., & Conway-Lanz, S. (1998). Social dominance orientation and the legitimisation of policy. *Journal of Applied Social Psychology, 28*, 1853–1875.
- Pratto, F., Stallworth, L. M., & Sidanius, J. (1997a). The gender gap: Differences in political attitudes and social dominance orientation. *British Journal of Social Psychology, 36*, 49–68.
- Pratto, F., Stallworth, L. M., Sidanius, J., & Siers, B. (1997b). The gender gap in occupational role attainment: A social dominance approach. *Journal of Personality and Social Psychology, 72*, 37–53.
- Pratto, F., Tatar, D. G., & Conway-Lanz, S. (1999). Who gets what and why: Determinants of social allocations. *Political Psychology, 20*, 127–150.
- Pratto, F., & Walker, A. (2004). The bases of gendered power. In A. E. Beall, A. H. Eagly, & R. J. Sternberg (Eds.), *The psychology of gender* (pp. 242–268). New York: Guilford Press.

- Reynolds, K. J., Turner, J. C., Haslam, S. A., & Ryan, M. K. (2001). The role of personality and group factors in explaining prejudice. *Journal of Experimental Social Psychology, 37*, 427–434.
- Reynolds, K. J., Turner, J. C., & Veenstra, K. (2004). *Personality, prejudice, and social change*. Paper presented at the conference on The Dynamics of Social Change, November 7–10, The Australian National University, Canberra, Australia.
- Roccatto, M., & Ricolfi, L. (2005). On the correlation between right-wing authoritarianism and social dominance orientation. *Basic and Applied Social Psychology, 27*, 187–200.
- Rowell, T. E. (1974). The concept of social dominance. *Behavioural Biology, 11*, 131–154.
- Rubin, M., & Hewstone, M. (2004). Social identity, system justification, and social dominance: Commentary on Reicher, Jost et al., and Sidanius et al. *Political Psychology, 25*, 823–844.
- Russell, B. L., & Trigg, K. Y. (2004). Tolerance of sexual harassment: An examination of gender differences, ambivalent sexism, social dominance, and gender roles. *Sex Roles, 50*, 565–573.
- Sanday, P. (1981). *Female power and male dominance*. New York: Cambridge University Press.
- Schmitt, M. T., Branscombe, N. R., & Kappen, D. M. (2003). Attitudes toward group-based inequality: Social dominance or social identity? *British Journal of Social Psychology, 42*, 161–186.
- Sherif, M., Harvey, O. J., White, B. J., Hood, W. R., & Sherif, C. (1961). *Intergroup conflict and cooperation: The Robber's Cave experiment*. Norman, OK: Institute of Group Relations, University of Oklahoma.
- Shorey, H. S., Cowan, G., & Sullivan, M. P. (2002). Predicting perceptions of discrimination among Hispanics and Anglos. *Hispanic Journal of Behavioural Sciences, 24*, 3–22.
- Sidanius, J. (1993). The psychology of group conflict and the dynamics of oppression: A social dominance perspective. In S. Iyengar & W. McGuire (Eds.), *Explorations in political psychology* (pp. 183–219). Durham, NC: Duke University Press.
- Sidanius, J., Cling, B. J., & Pratto, F. (1991a). Ranking and linking behaviour as a function of sex and gender: An exploration of alternative explanations. *Journal of Social Issues, 47*, 131–149.
- Sidanius, J., & Ekehammar, B. (1980). Sex-related differences in socio-political ideology. *Scandinavian Journal of Psychology, 21*, 17–26.
- Sidanius, J., Feshbach, S., Levin, S., & Pratto, F. (1997). The interface between ethnic and national attachment: Ethnic pluralism or ethnic dominance? *Public Opinion Quarterly, 61*, 102–133.
- Sidanius, J., Haley, H., Molina, L., & Pratto, F. (in press). Vladimir's choice and the distribution of social resources: A group dominance perspective. *Group Processes and Intergroup Relations*.
- Sidanius, J., Levin, S., Federico, C. M., & Pratto, F. (2001a). Legitimising ideologies: A social dominance approach. In J. T. Jost & B. Major (Eds.), *The psychology of legitimacy* (pp. 307–331). New York: Cambridge University Press.
- Sidanius, J., Levin, S., Liu, J., & Pratto, F. (2000). Social dominance orientation, anti-egalitarianism, and the political psychology of gender: An extension and cross-cultural replication. *European Journal of Social Psychology, 30*, 41–67.
- Sidanius, J., Levin, S., & Pratto, F. (1996). Consensual social dominance orientation and its correlates within the hierarchical structure of American society. *International Journal of Intercultural Relations, 20*, 385–408.
- Sidanius, J., Levin, S., van Laar, C., & Sears, D. (2006a). *The dynamics of social identity and intergroup relations on campus*. Manuscript in preparation.
- Sidanius, J., Liu, J. H., Pratto, F., & Shaw, J. S. (1994a). Social dominance orientation, hierarchy attenuators and hierarchy-enhancers: Social dominance theory and the criminal justice system. *Journal of Applied Social Psychology, 24*, 338–366.

