

HOW SOCIAL DOMINANCE ORIENTATION AND JOB STATUS INFLUENCE PERCEPTIONS OF AFRICAN-AMERICAN AFFIRMATIVE ACTION BENEFICIARIES

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This paper examines evaluative judgments about an African-American beneficiary of affirmative action (AA) in two studies. Based on a motivated social cognition model, we test whether the use of AA, social dominance orientation (SDO), and job status jointly influence judgments about the future job performance and career progression of an AA beneficiary. In a sample of 244 undergraduate business students, Study 1 showed that SDO and AA interact to predict job-related performance expectations, and AA and job status interact to predict career progression expectations. Study 2 used a different sample of 190 business undergraduates to test whether the effects of AA, job status, SDO and their interactions on evaluative judgments is mediated by stereotype application. Results showed that different dimensions of stereotypes mediated the relationships between SDO, job status and the AA \times SDO interaction.

Affirmative action (AA) is a controversial social policy instrument designed to overcome equal employment opportunity barriers faced by historically disadvantaged groups. In recent years, critics have

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increasingly attacked the use of AA in hiring and university admissions decisions. Opponents of AA have cited three main objections. First, AA policies are seen as violating principles of fairness because AA “beneficiaries” (e.g., women, African Americans) are perceived to have received non-merit based preferential treatment (Son Hing, Bobocel & Zanna, 2002). Second, non beneficiaries, who in the United States tend to be predominantly White, Euro-American males, come to view themselves as “victims” of an unjust policy that can heighten interethnic tensions and disrupt workplace relationships (Heilman, 1994; Heilman, Battle, Keller & Lee, 1998). Third, the use of AA is said to stigmatize beneficiaries because observers tend to make negative inferences about their abilities and qualifications (Heilman, Battle, Keller, & Lee, 1998; Heilman, Block, & Lucas, 1992). As a result, AA lowers others’—and possibly beneficiaries’ own—expectations of career and professional success (Cose, 1993; Crosby, Iyer, Clayton & Downing, 2003).

This paper focuses on this last objection by examining the social psychological processes that influence evaluative judgments about an employee known to have benefited from AA. We examine perceptions and judgments of an African-American employee who is described as having either benefited or not benefited from AA in two studies. We restrict our analysis to a race-based hiring decision because the problem of White–Black relations has been and continues to be a major source of conflict and social division in American society (Myrdal, 1944; Sears, Hetts, Sidanius, & Bobo, 2000). Moreover, there is evidence that White Americans’ opposition to AA is driven by negative stereotypes and affect towards African Americans that do not extend towards other demographic groups (Kravitz & Platania, 1993; Sniderman & Piazza, 1993). For these reasons, examining reactions towards African-American AA beneficiaries provides a powerful context for exploring variables that influence social perceptions and judgments about personnel decisions in which race might be perceived as playing an important role.

This study makes a theoretical contribution to the study of inter group relations in organizations by exploring how motivational and situational factors influence social cognition in the context of an AA hiring decision. There are also practical reasons why managers should be interested in the research questions addressed by our study. A key organizational concern is the need to effectively manage diversity in the work place, including attitudes, expectations, and behaviors of organizational members. If not properly managed, the psychological experiences of both beneficiaries and non beneficiaries of AA can adversely affect motivation and work performance as well as subjective well-being (Cose, 1993; Crosby et al., 2003). Because organizations have a legal and, arguably, a moral

responsibility to provide a psychologically healthy employment environment, it would seem important and necessary to reduce the potential for inter-group hostility and misunderstandings that may accompany the use of AA. To do this, it is helpful to gain a better understanding of the complex social psychological dynamics that underlie these reactions if AA is to be implemented effectively.

A key assumption of our paper is that perceptions of an African-American AA beneficiary are partly the result of *motivated social cognition* (e.g., Duckitt, 2001; Jost, Glaser, Kruglanski, & Sulloway, 2003; Kruglanski, 1996; Kunda, 1990). This means that judgments, beliefs, and perceptions are at least partly constructed to satisfy certain psychological needs. As a result, the processing of social information can be influenced by unavoidable personal and social motivations (e.g., Kunda, 1990) that may not be consciously accessible to the perceiver (Kruglanski, 1996). Based on a motivated social cognition model, we examine a psychological construct that has been shown to predict how people perceive and evaluate members of minority groups. This construct is social dominance orientation (SDO), an individual difference variable that reflects the extent to which people hold beliefs that favor group-based forms of inequality and domination (Pratto, Sidanius, Stallworth, & Malle, 1994).

We expect SDO to be a significant predictor of how people evaluate the likely job performance and career success of an African-American AA beneficiary because African Americans are perceived by many Americans as occupying subordinate status positions in U.S. society relative to Whites and other minorities (Sidanius & Pratto, 1999). Thus, beliefs about group-based dominance may lead people high in SDO to cognitively justify the subordinate status of African Americans, which can affect their evaluations of an African-American AA beneficiary. A second question we examine is whether these evaluations are influenced by the type of job for which the employee is hired. A consistent finding in social psychology is that people who occupy high status roles are perceived more positively than those who occupy low status roles (cf. Carli & Eagly, 1999; Lucas, 2003). Based on the possibility that a favorability bias colors judgments about high status persons, we expect perceivers to evaluate an AA hire more negatively than a non-AA hire when the former is chosen for a low but not a high status job. Figure 1 depicts our conceptual model.

The model shows that SDO, job status, and the presence of an AA policy within an organization can influence evaluations of an African-American AA hire. We theorize that the cognitive mechanism underlying these relationships is the *activation* of certain stereotypes that may then

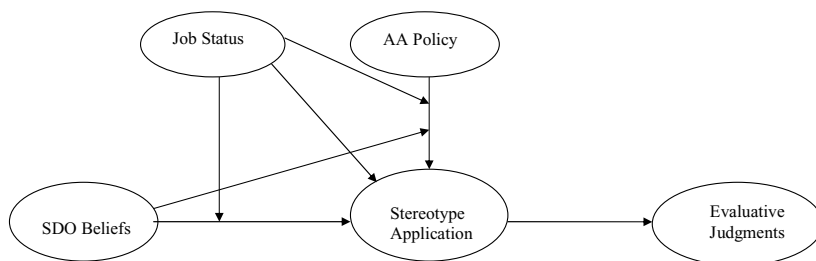


Figure 1: Theoretical Model of SDO, AA, and Job Status Effects on Evaluation Judgments.

be *applied* to form evaluative judgments.¹ The model shows that SDO moderates the effects of an AA policy on evaluations, and job status moderates the effects of AA and SDO through the mediating construct of stereotype application. We test these predictions in two studies using different samples. Study 1 tests the direct effects of AA, SDO beliefs, job status, and their interactions on evaluations of an African-American employee. Study 2 examines the mediating cognitive process of stereotype application that links AA, SDO beliefs, and job status to employee evaluations. Both studies used a similar experimental paradigm that presented business students with a fictional hiring decision in which an African-American job candidate was hired in a company that either had or did not have a stated AA policy. The job for which the candidate was hired was manipulated so that it was either a high (manager) or low (maintenance technician) status position. We now explain how SDO and job status influence social cognition when people are asked to make evaluative judgments about an African-American AA beneficiary.

Theoretical Background

Social Perception and Motivated Cognition

Models of social perception suggest that peoples' judgments about others are often influenced by the stereotypes they hold about the group or groups to which the person being perceived belongs (Devine, 1989).

¹The activation of a stereotype does not necessarily mean that it will be applied. When perceivers apply a stereotype to a member of a stereotyped group, it can be assumed that they have also activated the stereotype. Nevertheless, when a stereotype is not applied, it cannot be assumed that it was not activated because people do not always apply their activated stereotypes (Gilbert & Hixon, 1991). In our study, we measure stereotype *application* because we examine how variables influence *explicit* judgments about individual members of a group.

Stereotypes can be useful for reducing informational complexity (Devine, 1989), but they can also lead people to draw erroneous or biased conclusions about others. These conclusions can impact inter group relations by activating a cognitive process whereby subsequent judgments are constructed to confirm initial inferences (Taylor & Crocker, 1981). A key theoretical question therefore becomes: What variables affect the motivation to make the initial stereotypic inferences that drive the process of perceptual confirmation?

Recall that a criticism of AA is that it can stigmatize its beneficiaries by leading people to question their abilities and qualifications. A theoretical explanation for why such stigmatization can occur is that AA draws attention to the social categories that define the members of beneficiary groups (e.g., African Americans, women; Kunda & Spencer, 2003). As a result, negative stereotypes about those groups may be activated (Kunda & Spencer, 2003). Once activated, some people may apply these stereotypes leading them to negatively evaluate AA beneficiaries. This can occur because AA provides a plausible external attribution for a person's achievements, thereby allowing the perceiver to discount alternative internal attributions for their success (Heilman et al., 1992; Kelley, 1973; Resendez, 2002). The above reasoning suggests that a possible consequence of implementing an AA policy is that it may influence whether or not negative stereotypes are activated and sometimes applied when perceivers encounter a member of an AA beneficiary group. There is some evidence supporting this argument.

Northcraft and Martin (1982) asked 32 participants to match five resumes to five recent hires, one of whom was African American. When told that the company needed to hire an African American to satisfy its affirmative action obligations, they paired the African-American employee with the weakest resume at a level higher than chance. In another study, Garcia, Erskine, Hawn, and Casmay (1981) had White male and female undergraduates evaluate minority applicants to graduate schools in psychology. The minority applicant was evaluated less favorably when commitment to affirmative action was emphasized. In a third study, Heilman et al. (1992), showed that people evaluated a coworker as less competent when led to believe the coworker benefited from AA. Finally, Resendez (2002) found that an African-American AA beneficiary was perceived as less competent than an African-American non beneficiary. Taken together, these studies suggest that the use of AA in organizations may stigmatize AA beneficiaries. The following hypothesis tests this argument:

Hypothesis 1: People will evaluate an African-American AA beneficiary more negatively compared to an African-American non beneficiary.

The above hypothesis is not new and we treat it simply as the foundation for more complex predictions involving SDO and job status. In the context

of an AA hiring decision involving an African American, we hypothesize that what may also influence stereotype application are people's beliefs about relationships between dominant and subordinate groups in wider society. The application of more negative stereotypes as a function of such beliefs is consistent with the predictions of social dominance theory.

The Psychology of Group-Based Dominance

Social dominance theory (SDT) is an integrative framework that tries to explain the sources of group-based prejudice and oppression (Pratto, 1999; Pratto et al., 1994; Sidanius & Pratto, 1999). According to SDT, every complex society is characterized by the existence of a group-based hierarchy in which at least one group is dominant over at least one other group, which occupies a subordinate position, and the former enjoys a disproportionate share of privilege. The theoretical and empirical contribution of SDT rests on the construct of social dominance orientation (SDO), which is defined as "the degree to which individuals desire and support a group-based hierarchy and the domination of 'inferior' groups by 'superior' groups" (Sidanius & Pratto, 1999, p. 48). A considerable amount of empirical research (see Sidanius & Pratto, 1999) indicates that SDO may be among the most important variables for explaining whether people accept or reject cognitions that either promote or attenuate inequality. These motivations presumably influence the adoption of certain beliefs, attitudes, or values that justify group-based inequality (Jost & Banaji, 1994; Pratto et al., 1994). In support of this argument, SDO has been shown to reliably predict a range of ideologies and political beliefs linked to group-based dominance hierarchies. For example, high SDO scorers have been shown to be more prejudiced, politically conservative, favorable to the military, and patriotic (Pratto et al., 1994; Sidanius & Pratto, 1999). Low scorers have reported more favorable attitudes towards women's and gay rights, and social programs in general (Pratto et al., 1994), including AA (e.g., Federico & Sidanius, 2002; Jost & Thompson, 2000).

The core beliefs associated with SDO legitimize group-based dominance and are psychologically functional because they satisfy a need to believe that dominant and subordinate groups' positions in life are deserved and that the world is just and fair. One of the most effective ways to justify one group's privileged position and another group's relative disadvantage is to attribute negative characteristics to members of the latter group (Lerner, 1980), which legitimizes their social, economic, and political subordination (Jost & Banaji, 1994). We propose that people high in SDO are more motivated to cognitively justify group based hierarchies than people who are low in SDO. As a result, the former are more likely to apply negative stereotypes they may hold about subordinate groups (e.g., African Americans) leading them to evaluate that group member more

negatively. Moreover, these negative judgments will occur regardless of whether or not the African-American employee has benefited from AA. The following hypothesis tests this prediction:

Hypothesis 2: People high in SDO will evaluate an African-American employee more negatively than people low in SDO.

Although there are sound theoretical reasons for predicting that SDO will directly affect evaluations of an African-American employee, we hypothesize a higher-order interaction involving AA. Specifically, we hypothesize that the motivation to evaluate an African-American employee more negatively among people high in SDO is strengthened if they also believe that the employee has benefited from AA. This amplifying of the SDO effect will occur because an AA policy makes group category membership more salient, and its implementation challenges the legitimacy of an existing group-based dominance hierarchy. As a result, people who favor and accept such hierarchies should be highly motivated to engage in cognitive and ideological work to defend them. One way to do this is to devalue those who might benefit from a hierarchy attenuating policy like AA and to attribute their successes to the policy rather than to their individual merits or abilities. The following hypothesis tests this argument:

Hypothesis 3: The negative effect of SDO on evaluations specified in Hypothesis 2 is stronger if the employee is perceived to have benefited from AA than if AA is not mentioned.

The predictions involving SDO are individual-level explanations for motivated social cognition. We now consider a social structural variable that might provide a reason for people to make more favorable evaluations about an African-American AA beneficiary: the status of the job for which the AA beneficiary is hired.

Job Status

Research shows that people hold trait-like stereotypes about those in high and low status positions, believing, for example, that the former are more competent, intelligent, and even better looking than the latter (Carli & Eagly, 1999; Humphrey, 1985; Sande, Ellard, & Ross, 1986). Higher status individuals are also judged with more leniency than lower status individuals, who are evaluated with stricter standards (Foschi, 2000). These findings support the existence of a positive stereotypic bias towards high status persons. One reason such stereotypes are particularly likely to be applied in organizations is that the social system consists of well-defined roles associated with varying levels of prestige, responsibility, and power. These roles serve as status labels that define the social rank of the person occupying that role and the qualities required to attain it (cf.

Carli & Eagly, 1999). For example, being assigned the role of a manager confers a specific status on an employee relative to employees in other organizational roles. This conferred status can lead people to draw certain inferences about the attributes possessed by the person who occupies that role (cf. Carli & Eagly, 1999; Fiske, Cuddy, Glick & Xu, 2002). Thus, we expect job status to have a positive effect on evaluations of an African-American employee whether or not they are believed to have benefited from AA. The following hypothesis tests this prediction:

Hypothesis 4: People will evaluate an employee more positively if they are hired for a high rather than a low status job.

Of greater interest to us, though, is whether the positive stereotypes associated with a high status role can influence evaluations of an African-American employee who benefits from AA. In the U.S., African Americans are perceived as being lower in social and economic status than Whites and even other minorities (Sears et al., 2000). However, perceptions and stereotypes about *individual* African Americans may be affected by factors such as their level of education and career achievement. For example, Fiske et al. (2002), found that professional African-Americans were considered to be as competent as other U.S. subgroups with high status and competence, such as Asians and rich people. Poor African Americans, however, were viewed as incompetent. More direct support for our hypothesis is offered by Heilman et al. (1992), who asked a sample of White male adults to think about a non traditional (minority) coworker and report their perceptions of this person. Results indicated that the presumed role of AA in the hiring decision was greater when the target beneficiary was at a lower level in the organization relative to the respondent than when the beneficiary was at the same or at a superior level than the respondent. In addition, when the AA beneficiary was higher in the organizational hierarchy than the respondent, perceptions of the target's projected career progress were not associated with presumed AA status. These findings suggest that when an African-American employee is perceived to have benefited from AA, the *job* for which he or she is being hired can affect the evaluations others make about that beneficiary such that the evaluations should be more positive if the job has high rather than low status. This hypothesis is consistent with the argument that social roles can influence the interpretation of social information such that when an African-American target is evaluated in the context of a high status role (e.g., a lawyer), negative biases against African Americans as a group may be attenuated (Barden, Maddux, Petty, & Brewer, 2004; Dasgupta & Greenwald, 2001; Devine & Baker, 1991).

We hypothesize that when an African American is perceived as having benefited from AA, peoples' evaluations will be influenced by the

organizational role for which the beneficiary is selected. If the beneficiary is hired for a high status job, it can activate positive *role-based* stereotypes that might then be applied to the process of making evaluative judgments. As a result, the employee hired for a high status position is likely to be evaluated positively even if he or she has benefited from AA. If the employee is hired for a low status job, then less positive role-based stereotypes will be activated, and the employee who is perceived as having benefited from AA will be evaluated more negatively than an employee who has not benefited from AA. These arguments suggest that stereotype application may be inhibited if a different stereotype, perhaps based on an organizational role, becomes salient (Kunda & Spencer, 2003). The following hypothesis tests this prediction:

Hypothesis 5: The negative effect of AA on evaluations specified in Hypothesis 1 is weaker if the employee is hired for a high rather than low status job.

Similarly, the status of the job for which an African-American employee is hired may influence the relationship between SDO and evaluative judgments. If an employee is hired for a high rather than low status job, positive role-based stereotypes might inhibit the application of negative stereotypes of African-Americans among those with high SDO beliefs. As a result, the negative effect of high SDO on performance expectations may be weakened when the employee is hired for a high rather than low status job. The following hypothesis tests this prediction:

Hypothesis 6: The negative effect of SDO on evaluations specified in Hypothesis 2 is weaker if the employee is hired for a high rather than low-status job.

Method

Sample and Procedures

The sample for Study 1 consisted of undergraduate students enrolled in introductory organizational behavior classes at a mid-Atlantic state university. Students participated in the study to fulfill a course requirement. We adapted a methodology that Heilman and her colleagues used to examine impressions of female AA beneficiaries (e.g., Heilman et al., 1992, 1998). Data were collected in two parts. In Part I, participants completed an electronic pre questionnaire assessing SDO, demographics, and other variables unrelated to the present study. A minimum of 1 week later, participants were given stimuli for evaluating a hypothetical job candidate. All participants were told they were taking part in a larger research program investigating personnel selection and placement processes. In Part II,

participants were given packets that included a job description and an employment application that contained the AA and job status manipulations and a second survey containing the manipulation checks and dependent measures. Code numbers were used to match participants' electronic pre questionnaire responses to their responses on the candidate evaluation materials. The job description, presented in the form of a recruitment bulletin, described a position at "Corporate Paper Company." Included were the job requirements, general work responsibilities, and salary information.

Following Heilman's procedure, a photograph (about 1.5 square inches) of an African-American male was included in the upper right hand corner of the dossier to indicate the race of the employee (Heilman et al., 1992 and 1998, utilized a photo of a White female). A pilot test was conducted to ensure the photograph did not sway responses. Photographs of six individuals, three White males and three black males, were rated by undergraduates ($n = 120$) on the dimensions of attractiveness, the appearance of success, and intelligence. The individual in the photograph chosen for the present study was rated at the group average on the dimensions of success and intelligence, and slightly above the average on the dimension of attractiveness. In all conditions, the hire was described as being 28 years old, having "graduated with honors," and as currently participating as a volunteer in a "community learn-to-read program" (cf. Heilman et al., 1992, 1998). Finally, like Heilman and colleagues, the bottom section of the application form, marked "For clerical purposes only," had an area designated for indication of the hiring decision and start date of employment. The handwritten word "Hire" appeared in this space, accompanied by a starting date.