- Sidanius, J., Peña, Y., & Sawyer, M. (2001b). Inclusionary discrimination: Pigmentocracy and patriotism in the Dominican Republic. *Political Psychology*, *22*, 827–851.
- 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: Cambridge University Press.
- Sidanius, J., & Pratto, F. (2003). Social dominance theory and the dynamics of inequality: A Reply to Schmitt, Branscombe, & Kappen and Wilson & Liu. *British Journal of Social Psychology*, *42*, 207–213.
- Sidanius, J., Pratto, F., & Bobo, L. (1994b). Social dominance orientation and the political psychology of gender: A case of invariance? *Journal of Personality & Social Psychology*, *67*, 998–1011.
- Sidanius, J., Pratto, F., & Brief, D. (1995). Group dominance and the political psychology of gender: A cross-cultural comparison. *Political Psychology*, *16*, 381–396.
- Sidanius, J., Pratto, F., Martin, M., & Stallworth, L. (1991b). Consensual racism and career track: Some implications of social dominance theory. *Political Psychology*, *12*, 691–721.
- Sidanius, J., Pratto, F., & Mitchell, M. (1994c). Group identity, social dominance orientation, and intergroup discrimination: Some implications of social dominance theory. *Journal of Social Psychology*, *134*, 151–167.
- Sidanius, J., Pratto, F., & Rabinowitz, J. (1994d). Gender, ethnic status, and ideological asymmetry: A social dominance perspective. *Journal of Cross-Cultural Psychology*, *25*, 194–216.
- Sidanius, J., Pratto, F., van Laar, C., & Levin, S. (2004). Social dominance theory: Its agenda and method. *Political Psychology*, *25*, 845–880.
- Sidanius, J., Sinclair, S., & Pratto, F. (2006b). Social dominance orientation, gender and increasing college exposure. *Journal of Applied Social Psychology*, *36*, 1640–1653.
- Sidanius, J., van Laar, C., Levin, S., & Sinclair, S. (2003). Social hierarchy maintenance and assortment into social roles: A social dominance perspective. *Group Processes and Intergroup Relations*, *6*, 333–352.
- Sidanius, J., & Veniegas, R. C. (2000). Gender and race discrimination: The interactive nature of disadvantage. In S. Oskamp (Ed.), *Reducing prejudice and discrimination. The Claremont Symposium on Applied Social Psychology* (pp. 47–69). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Spencer, S. J., Steele, C. M., & Quinn, D. M. (1999). Stereotype threat and women's math performance. *Journal of Experimental Social Psychology*, *35*, 4–28.
- Steele, C. M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African-Americans. *Journal of Personality and Social Psychology*, *69*, 797–811.
- Strier, K. B. (1994). Brotherhoods among Atelins: Kinship, affiliation, and competition. *Behaviour*, *130*, 151–167.
- Sumner, W. G. (1906). *Folkways: A study of the sociological importance of usages, manners, customs, mores and morals*. Boston: Ginn.
- Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behaviour. In S. Worchel & W. G. Austin (Eds.), *Psychology of intergroup relations* (pp. 7–24). Chicago, IL: Nelson-Hall.
- Thomas, C. A., & Esses, V. M. (2004). Individual differences in reactions to sexist humor. *Group Processes and Intergroup Relations*, *7*, 89–100.
- Tilly, C. (1998). *Durable inequality*. Berkeley, CA: University of California Press.
- Trivers, R. (1972). Parental investment and sexual selection. In B. Campbell (Ed.), *Sexual selection and the descent of man* (pp. 136–179). New York: Aldine.