Three-hundred and fifty nine students completed the electronic survey. Of these, 244 completed the second survey and provided usable data on all study variables. Fifty-four percent of the participants were female. The majority (89%) identified themselves as Caucasian. Forty-seven percent were working part time at the time of the study and 51% were not working at all. They averaged 5.3 years of work experience ($SD = 2.1$).

Experimental Manipulations

Following Heilman and colleagues' (Heilman et al., 1992, 1998) procedures, participants were provided with Corporate Paper Company's human resources/hiring policy, under the heading "Policies and Procedures" with a subheading, "Subject: Hiring" prior to being presented with the job description and employee information. It was here that the AA condition manipulation was introduced.

Affirmative action policy. In the *no-AA condition*, the following statement was presented under the “Subject: Hiring” subheading: “Corporate Paper Company (CPC) is an equal opportunity employer and is committed to promoting a fair distribution of employment opportunities.” In the *AA condition*, the statement presented under the subheading “Subject: Hiring,” read, “Corporate Paper Company (CPC) is an equal opportunity employer and has an affirmative action employment policy. CPC is committed to promoting a fair distribution of employment opportunities as well as to broadening the overall talent pool by actively seeking female and minority employees. When applicants are determined to have the minimum job qualifications, CPC gives primary consideration to hiring women and members of minority groups.”

Following Heilman et al.’s (1992, 1998) procedure, the bottom section of the application form, marked “For clerical purposes only,” had an area designated to indicate the hiring decision and start date of employment. In both the AA and non-AA conditions, the handwritten word “Hire” appeared in this space, accompanied by a starting date. In the AA condition, the handwritten parenthetical phrase “(Affirmative action hire)” appeared under the word “Hire.” In both the AA and non-AA conditions, the “Policies and Procedures” section of the employment dossier closed with the following statement: “In accordance with CPC’s Employment Program, whenever a position becomes available, the Company will comply with the Employment Policy Statement (Policy No. 201, Section D)”, referencing the policy descriptions (manipulations) described above (cf. Heilman et al., 1992, 1998).

Job status. We manipulated information about the organizational role for which the AA beneficiary or non beneficiary was being hired to indicate whether the jobs were either high or low status. The *low status* job was a “maintenance technician.” The duties described in the information packet included “cleaning and maintaining equipment and supplies,” and working “directly under the maintenance superintendent to develop and implement janitorial procedures.” The low status position description concluded with “Position requires strong attention to detail and task completion skills. Effective interpersonal skills needed to work with diverse personnel (\$20,000–\$25,000).” The *high status* job was a “production manager,” whose responsibilities included “directing and coordinating activities concerned with the production and distribution of paper” and “supervising and coordinating activities of workers engaged in operating paper making machines.” The high status position description concluded with “Works directly over the production staff to develop and implement procedures to improve product quality. Position requires strong administrative and decision-making skills. Effective interpersonal skills needed to supervise diverse personnel (\$55,000–\$60,000).”

In both status conditions the hiree's educational background and prior work experiences described in the application *satisfied the minimum job requirements* as stated by the job description. This means that in neither case was the job candidate *unqualified* for the position, an assumption that critics of AA often make about those hired as a result of the policy. The hiree in the *high status* condition was described as having an MBA from a major mid-Atlantic state university and as having previous managerial experience (i.e., associate manager). The hiree in the *low status* condition was described as having an apprentice degree from a technical trade school and experience installing power connections, fuse boxes, and so forth.

Measures

Social dominance orientation. Sidanius and Pratto's (1999) 16-item instrument was used to assess SDO via the online web survey. The instrument asks respondents to indicate their attitudes towards various statements on a seven-point Likert-scale (1 = *very negative*, 7 = *very positive*) that reflect either support for group-based hierarchies (e.g., "Superior groups should dominate inferior groups," "It's okay if some groups have more of a chance in life than others") or the endorsement of hierarchy attenuating goals (e.g., "Group equality should be our ideal," "No one group should dominate society"). Items were averaged to form a scale ($\alpha = .90$) and scored so that a high score indicates high SDO.

Evaluative judgment. We used five items from Heilman et al. (1992, 1998) to measure participants' evaluations of the hiree. Three of these items assessed expectations concerning job-related performance: "How do you think this individual would be as a coworker?" "How competently do you expect this individual to perform this job?" "How effective do you think this individual will be at doing the work?" The other two items—"How likely do you think this individual will move up in the organization?" and "If the individual gets a promotion, how quickly do you think it will happen?"—assessed the employee's likely career progression. The five items were included in the job candidate evaluation packet presented at Time 2. Responses were made on nine-point scales (e.g., 1 = *not at all competently/not at all effective*, and 9 = *very competently/very effective*).

Heilman et al. (1992) analyzed these measures separately but did not examine the possibility that the items may tap a common construct. We also presumed that the measures tap different evaluative dimensions, but stronger empirical evidence is needed to confirm this. Accordingly, we conducted a test of the dimensionality of the five employee evaluation items by performing a confirmatory factor analysis (CFA) using AMOS 5 (Arbuckle, 2003). First, we performed a CFA on the hypothesized two-factor model. The results showed that the model fit the data extremely well

($\chi^2(4) = 9.42, p = .05, GFI = .99, NFI = .99, CFI = .99, RMSEA = .07$). Then, to establish that the items do not load on a single factor, we compared the fit of the two-factor model to a single factor model. The one-factor model fit the data poorly ($\chi^2(5) = 137.57, p < .001, GFI = .85, NFI = .79, CFI = .79, RMSEA = .33$), and a comparison of the models showed that a two-factor model produced a significant improvement in fit ($\chi^2_{diff(1)} = 128.15, p < .001$). These results provide evidence that two factors underlie the evaluation items and so we averaged the items loading on each factor to form two scales. The Cronbach's alpha reliability was .84 for both the job performance and career progression scales.

Control variables. We controlled for participants' political orientation because it has been shown that people with more conservative political orientations are more likely to oppose AA than those with more liberal political orientations (Sidanius, Pratto, & Bobo, 1996). Although SDO has been found to correlate with political orientation, they are not identical constructs (Sidanius et al., 1996); hence, we included political orientation as a control. We measured this construct by asking participants to indicate their political orientation using a nine-point (1 = *extremely liberal*, 9 = *extremely conservative*) index. We also controlled for sex because women have been shown to have more favorable attitudes towards AA than men (Kravitz et al., 1997), and there is evidence that female perceivers view others more positively than male perceivers (Winquist, Mohr, & Kenny, 1998), which could influence their evaluations of the job hire. Sex was dummy coded in the analysis (0 = *male*, 1 = *female*). Whites have been found to be less favorable to AA as a policy than non-Whites (Kravitz et al., 1997). Such attitudes might influence their evaluations of the African-American employee. Consequently, we controlled for the effects of race using dummy coding with non-Whites serving as the reference category (1 = *Whites*, 0 = *non-Whites*).

Results

Descriptive statistics and correlations among the study variables are shown in Table 1.

Manipulation Checks

We assessed the effectiveness of the AA manipulation by asking participants whether the company in which the job candidate was hired had an AA policy. Ninety-six percent of the participants in the AA condition reported that the company had some type of policy. However, even though AA was not mentioned in the stimulus materials for the no AA condition, 18% of the participants believed the organization had some type of AA

TABLE 1
Descriptive Statistics and Correlations for Study 1 Variables

Variable	M	(SD)	1	2	3	4	5	6	7	8
1. Job-related performance	7.20	(1.11)	(.84)							
2. Career progression	5.77	(1.61)	.49***	(.84)						
3. Politically conservative	4.75	(1.58)	-.15*	.03	—					
4. White	.89	(.31)	.00	.01	.10	—				
5. Female	.53	(.50)	.03	-.04	-.03	-.03	—			
6. Affirmative action (AA)	.45	(.50)	-.05	-.05	-.05	.05	-.09	—		
7. SDO	2.64	(.90)	-.25***	-.14*	.11	.08	-.23***	.05	(.90)	
8. High job status	.51	(.50)	.29***	.48***	.04	.01	-.18**	.04	-.01	—

Note. N = 244. *p < .05, **p < .01, ***p < .001. Cronbach's alpha reliabilities are shown along the diagonal.

policy. One possible explanation for this result is that some participants in the no AA condition *assumed* that because the employee hired for the job was an African American the organization *must* have an AA policy, even if it was not explicitly described as having one in the information materials. This is not entirely surprising as Heilman and Blader (2001) found that gender-based AA (specifically, preferential selection) was assumed among participants evaluating a female employee even when information regarding the organization's hiring policy was not provided. Nevertheless, we examined the correlation between misperceptions about the company's AA policy and evaluative judgments to see if they might have any effect on the dependent variables. We found no significant zero-order correlation between these misperceptions and evaluative judgments. We also examined whether these misperceptions might be related systematically to the SDO scores, sex, race, and political orientation of the participants and, again, found no statistically significant pattern. Consequently, we retained all of the study participants to minimize data loss.

We assessed whether the employee was perceived as having met the educational and work experience requirements of the job in both AA conditions by asking participants to indicate the extent to which the candidate met these requirements on a nine-point (1 = *not at all*, 9 = *completely*) Likert-scale. Across all conditions, average scores on the education and work experience items were 8.2 ($SD = 1.4$) and 6.3 ($SD = 2.1$), respectively. These scores were above the midpoint of the nine-point scale, indicating that participants believed the employee had satisfied the minimum requirements for the position. A *t*-test showed no significant differences in either education ($t(245) = 1.60, ns$) or work experience ($t(245) = -.56, ns$) ratings across the two AA conditions.

We assessed the effectiveness of the job status manipulation by asking participants to rate the job for which the candidate was being hired on four 9-point bipolar adjective scales; undesirable–desirable, low status–high status, ordinary–prestigious, and unimportant–influential. The items were recoded and averaged so that a high score indicated high perceived status ($\alpha = .92$). A *t*-test showed that participants' perceptions of job status differed significantly for the high and low status conditions, $t(245) = 18.73, p < .001$. The mean status ratings were 6.1 ($SD = 1.0$) and 3.5 ($SD = 1.2$), for the high and low status jobs, respectively.

Hypothesis Tests

We used hierarchical regression to test the study hypotheses. We entered the control and independent variables in Step 1 and the two-way interactions involving AA and SDO (Hypothesis 3), AA and job status (Hypothesis 5), and SDO and job status (Hypothesis 6) in Step 2. The

TABLE 2

Hierarchical Regression of Evaluative Judgments on SDO, AA, and Job Status

Variables	Job-related performance		Career progression	
	Step 1	Step 2	Step 1	Step 2
(1) Politically conservative	-.14*	-.15*	.02	.02
(2) White	.03	.02	.02	.02
(3) Female	.03	.01	.01	.01
(4) AA	-.05	-.05	-.06	-.07
(5) SDO	-.23**	-.22**	-.13*	-.14*
(6) High job status	.30**	.30**	.48**	.49**
(7) AAX SDO		-.15*		-.05
(8) AAX Job status		.02		.14*
(9) SDO \times Job status		.08		.07
R^2	.17**	.20**	.25**	.28**
ΔR^2		.03*		.03*

Note. Standardized regression weights are presented. * $p < .05$, ** $p < .001$.

variables were centered to minimize multicollinearity among the interaction terms and their components (Aiken & West, 1991). The results of this analysis are shown in Table 2.

Hypothesis 1 states that people would evaluate an AA candidate more negatively than a non-AA candidate. We found no support for this hypothesis because AA had no significant main effect on either expected job performance ($b = -.05$, *ns*) or career progression ($b = -.07$, *ns*). Hypothesis 2 states that people high in SDO would evaluate an African-American employee more negatively than those who are low in SDO. The significant negative relationship between SDO and both job performance ($b = -.22$, $p < .001$) and career progression ($b = -.14$, $p < .05$) supports this hypothesis.

Hypothesis 3 states that although people high in SDO would evaluate an African-American AA employee more negatively than people low in SDO, the effect would be stronger if the employee is perceived to have benefited from AA. The two-way interactions as a set explained a significant amount of additional variance in evaluations of likely job performance ($\Delta R^2 = .03$, $p < .05$). Inspection of the individual regression weights revealed that the AA \times SDO interaction was significant ($b = -.15$, $p < .05$). Figure 2a shows the simple slopes of the relationship between SDO and job performance expectations in the AA and no AA conditions.

Analysis of the simple slopes revealed that the negative effect of SDO on performance expectations was stronger in the AA ($b = -.64$, $p < .001$) than in the no AA ($b = -.28$, $p < .05$) condition, which supports

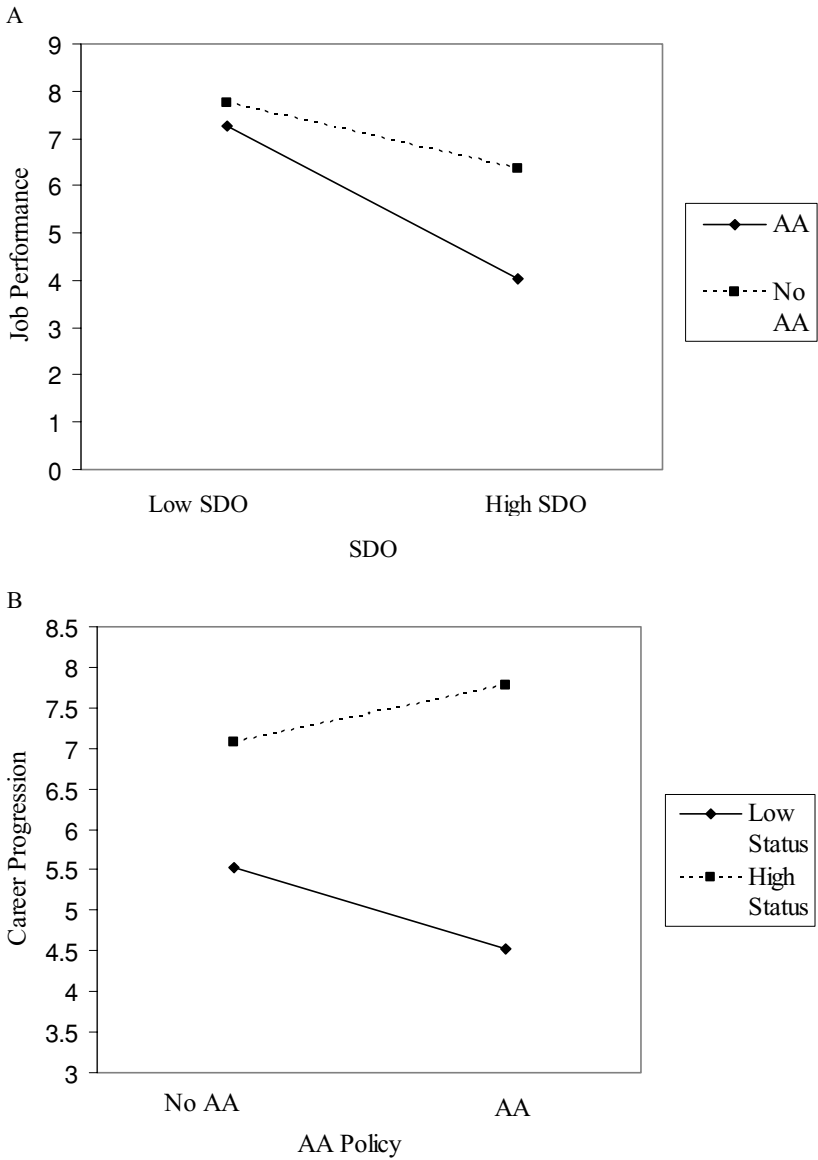


Figure 2: (A) SDO × AA Interaction Effect on Job-Related Performance Expectations. (B) Job Status × AA Interaction Effect on Expected Career Progression.

Hypothesis 3. The AA \times SDO interaction was not significant in the model predicting career progression, so Hypothesis 3 is not supported for this dependent variable.

Hypothesis 4 states that people would evaluate an employee hired for a high status job more positively than one hired for a low status job. The significant positive relationship between status and both job performance ($b = .30, p < .001$) and career progression ($b = .49, p < .001$) expectations supports this hypothesis. Hypothesis 5 states that people would evaluate an African-American AA beneficiary more negatively than a non beneficiary, but this effect would be weaker if the employee is hired for a high rather than low status job. Hypothesis 6 states that people high in SDO would evaluate an African-American employee more negatively than people low in SDO, but this effect would be weaker if the employee is hired for a high rather than low status job.

The two-way interactions as a set explained a significant amount of additional variance in career progression ($\Delta R^2 = .03, p < .05$). Inspection of the individual regression weights reveals that the AA \times job status interaction was significant ($b = .14, p < .05$). The form of the interaction is shown in Figure 2b. Analysis of the simple slopes reveals that the effect of AA on career progression becomes *positive* when the African-American employee is hired for a high status job ($b = .74, p < .01$) whereas the effect of AA is negative, though not significant, when the employee is hired for a low status job ($b = -.22, n.s.$). This pattern supports Hypothesis 5 because it indicates that the use of AA has a less negative effect on evaluations of an African-American employee who is hired for a high rather than low status job. Indeed, people expected the high status employee to advance *faster* when they benefited from AA. The AA \times job status interaction was not significant in the model predicting expected job performance, so Hypothesis 5 is not supported for this dependent variable. There was also no significant effect of the SDO \times job status interaction in either of the models, so Hypothesis 6 was not supported.

Discussion of Study 1

We found support for our hypothesis that people high in SDO would evaluate an African-American employee's likely job performance more negatively than those low in SDO in the presence, but not the absence, of an AA policy. Results also supported the hypothesized interaction between AA and job status for career progression, but not for job-related performance. However, supporting our assertion that people in high status roles are perceived more favorably than those in low status roles, job status had a direct effect on performance expectations. The AA \times job status interaction effect is consistent with other research showing that social roles can

influence category-based social judgments. For example, Sniderman and Piazza (1993) found that when both races are portrayed within a role that is hard working, Whites were more willing to help out Blacks than other Whites. In another study, when face primes were portrayed as lawyers—a high status role—people showed an evaluative bias favoring Black over White targets (Barden et al., 2004). Taken together, these results support the possibility that contextual factors like social roles can moderate the impact of racial biases on both controlled and automatic attitudes and judgments.

The Study 1 findings suggest that in the presence of an AA policy, people high in SDO were motivated to make more pessimistic predictions about the AA beneficiary's future job performance compared with people who were low in SDO. We argued that this was a direct result of their holding ideological beliefs regarding the acceptability of group-based dominance hierarchies. We theorized that these beliefs would lead them to evaluate the AA hire more negatively because an AA policy poses a threat to existing hierarchical relations by advancing the economic and social positions of subordinate (e.g., African Americans), relative to dominant (e.g., Whites), groups. We recognize that our data do not allow us to test the specific motivations that influenced the social judgments of high versus low SDO persons, so we offer this interpretation as a possible question for future research.

A finding that deserves some comment is the significant negative relationship between a conservative political orientation and expected performance. What is interesting about this finding is that conservative commentators and scholars (e.g., Thernstrom & Thernstrom, 1997; Roth, 1990; Williams, 1997) have been among the most vocal proponents of the view that AA should be eliminated because it stigmatizes the very people it was meant to help. And yet, in Study 1, the persons most likely to evaluate an African-American employee negatively regardless of their AA status were those who were more politically conservative. It may be that the people who are most likely to criticize AA because they believe its beneficiaries are wrongly stigmatized are the very same people who are also most likely to engage in such stigmatization. Future studies should investigate this possibility to see if this interpretation of our data is supported in other settings.

An important limitation of Study 1 is that it did not directly test an intervening construct in our theoretical model. According to our model, AA, SDO, job status, and their interactions influence evaluative judgments through the *application* of negative stereotypes about African Americans. The purpose of Study 2 was to test this hypothesis and to also see if we could replicate the significant effects found in Study 1 in a new sample.