- Tuchman, B. W. (1978). *A distant mirror: The calamitous fourteenth century*. New York: Knopf.
- Turner, J. C., & Reynolds, K. J. (2003). Why social dominance theory has been falsified. *British Journal of Social Psychology, 42*, 199–206.
- Umphress, E. E., Smith-Crowe, K., Brief, A. P., Dietz, J., & Watkins, M. B. (in press). When birds of a feather flock together and when they do not: Status composition, social dominance orientation, and organisational attractiveness. *Journal of Applied Psychology*.
- United Nations. (2002). *Women, peace, and security*. Retrieved April 4, 2005 from <http://www.un.org/womenwatch/daw/public/eWPS.pdf>
- van Dijk, T. (1987). *Communicating racism: Ethnic prejudice in thought and talk*. Newbury Park, CA: Sage.
- van Hiel, A., & Mervielde, I. (2002). Explaining conservative beliefs and political preferences: A comparison of social dominance orientation and authoritarianism. *Journal of Applied Social Psychology, 32*, 965–976.
- van Laar, C., Sidanius, J., Rabinowitz, J., & Sinclair, S. (1999). The three Rs of academic achievement: Reading, 'riting, and racism. *Personality and Social Psychology Bulletin, 25*, 139–151.
- Vescio, T. K., Gervais, S. J., Snyder, M., & Hoover, A. (2005). Power and the creation of patronizing environments: The stereotype-based behaviours of the powerful and their effects on female performance in masculine domains. *Journal of Personality and Social Psychology, 88*, 658–672.
- Wagner, U., van Dick, R., & Zick, A. (2001). Sozialpsychologische Analysen und Erklärungen von Fremdenfeindlichkeit in Deutschland. *Zeitschrift für Sozialpsychologie, 32*, 59–79.
- Walton, G. M., & Cohen, G. L. (2003). Stereotype lift. *Journal of Experimental Social Psychology, 39*, 456–467.
- Ward, D. (1995). *Social dominance theory: Are the genes too tight?* Paper presented at the 18th Annual Meeting of the International Society of Political Psychology, Washington DC, July 4–8. <http://ispp.org/ISPP/wardispp95.html>
- White, W. F. (1969). *Rope and faggot: A biography of Judge Lynch*. New York: Arno Press.
- Whitehead, J. T. (1998). 'Good ol' boys' and the chair: Death penalty attitudes of policy makers in Tennessee. *Crime and Delinquency, 44*, 245–256.
- Whitley, B. E. (2001). Gender-role variables and attitudes toward homosexuality. *Sex Roles, 45*, 691–721.
- Whitley, B. E. Jr., & Ągisdottir, S. (2000). The gender belief system, authoritarianism, social dominance orientation, and heterosexuals' attitudes toward lesbians and gay men. *Sex Roles, 42*, 947–967.
- Wilson, M., & Daly, M. (1992). The man who mistook his wife for a chattel. In J. H. Barkow, L. Cosmides, & J. Tooby (Eds.), *The adapted mind* (pp. 289–322). New York: Oxford University Press.
- Wilson, M. S. (2003). Social dominance and ethical ideology: The end justifies the means? *Journal of Social Psychology, 143*, 549–558.
- Wilson, M. S., & Liu, J. H. (2003). Social dominance orientation and gender: The moderating role of gender identity. *British Journal of Social Psychology, 42*(2), 187–198.
- Wrangham, R. W., & Peterson, D. (1996). *Demonic males: Apes and the origins of human violence*. New York: Mariner Books.

APPENDIX

SDO<sub>6</sub> Scale

INSTRUCTIONS

Below are a series of statements with which you may either agree or disagree. For each statement, please indicate the degree of your agreement\disagreement by **circling** the appropriate number from '1' to '7'. Once again, remember that your first responses are usually the most accurate.

	<b>Strongly Disagree/ Disapprove</b>							<b>Strongly Agree/ Favor</b>
1. Some groups of people are just more worthy than others .....	1	2	3	4	5	6	7	7
2. In getting what your group wants, it is sometimes necessary to use force against other groups .....	1	2	3	4	5	6	7	7
3. It's OK if some groups have more of a chance in life than others .....	1	2	3	4	5	6	7	7
4. To get ahead in life, it is sometimes necessary to step on other groups .....	1	2	3	4	5	6	7	7
5. If certain groups of people stayed in their place, we would have fewer problems .....	1	2	3	4	5	6	7	7
6. It's probably a good thing that certain groups are at the top and other groups are at the bottom .....	1	2	3	4	5	6	7	7
7. Inferior groups should stay in their place .....	1	2	3	4	5	6	7	7
8. Sometimes other groups must be kept in their place .....	1	2	3	4	5	6	7	7
9. It would be good if all groups could be equal .....	1	2	3	4	5	6	7	7
10. Group equality should be our ideal ....	1	2	3	4	5	6	7	7
11. All groups should be given an equal chance in life.....	1	2	3	4	5	6	7	7
12. We should do what we can to equalize conditions for different groups .....	1	2	3	4	5	6	7	7
13. We should increase social equality .....	1	2	3	4	5	6	7	7
14. We would have fewer problems if we treated different groups more equally .....	1	2	3	4	5	6	7	7
15. We should strive to make incomes more equal .....	1	2	3	4	5	6	7	7
16. No one group should dominate in society .....	1	2	3	4	5	6	7	7

*Note to users: Items 9–16 should be reverse coded. The reverse coded items are usually intermixed with the non-coded items.*