Study 2: Stereotype Application as a Mediating Cognitive Process

We proposed in Study 1 that more negative stereotypes about African Americans are likely to be applied by people who are high rather than low in SDO and that this effect becomes stronger if they believe the employee has benefited from AA. We also argued that when an AA beneficiary is hired for a high status job the activation of a positive role-based stereotype can neutralize the negative group-based stereotypes about African Americans that may have been activated by the use of AA. Although we found empirical support for both of these predictions, what we do not know is how the *content* of the stereotypes elicited in response to the target employee might affect evaluative judgments. We address this question in Study 2 by applying a stereotype content model (SCM) proposed by Fiske, Glick, and their colleagues (Fiske, 1998; Fiske et al., 2002; Fiske, Xu, Cuddy, & Glick, 1999). The SCM posits that qualitative differences among group stereotypes are captured by two dimensions: *competence* and *warmth*. To our knowledge, no previous study of AA has examined how the content of stereotypes might be influenced by the use of AA. Study 2 was conducted to fill this gap and test the mediating processes in our theoretical model.

Dimensions of Group Stereotypes

According to the SCM, some group stereotypes (e.g., housewives, disabled people, elderly people) elicit disrespect based on a perceived lack of competence, others elicit dislike based on a perceived lack of warmth (e.g., Asians, Jews, career women), and still others elicit both dislike and disrespect (e.g., welfare recipients). The competence and warmth dimensions that distinguish group stereotypes are functional for perceivers because they help people infer others' intentions (i.e., warmth) and their ability to pursue them (i.e., competence). Fiske et al. (2002), suggest that different group-based stereotypes that vary along the dimensions of competence and warmth may be applied when people make evaluative judgments about an African-American AA beneficiary. We extend their model by proposing that these group-based stereotypes may also be influenced by SDO and job status.

Fiske and her colleagues (2002) tested their model in four studies and their results shed light on how differences in stereotype content might account for the effects we found in Study 1. One of their findings was that African Americans *as a group* were stereotyped as being at the midpoint of the warmth and competence dimensions, along with blue-collar workers, Hispanics, and young people. Thus, when people consider African Americans as an abstract social category, it appears that they do not automatically apply an extreme negative stereotype to them. Instead,

different African-American *subgroups* elicit different kinds of stereotypes. Poor African Americans, for example, were stereotyped as being low in warmth and competence, along with poor Whites and welfare recipients, whereas African-American professionals were stereotyped as being high in competence, but average in warmth, along with Asians, businesswomen, feminists, Jews, northerners, and rich people. Fiske and colleagues (2002) speculated that individual differences among perceivers may account for some of the variation in the content of African-American stereotypes. One reason this may occur is that these individual differences motivate people to apply certain African-American subgroup stereotypes (e.g., athlete, welfare recipient) when forming social judgments.

We explore this possibility by hypothesizing that SDO is an individual difference variable that may influence the motivation to apply certain subgroup stereotypes about African Americans prior to making an evaluative judgment. Based on the theoretical postulates underlying the SDO construct, and on empirical research linking SDO measures of anti-Black affect and racism (Pratto et al., 1994; Sidanius et al., 1996), we propose that SDO can influence both the competence and warmth dimensions of the African-American stereotype. If those high in SDO are motivated to justify the subordinate positions of African Americans as a group by denigrating an African-American employee, then it seems reasonable to assume that they can maximally denigrate that employee by applying a group stereotype that is low on *both* the competence and warmth dimensions (e.g., Black welfare recipient). The following hypothesis tests this argument:

Hypothesis 7: People high in SDO will perceive an African-American employee as being less competent and warm than people low in SDO.

Another of Fiske et al.'s (2002) findings was that the perceived status (e.g., holding prestigious jobs) of the group being stereotyped was positively correlated with perceived competence, whereas a perception that the group was in competition with a "mainstream" group (e.g., Whites, the middle class, Christians) was negatively correlated with warmth. Taken together, these findings provide a theoretical rationale for hypothesizing that job status and the use of AA can influence the content of an applied group stereotype about an African-American employee. One hypothesis that can be derived from Fiske et al.'s (2002) results is that when an African American is hired for a high status job, people are more likely to apply an African-American subgroup stereotype (e.g., Black professional) that is more favorable along the competence dimension than when the African American is hired for a low status job. The following hypothesis tests this prediction:

Hypothesis 8: People will perceive an African-American employee as being more competent if they are hired for a high rather than a low status job.

A second hypothesis follows directly from the social structural explanation of stereotype content. If a perceiver knows that an African-American employee benefited from AA, it can motivate him or her to apply a subgroup stereotype that is lower on the competence dimension (e.g., Black welfare recipient). This hypothesis is consistent with the AA stigmatization argument that if someone is hired through AA, it gives perceivers a reason to attribute their selection to something other than competence (Heilman et al., 1992). Although we did not find any support for this prediction in Study 1, we wanted to test this hypothesis again on a different outcome because prior research (e.g., Heilman et al., 1992; Northcraft & Martin, 1982; Resendez, 2002) has supported the effect.

Along with its possible effect on the competence dimension, there are theoretical reasons for expecting the perception that an African-American employee has benefited from AA policy to influence the warmth dimension. Arguably, the use of AA in organizations can heighten the perception that African-American beneficiaries are directly competing with other groups (e.g., non-AA beneficiaries) for a critical social resource. According to Fiske et al. (2002), this should lead perceivers to stereotype AA beneficiaries as less warm. Indeed, Fiske and colleagues found that the least favorable stereotypes (low competence, low warmth) were associated with groups viewed as free loaders whose interests detract from others and create zero-sum competition. Based on the preceding arguments, the following hypothesis was tested:

Hypothesis 9: People will perceive an African-American employee as being less competent and warm if they are perceived as having benefited from AA than when AA is not mentioned.

The above hypotheses predict direct relationships between the independent variables and stereotype content. We can also derive more complex predictions that explain the AA \times SDO and AA \times job status interactions found in Study 1. Turning first to the AA \times SDO interaction, we hypothesized that people high in SDO are more likely to apply a group stereotype to an African-American employee that is lower on the competence and warmth dimension than people who are low in SDO (Hypothesis 7). However, if the use of AA also lowers perceptions of competence and warmth (Hypothesis 9), then the presence of AA should strengthen the effect of high SDO on stereotype content. That is, high SDO persons will be even more likely to evaluate an African-American employee as being low in warmth and competence than low SDO persons in the presence of an AA

policy than when no such policy is used. The following hypothesis tests this argument:

Hypothesis 10: The negative effects of SDO on perceptions of competence and warmth specified in Hypothesis 7 are stronger when the employee is perceived to have benefited from AA than when AA is not mentioned.

We follow a logic similar to the one just described to predict an AA \times job status interaction. If people apply a group stereotype that is higher along the competence dimension when an African-American employee is hired for a high rather than low status job (Hypothesis 8), then this stereotype might supplant or neutralize the application of a low competence stereotype when the employee is perceived as having benefited from AA (Hypothesis 9). In other words, people will not evaluate the high status AA beneficiary as less competent than a high status non-AA beneficiary. However, they will evaluate a low status AA beneficiary as less competent than a low status non beneficiary. The following hypothesis tests this prediction:

Hypothesis 11: The negative effect of AA on perceptions of competence specified in Hypothesis 9 is weaker when the employee is hired for a high rather than low status job.

It is important to note that our hypotheses involving job status refer only to the competence but not the warmth dimension. These predictions are based on a direct application of Fiske et al.'s (2002) findings, which indicated that although professional African Americans were stereotyped more favorably along the competence dimension, they were not as favorably stereotyped along the warmth dimension. Hence, we make no prediction about the effects of job status on judgments of an African-American employee's warmth.

Based on our theoretical model, we expect the effects of SDO, AA, job status, and their interactions on evaluations of an African-American employee to be mediated by the application of stereotypes that vary along the dimensions of competence and warmth. The following hypotheses test these mediated relationships:

Hypothesis 12: Perceptions of competence and warmth mediate the direct effects of AA, SDO, and job status on evaluative judgments of an African-American AA beneficiary.

Hypothesis 13: Perceptions of competence and warmth mediate the effects of the SDO \times AA and AA \times job status interactions on evaluative judgments of an African-American AA beneficiary.

Study 2 Method

Sample and Procedures

We used the same materials as Study 1. However, the Time one (*T1*) survey in Study 2 was completed by hand rather than electronically in three undergraduate business courses. Participants were asked to provide a code name or number on their *T1* surveys so that they could be matched with the second survey collected at Time two (*T2*), and to record that code name in their syllabi for reference at *T2*, which took place in the same classes four weeks after *T1*. At *T2*, participants were given packets including the study manipulations and dependent measures.

Participants were undergraduate students at a large Southeastern state university enrolled in junior and senior level business courses. Participation was voluntary. One-hundred and ninety nine students completed both *T1* and *T2* surveys; one hundred and ninety provided usable data on all study variables. Fifty-five percent of the participants were male, and similar to the study one sample, the vast majority (91%) identified themselves as Caucasian. Fifty-two percent were working part-time at the time of the study and 42% were not working at all. They averaged 3.8 years of work experience ($SD = 2.7$).

Experimental Manipulations

The manipulations were identical to those used in Study 1.

Measures

Social Dominance Orientation. SDO was assessed using the Sidanius and Pratto's (1999) 16-item instrument ($\alpha = .90$).

Stereotype application. Our approach to measuring stereotype application assumes that the influence of a particular subgroup stereotype on the evaluation of an individual African-American employee can be revealed through judgments about the traits that the employee possesses. There is a rich literature in social cognition that supports this assumption. For example, racial labels can automatically cue stereotypic trait associations (Devine, 1989) which, as a collective gestalt-type "schema," provide simple conceptions of out-group members (Linville, 1982). The reason is that judgments about an individual member of a stereotyped group will motivate people to draw trait inferences that are consistent with the content of that stereotype for that group. For example, if a group-based stereotype is high on competence and warmth, then the perceiver is more likely to

infer that the individual group member to which the stereotype applies has traits associated with being highly competent and warm.

Based on the above assumption, we measured stereotype application by asking respondents' to make inferences about what they thought the African-American employee was like using nine bipolar trait descriptors answered on nine-point scales. Four of these descriptors—hardworking–lazy, responsible–irresponsible, gives up easily–persistent, and untrustworthy–trustworthy—assessed the stereotype dimension of competence. The other five—extroverted–introverted, outgoing–reserved, sincere–insincere, good-natured–hostile, and warm–cold—assessed the stereotype dimension of warmth. Items were recoded so that a *high* score indicates the application of a more positively valenced group-based stereotype. The items measuring stereotype application appeared *before* the items measuring performance expectations making their ordering consistent with the theoretical model on which our predictions are based.

Evaluative judgments. We used the same three job-related performance expectations and two career progression items from Study 1.

The trait descriptors measuring stereotype application and the evaluation items are likely to be correlated not only for conceptual reasons, but also because they were answered on the same survey. Consequently, we performed a confirmatory factor analysis (CFA) on these items using AMOS 5 (Arbuckle, 2003) to assess unidimensionality. We hypothesized that the competence and warmth traits would load on separate factors as would the performance expectation and career progression items. The CFA showed that a four-factor model fit the data well ($\chi^2(71) = 167.76$, $p < .001$, GFI = .89, NFI = .90, CFI = .94, RMSEA = .08). However, as in Study 1, we conducted comparative model tests to further establish the validity of the four-factor structure. First, we compared the four-factor model to a two-factor model where the nine trait items were assigned to one factor and the evaluation items to another. The CFA showed that the two-factor model fit the data poorly ($\chi^2(76) = 356.34$) and was inferior to the four-factor model ($\chi^2_{\text{diff}(5)} = 188.58$, $p < .001$). Next, we compared the four-factor model to two three-factor models. In the first model, the trait items were assigned to a single factor and the performance expectation and career progression items were assigned to two separate factors. This three-factor model fit the data poorly ($\chi^2(74) = 255.65$) and was inferior to the four-factor model ($\chi^2_{\text{diff}(3)} = 87.89$, $p < .001$). In the second model, the trait items were assigned to warmth and competence factors, and the performance expectation and career progression items were assigned to the same factor. This three-factor model also fit the data poorly ($\chi^2(74) = 272.95$) and was inferior to the four-factor model ($\chi^2_{\text{diff}(3)} = 105.19$, $p < .001$). The results of the comparative model test supported the hypothesized four-factor structure underlying the stereotype application

and evaluation items. Consequently, we averaged the items loading on each factor to form four scales. The Cronbach's alpha reliabilities were .88, .87, .74, and .87 for the job performance, career progression, competence, and warmth scales, respectively.

Control variables. As in Study 1, we controlled for sex which was dummy coded in the analysis (0 = *male*, 1 = *female*). We also controlled for the effects of race using dummy coding with non-Whites serving as the reference category (1 = *Whites*, 0 = *non-Whites*). Although political orientation was found to predict evaluative judgments in Study 1, it is a rather broad construct that is related to many political attitudes and beliefs. Consequently, in Study 2, we wanted to control for more specific policy beliefs about AA that might be theoretically linked to peoples' judgments about an African-American beneficiary. The beliefs are two of the more prominent "principled" reasons that political conservatives (e.g., Roth, 1990; Thernstrom & Thernstrom, 1997) have offered for opposing AA on non racist or non sexist grounds. These beliefs concern (a) the potential stigmatization of AA beneficiaries and (b) the adverse effects of AA on inter group relations. We asked two questions—"Affirmative action will increase racial conflict" and "Affirmative action just increases the idea that certain groups are not as good as others"—taken from a study by Federico and Sidanius (2002) to measure negative AA beliefs. The questions were answered on a seven-point (1 = *completely disagree*, 7 = *completely agree*) Likert format and were averaged to form a scale ($\alpha = .65$).

Study 2 Results

Descriptive statistics and correlations among the study variables are shown in Table 3.

Manipulation Checks

As in Study 1, we asked participants to indicate whether they believed the company in which the job candidate was hired had an AA policy. Ninety-three percent of the participants in the AA condition reported that the company had some kind of an AA policy. However, as in Study 1, a small proportion (13%) of the participants in the no AA condition reported that the company had some type of AA policy even though AA was not mentioned at all in the stimulus materials. Again, we examined the correlation between these misperceptions and the dependent variables and mediators to see if they might compromise our results and found no significant correlations among these variables. These misperceptions were also not significantly related to SDO scores and race. However, we did find that the men in Study 2 were significantly more likely to have misperceived

TABLE 3
Descriptive Statistics and Correlations for Study 2 Variables

Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10
1. Job-related performance	6.94	(1.13)	(.88)									
2. Career progression	5.52	(1.67)	.63***	(.87)								
3. Competence	6.49	(1.27)	.68***	.58***	(.74)							
4. Warmth	6.34	(1.19)	.60***	.51***	.60***	(.87)						
5. White	.91	(.29)	.13	.11	.07	.07	—					
6. Female	.45	(.50)	-.02	.04	.14	.03	-.05	—				
7. Negative AA beliefs	4.79	(1.44)	-.07	-.06	-.12	-.17*	.24**	-.24**	(.65)			
8. Affirmative action (AA)	.45	(.50)	-.02	.07	.01	-.06	.03	.09	-.07	—		
9. SDO	2.88	(1.00)	-.13	-.20**	-.22**	-.19**	.02	-.21**	.18*	.08	(.90)	
10. Job status	.49	(.50)	.13	.35***	.37***	.21**	-.06	.14	-.10	.05	-.06	—

Note. (N = 190). *p < .05, **p < .01, ***p < .001. Cronbach's alpha reliabilities are shown along the diagonal.

the AA information than women ($\chi^2(1) = 5.91, p < .05$). This difference is accounted for in our analyses because we controlled for sex in the regressions. Because we found no evidence that the misperceptions would have any significant effect on the dependent variables and mediators, we retained all of the study participants to minimize data loss.

We assessed the effectiveness of the job status manipulation by asking participants to rate the job for which the candidate was being hired with the same four bipolar adjective scales from study one. The items were recoded and averaged so that a high score indicated high perceived status ($\alpha = .89$). A *t*-test showed that participants' perceptions of job status were significantly different as a function of the high and low status manipulations, $t(198) = 12.92, p < .001$. The mean status ratings were 5.83 ($SD = 1.22$) and 3.61 ($SD = 1.20$) for the high and low status jobs, respectively.

Hypothesis Tests

We tested the Study 2 hypotheses using hierarchical regression. Six separate regression models were fitted. Two of the models regressed perceptions of competence and warmth on the control variables, the independent variables, and the hypothesized interactions. The other four regressed evaluations of the employee's expected performance and career progression on the control variables, the independent variables, the interactions, and the hypothesized mediators. The variables were centered in all analyses to minimize multicollinearity among the interaction terms and their components.

Table 4 presents the results of regressions predicting perceptions of competence and warmth.

Hypothesis 7 states that people high in SDO would perceive an African-American employee as less competent and warm than people low in SDO. The results in Table 4 support this prediction for competence ($b = -.17, p < .05$) and warmth ($b = -.15, p < .05$). Hypothesis 8 stated that people would perceive an African-American employee as being more competent if they are hired for a high rather than low status job. This hypothesis is supported as job status was positively related to perceived competence ($b = .26, p < .001$). Although not hypothesized, job status was also positively related to perceived warmth ($b = .22, p < .01$). Hypothesis 9 states that people would perceive an African-American employee as being less competent and warm if they were also perceived as having benefited from AA than when AA is not mentioned. This hypothesis was not supported as AA had no significant effect on either competence or warmth.

Turning to the interactions, Hypothesis 10 states that the effect of SDO on perceptions of competence and warmth is stronger when the

TABLE 4
*Hierarchical Regression of Competence and Warmth on AA, SDO,
 and Job Status*

Variables	Competence		Warmth	
	Step 1	Step 2	Step 1	Step 2
(1) White	.14	.14	.13	.14*
(2) Female	.05	.05	-.06	-.05
(3) Negative AA beliefs	-.10	-.10	-.18*	-.20**
(4) AA	-.01	-.01	-.07	-.08
(5) SDO	-.17*	-.17*	-.15*	-.15*
(6) Job status	.25***	.26***	.21**	.22**
(7) AAX SDO		-.07		-.20**
(8) AA × Job status		.02		.05
R^2	.13***	.13***	.11**	.16**
ΔR^2		.01		.04*

Note. Standardized regression weights are presented. * $p < .05$, ** $p < .01$, *** $p < .001$.

employee is perceived to have benefited from AA than when he or she has not benefited. Hypothesis 11 states that the effect of AA on perceived competence is weaker when the employee is hired for a high rather than low status job. In the model predicting competence, the AA × SDO and AA × job status interactions did not explain significant variance beyond the main effects ($\Delta R^2 = .01$, *ns*). Hypothesis 10 was therefore not supported for this dimension of the SCM, and no support was found for Hypothesis 11. The interactions did explain a significant amount of additional variance in the model predicting warmth ($\Delta R^2 = .04$, $p < .05$). Inspection of the individual regression weights for the interactions reveals that the AA × SDO interaction was significant ($b = -.20$, $p < .01$). The form of the interaction is shown graphically in Figure 3.

Analysis of the simple slopes revealed that the negative relationship between SDO and perceived warmth is stronger when AA was mentioned ($b = -.65$, $p < .001$) than when it was not mentioned ($b = -.18$, *ns*). This result supports Hypothesis 10 for the warmth dimension of the SCM.

Hypotheses 12 and 13 state that the independent variables and their interactions influence evaluative judgments regarding the employee's future performance and career progression through the mediating constructs of perceived competence and warmth. We tested these hypotheses using Baron and Kenny's (1986) test of mediation. According to Baron and Kenny (1986) support for mediation is indicated if the following conditions are met: (a) the independent variable significantly predicts the dependent variable; (b) the independent variable significantly predicts the mediator,

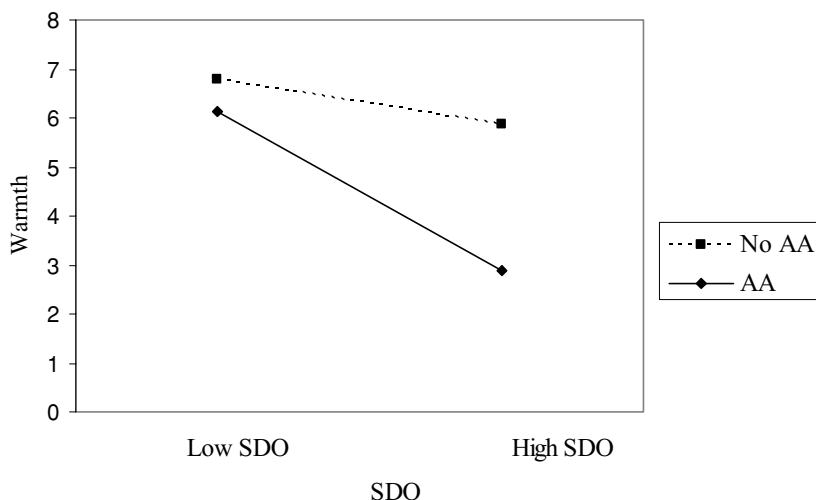


Figure 3: AA × SDO Interaction Effect on Perceived Warmth.

and (c) the mediator significantly predicts the dependent variable and the effect of the independent variable on the dependent variable is weaker when the mediator is included as a predictor. If the relationship between the independent and dependent variable becomes non significant when the mediator is added, this indicates full mediation. If the relationship is weaker, but still significant, this indicates partial mediation. Kenny, Kashy, and Bolger (1998) recently qualified Baron and Kenny's (1986) conditions for mediation by stating that it was not necessary to show that the independent variable predicts the dependent variable (Step 1) for there to be mediation. According to Kenny et al. (1998: 260), "a path from the initial variable to the outcome is implied if Steps 2 and 3 are met. So the essential steps in establishing mediation are Steps 2 and 3."

We already conducted the test of the second condition for establishing mediation (see Table 4). We performed a hierarchical regression on judgments of expected performance and career progression by first regressing the control variables, independent variables, and the hypothesized interactions on each of the dependent variables to test Steps 1 and 3. In separate models, we then added each mediator in the second step. We evaluated the significance of the regression weights at each step of the analysis to test for mediation. The results of these analyses are shown in Table 5.

Table 5 shows that SDO significantly predicted career progression ($b = -.19, p < .05$) but not expected performance ($b = -.12, ns$). Job status significantly predicted career progression ($b = .35, p < .001$) and

TABLE 5
Tests of Mediating Effect of Perceived Competence and Warmth on Evaluative Judgments

Variable	Job-related performance		Career progression		Job-related performance		Career progression	
	Step 1	Step 2	Step 1	Step 2	Step 1	Step 2	Step 1	Step 2
(1) White	.17*	.07	.15*	.08	.17*	.08	.15*	.08
(2) Female	-.08	-.12	-.06	-.08	-.08	-.05	-.06	-.04
(3) Negative AA beliefs	-.10	-.03	-.05	.00	-.10	.01	-.05	.03
(4) AA	-.02	-.02	.06	.06	-.02	.02	.06	.09
(5) SDO	-.12	-.01	-.19**	-.11	-.12	-.04	-.19**	-.12
(6) Job status	.14*	-.04	.35***	.22***	.14*	.02	.35***	.26***
(7) AA × SDO	-.15*	-.10	-.08	-.04	-.15*	-.03	-.08	.01
(8) AA × Job status	-.01	-.03	-.01	-.02	-.01	-.04	-.01	-.03
(9) Competence		.69***		.50***		.58***		.44***
ΔR^2		.41***		.21***		.29***		.16***
R^2	.08*	.50***	.19***	.40***	.08*	.37***	.19***	.35***

Note. Standardized regression weights are presented. * $p < .05$, ** $p < .01$, *** $p < .001$.

expected performance ($b = .14, p = .05$). AA had no significant effects on either of the dependent variables. Turning to the interactions, the AA \times SDO interaction was a significant predictor of expected performance ($b = -.15, p < .05$) but not career progression ($b = -.08, ns$), however the AA \times job status interaction had no significant effect on any of the dependent variables.

When perceived competence was added to the regressions, it significantly predicted both expected performance ($b = .69, p < .001$) and career progression ($b = .50, p < .001$). Importantly, the effect of SDO on career progression became non significant providing evidence that perceived competence fully mediates this relationship. The effect of job status on career progression was still significant, but smaller ($b = .22, p < .001$), providing evidence that perceived competence partially mediates the relationship. When perceived warmth was added to the regressions, it significantly predicted performance ($b = .58, p < .001$) and career progression ($b = .44, p < .001$). The effect of SDO on career progression also became non significant, providing evidence that perceived warmth fully mediates this relationship. The effect of job status on career progression was still significant, but smaller ($b = .26, p < .001$), providing evidence that perceived warmth partially mediates the relationship. Finally, the AA \times SDO effect on expected performance became non significant indicating that warmth fully mediates this relationship.

To summarize, based on the guidelines for establishing mediation, the results in Tables 4 and 5 indicate that, as stated in Hypothesis 12, perceptions of warmth and competence mediate the direct effects of SDO and job status on career progression. We also found support for mediation of the AA \times SDO interaction but only for the warmth dimension of the SCM. This result provides partial support for Hypothesis 13. Although we did not find any evidence that the AA \times SDO interaction directly affected career progression (see Table 5), this does not mean that there was no mediation. According to Kenny et al. (1998), the essential steps for establishing mediation are that the independent variable (AA \times SDO) significantly predicts the mediator (warmth) and that the mediator significantly predicts the dependent variable (career progression). Inspection of Tables 4 and 5 shows that these conditions were met, suggesting that perceptions of warmth at least partially mediate the effect of the AA \times SDO interaction on career progression, as predicted in Hypothesis 13.

Study 2 Discussion

The results support a mediated effect of competence and warmth on the direct relationship between SDO and evaluative judgments. We also found that competence and warmth stereotypes partially mediated the

direct effect of job status on these judgments and that the $SDO \times AA$ interaction was fully mediated by warmth. Fiske et al. (2002) found that professional African Americans were not stereotyped as being particularly warm, so we did not hypothesize that the warmth dimension of the SCM would be influenced by job status. However, the significant effect of status on perceived warmth suggests that status may have more robust effects on stereotype content than we originally anticipated. Our results may not be too surprising, though, given that other studies have found some evidence that high status people are presumed to be more attractive, likable, and sociable than low status persons (cf. Foschi, 2000; Lucas, 2003; Webster & Hysom, 1998). Similarly, Bobo and Massagli (2001) showed that a group's perceived socioeconomic status influences dispositional stereotypes about that group such that the more economically successful a group is perceived to be, the more intelligent, self-supporting (vs. living off of welfare), and personable they are rated.

We were able to replicate one of the interactions found in Study 1 but not the other. We found that the $AA \times SDO$ interaction significantly predicted job-related performance expectations and that this effect was fully mediated by perceived warmth. Interestingly, the $AA \times SDO$ interaction did not affect perceived competence. One explanation for this may be that participants who were high in SDO were less willing to publicly express a negative evaluation of an African American on the competence trait descriptors due to self-presentational concerns. However, they may have been more willing to evaluate the employee negatively on the warmth descriptors. It is not clear why we failed to replicate the $AA \times$ job status effect in Study 2. Perhaps the effect of job status on evaluations of an AA beneficiary is not as strong as those of SDO. Or it may simply be that because of the inherent difficulty of replicating interactions (McClelland & Judd, 1993), a stronger design and larger sample may be needed to detect this effect. Taken together, the results of Study 2 provide further support for the internal validity of our theoretical model while offering a more precise description of how SDO beliefs, AA, and job status affect evaluative judgments through stereotype application. Below, we consider the theoretical and practical implication of both studies.

A notable finding in Study 2 that parallels an effect found in Study 1 concerns the significant relationship between the control variable negative AA beliefs and the perceived warmth of the AA beneficiary. The relationship showed that persons who agreed with the notions that AA was likely to increase racial conflict and promote the idea that some groups are not as good as others, like the politically conservative respondents in Study 1, were also the most likely to evaluate an African-American employee as being less warm. Again, this finding suggests that the people who

claim that they oppose AA on the principled grounds that it stigmatizes its beneficiaries and incites racial conflict may also be the ones most likely to do the stigmatizing.

General Discussion

The two studies reported here contradict previous research on the stigmatizing effects of AA (e.g., Garcia et al., 1981; Heilman et al., 1992; Northcraft & Martin, 1982). They are more consistent with research showing that in everyday work situations where people learn more about their own competence and that of others, the AA label does not seem to produce negative evaluations of AA beneficiaries. Parker, Baltes, and Christiansen (1997), who surveyed 7,000 employees in a large governmental agency, found that White men in the survey did not derogate AA targets but rather valued the organization's commitment to diversity. What our study did show is that the AA label had the strongest effect on the evaluative judgments of people who held high rather than low SDO beliefs and, in Study 1, on employees hired for a low status job.

The failure to find an AA main effect is particularly interesting because we used a "strong" AA manipulation that favored minimally qualified applicants from target groups. The policy can be described as "preferential treatment" (Kravitz et al., 1997). Studies show that strong or illegal forms of AA such as the one used in our study elicit more negative reactions to beneficiaries than weak and legal forms (Evans, 2003; Kravitz et al., 1997). However, a review of past research also shows that negative reactions to AA are not inevitable. For example, Heilman et al. (1992, Study 2) found that perceptions of a White woman's likely career progress were not associated with her AA status. In another study, Resendez (2002) found no significant difference between an African-American AA hire and a White hire on judgments of competence. These mixed results suggest that AA status alone is not sufficient to explain negative evaluations of perceived beneficiaries. As our studies suggest, individual differences among perceivers also matter.

High SDO beliefs significantly predicted evaluative judgments in both studies. These results provide further support for the now-robust finding that SDO is a reliable predictor of negative attitudes and cognitions towards devalued and subordinate social groups (Duckitt, Wagner, Plessis, & Birum, 2002). A new contribution of our study to the SDO literature is to show that these effects may be strengthened by social cues like the use of an AA policy. Research has thus far examined SDO with respect to attitudes toward AA, social policies in general, and political conservatism (e.g., Federico & Sidanius, 2002; Jost & Thompson, 2000). Our study suggests that when reactions to individual AA beneficiaries rather than to

abstract, impersonal AA policies are considered, SDO can still influence social cognition.

Recent evidence indicates that SDO is more appropriately viewed as a measure of ideological beliefs rather than a stable personality trait (Duckitt, 2001; Guimond, Dabrum, Michilov & Duarte, 2003). Duckitt (2001) proposed that these ideological beliefs are a cause of prejudice, not the other way around. This argument is consistent with our motivated social cognition model because we also assumed that SDO beliefs are causally prior to the application of negative stereotypes. Moreover, because SDO beliefs can legitimize group-based inequalities (e.g., racism, sexism), they can motivate people to interpret social information in ways that reinforce these beliefs. One way high SDO people may do this is to assign different meaning, weight, or relevance to objective facts about an African-American employee's educational background and work history.

Conversely, low SDO people may be better able to purge their minds of stereotypic thoughts when they encounter stereotyped others. One study found that people with chronic egalitarian goals were able to inhibit the activation of stereotypes about women (Moskowitz, Gollwitzer, Wasel, & Schaal, 1999). The endorsement of egalitarian goals is characteristic of people low in SDO (Sidanius & Pratto, 1999). This attribute of SDO beliefs suggests that one reason why low SDO persons in our studies evaluated an African-American job candidate more favorably than high SDO people, regardless of whether or not the candidate benefited from AA, is because they were more motivated than high SDO people to inhibit negative stereotype activation. Although we cannot test this speculation with our data, it would seem to be a worthwhile question for future research to address.

We also cannot determine whether these expectations affect high SDO peoples' behavior towards African-American AA beneficiaries. This is an important theoretical and practical question because even if high SDO people perceive an African-American AA beneficiary negatively, it does not necessarily mean that they will treat them differently than would people low in SDO.

However, as Bargh and Chartrand (1999) point out, the activation of stereotypes encourages individuals to act in accordance with their expectations toward others, thereby inducing others to act as expected. This process can occur automatically and without conscious awareness. Indeed, research has found that managers unwittingly exhibit different behaviors toward subordinates in accordance with their expectations and that performance is positively correlated to managers' expectations (Eden, 2003). It is possible that such expectation-behavioral confirmation processes result if workers react more negatively towards an employee who is perceived as having benefited from AA. Given the evidence that people often

behave towards others in ways that produce the very behavior they expected (Bargh & Chartrand, 1999; Eden, 2003; Rosenthal, 1974; Taylor & Crocker, 1981), a relationship between the types of expectations measured in this study and actual interpersonal behavior seems theoretically plausible.

Practical Implications

Our results have several implications for how more positive judgments about AA and its beneficiaries may be elicited. Our findings regarding status suggest that using AA to hire minorities for upper-level positions does not necessarily lead to their stigmatization. Rather, when an African American is hired for a high status position, a role- as opposed to a race-based stereotype may be activated even when they are believed to have benefited from AA. Indeed, Study 1 showed that when the African-American employee was hired for a high status job, people thought they were more likely to progress quickly through the organization when they were hired through AA. One explanation for this result is that participants assumed the presence of AA might make the employee's climb up a corporate ladder somewhat easier. This interpretation would arguably give an observer a reason to believe that the employee would *not* be promoted on the basis of merit. However, because Study 2 showed that people did not perceive the high status AA beneficiary to be any less warm or competent than a high status non-AA beneficiary, this did not appear to be the case in our sample.

For low status employees, the practical suggestions for how to minimize negative evaluative judgments are less clear. It is important to note, though, that the negative evaluation occurred only on the career progression variable and not on expected job performance. Nor did we find any AA \times job status effect on stereotype application. One way to interpret his finding is that even for low status employees the use of AA does not necessarily lead others to evaluate them more negatively when other factors, like the SDO beliefs of the perceiver, are taken into account.

SDO was found to be significantly related to all of the evaluative judgments measured in our study. It is probably unrealistic for organizations to use SDO as a screening tool. However, knowing that the beliefs underlying SDO, such as the general preference for hierarchical relations among groups and an opposition to hierarchy-attenuating policies, may explain some of the resistance to AA may be useful to organizational leaders who want to effectively implement the policy. One implication of this finding is that managers may need to be more proactive in shaping the perceptions that others have of AA beneficiaries if they want to override the effect of SDO beliefs on social cognition. For example, they can provide evidence of

the employee's competence and sociability (warmth). Because high SDO people may generally perceive an AA beneficiary as less warm than people low in SDO, efforts to manage impressions that convey warmth may be undertaken by both managers, informed coworkers, and (perceived) AA beneficiaries themselves as a way of influencing others' evaluative judgments and minimizing the likelihood of stigmatization.

Another factor to consider is that unlike more stable personality traits, SDO appears to be open to situational manipulation. Recent research on SDO suggests that it can be influenced by socialization into certain social roles. Guimond et al. (2003), found that people whose academic major prepared them for one of the hierarchy-enhancing "power professions" (i.e., law) increased their SDO scores over the course of their studies whereas the SDO scores of those whose academic major prepared them for more hierarchy attenuating professions (e.g., psychology) decreased. Similarly, the type of information and experiences people are exposed to at work may either increase or decrease their level of SDO, which can influence their reactions to AA beneficiaries. For example, if organizational leaders vigorously defend the legitimacy of group based dominance hierarchies in their statements and practices, or perpetuate such hierarchies through their reward and promotion systems, they can create environments that lead employees to adopt and maintain high SDO beliefs. Alternatively, if leaders emphasize egalitarian values, structure their organizations to minimize hierarchical distinctions, and endorse hierarchy attenuating policies in general, they might influence peoples' SDO beliefs to move in the other direction, thereby making them more open to accepting AA and evaluating perceived beneficiaries more positively. These speculations are supported by Sinclair, Sidanius, & Levin's (1998) study showing that SDO scores can drop significantly as a function of time spent in hierarchy attenuating environments.

Limitations of the Studies

The two studies reported here have limitations that need to be acknowledged. First, the generalizability of our findings to practicing managers or personnel officers making real-world hiring and promotion decisions can be questioned despite the fact that our sample consisted of business majors. Yet, we note that because our samples were upper classmen, many of them were presumably less than a year away from being full time members of the labor force. It seems likely that effects of their SDO beliefs on motivated cognition may be quite relevant and enduring in the short term. For example, Evans (2003) collected data regarding reactions to AA procedures among both undergraduates and corporate employees and reported consistent findings across, and very few differences between, samples.

Future research is needed to test, of course, whether our hypotheses can be supported in a field setting.

Second, an aspect of our methodology that should be considered when assessing the generalizability of our findings to real-world organizations concerns the nature of the AA policy described to participants. The policy, which favored “minimally qualified” applicants from target groups, is a fairly “strong” preferential treatment policy in contrast to equal opportunity and other relatively “weak” policies (cf. Evans, 2003) that weigh qualifications more heavily in the hiring decision. Indeed, the AA policy described in the present study is an illegal form of AA. The attributes of the AA policy used in our experiments is important because research has determined that reactions to stronger AA policies are more negative (Evans, 2003; Kravitz, 1995). We chose this particular type of AA policy to test our underlying research questions because it was likely to produce greater variability in peoples’ reactions to the AA hire, thus providing better conditions for testing our model. We also note that using an AA policy that is much stronger than those typically found in organizations highlights the theoretical importance of SDO and job status as predictors of evaluative judgments. Even in the face of a “strong” AA condition, participants still appeared to weigh high job status as more relevant when evaluating the employee than his status as an AA hire. In other words, even in the context of an illegal AA policy that should trigger highly negative reactions to the beneficiary, more favorable perceptions of the individual associated with his having relatively high status drove participants’ reactions. A similar argument can be made about SDO being more important than AA status even under a strong AA policy condition.

Another way in which our design may not directly mirror the real world is that participants were told that the target employee was an AA hire. This is typically not the case in organizations. It is possible that the overt nature of the manipulation may have alerted participants to the study’s purpose. It is also not clear whether the African-American employee would be perceived similarly (or more positively/negatively) if his status as an AA hire was ambiguous. In our defense, the purpose of our study was to test a theory of how AA affects performance expectations, and so it was necessary to ensure that participants were aware that the candidate in the AA condition benefited from AA.

A third limitation is that we examined responses to only one group of potential AA beneficiaries. We do not know if our results would be upheld if the beneficiary was a woman or a member of another racial group. Evaluations may also depend on contextual factors such as whether the role for which the person is hired is associated with certain sex-based stereotypes (cf. Fiske et al., 2002; Heilman, 1994). The extent to which our results would generalize to other AA recipient groups remains an

empirical question, but because SDO has been found to be similarly and positively related to both racism and sexism, along with other orientations toward social dominance (perceiving out-groups as threats; (cf. Federico & Sidanius, 2002), it seems reasonable to assume that our model may explain reactions to other AA beneficiary groups.

Conclusion

Two key concerns of personnel managers are to effectively manage diversity and to minimize dysfunctional conflict among employees that may result from implementing controversial policies. The perception of AA beneficiaries as being under qualified and undeserving can undermine both of these goals (Crosby et al., 2003). For this reason, it is important to understand the psychological mechanisms and social structural factors that may underlie such perceptions, and we hope our studies draw greater attention to the role that constructs like SDO may play in this process.

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