

Meritocracy and Opposition to Affirmative Action: Making Concessions in the Face of Discrimination

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Typically, people who strongly endorse the merit principle and believe that outcomes should be given to those most deserving oppose affirmative action (AA) programs that violate this principle. However, how do they respond to AA when faced with a great deal of workplace discrimination? The authors hypothesized that people who care strongly about merit should be motivated to combat discrimination because it biases the assessment of merit. Consequently, these individuals should make concessions for AA. The authors found support for their hypothesis when investigating (a) participants' preexisting perceptions of workplace discrimination and (b) experimentally induced perceptions of discrimination. They discuss the implications of these results for the psychology of meritocracy and for resistance to AA.

Discrimination against women and visible minorities in hiring (Rudman & Glick, 1999), evaluation (Sackett & DuBois, 1991), and promotion (Landau, 1995) continues to contribute to their underrepresentation in certain occupational areas and at higher levels of management. Affirmative action (or Employment Equity in Canada) is a policy designed to deal proactively with the problems of discrimination and underrepresentation. With such laudable goals, it is not surprising that affirmative action, as a general policy, is supported by most people (Kluegel & Smith, 1983). However, as noted in the past (Bobocel, Davey, Son Hing, & Zanna, 2001; Bobocel, Son Hing, Holmvall, & Zanna, 2002;

R. L. Cohen, 1994; Heilman, Battle, Keller, & Lee, 1998; Murrell, Dietz-Uhler, Dovidio, Gaertner, & Drout, 1994; Smith-Winkelman & Crosby, 1994), specific affirmative action programs are often criticized for their violations of the merit principle and are met with opposition.

The merit principle—also referred to as the equity principle—is a distributive justice rule that prescribes that an individual's relative outcomes (e.g., pay) should be allocated in proportion to his or her relative inputs (e.g., effort; Deutsch, 1975). Meritocracy is a widely known and widely endorsed ideology. Although the equity principle is only one potential norm (vs. need or equality) that can be applied in resource allocation decisions, it is the preferred norm for economic situations (Deutsch, 1975; Wagstaff, Huggins, & Perfect, 1993). Some forms of affirmative action, such as preferential treatment programs, consider target-group status in the selection criteria and thus might allow for the hiring of a less qualified target-group member (e.g., a woman or visible minority) over a more qualified White man. Such programs may be construed as violating the merit principle.

The exact role of meritocracy in opposition to affirmative action is a contentious issue. Studies reveal that people evaluate affirmative action programs more negatively to the extent that the programs place less weight on merit and more weight on target-group status in the decision-making process (Kravitz, 1995; Kravitz & Platania, 1993; Nacoste, 1985; Nosworthy, Lea, & Lindsay, 1995; Veilleux & Tougas, 1989). One interpretation of these findings is that people are more opposed to affirmative action to the extent that programs violate the merit principle. A second interpretation is that people are more opposed to affirmative action programs to the extent that programs aggressively increase target groups' representation. Indeed, some argue that opposition to affirmative action stems from prejudice toward target-group members and that concerns about equity are used to justify this opposition (e.g., Dovidio & Gaertner, 1996; Sidanius, Pratto, & Bobo, 1996). Thus,

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concerns that affirmative action violates meritocracy may be an excuse for rather than a cause of opposition.

Recently, Bobocel, Son Hing, Davey, Stanley, and Zanna (1998) directly tested the proposition that justice concerns can be a genuine determinant of opposition to affirmative action, independent of prejudice (see also Davey, Bobocel, Son Hing, & Zanna, 1999). The researchers reasoned that, to the extent that justice concerns (e.g., about meritocracy) are a true source of opposition to affirmative action, people with a strong preference for or endorsement of the merit principle should be more opposed to programs that violate this principle, regardless of their prejudice levels.¹ As expected, the authors found that when participants evaluated a merit-violating preferential treatment program, their endorsement of the merit principle (measured 1 month earlier) was a unique predictor of opposition. In fact, prejudice did not contribute significantly to opposition to the preferential treatment program because participants were equally opposed, regardless of their prejudice level. In contrast, when participants evaluated a program that upheld the merit principle, prejudice was a unique predictor of opposition to affirmative action such that more prejudiced participants were more opposed. The researchers concluded that prejudice and endorsement of the merit principle are independent sources of opposition to affirmative action and that the relative role of each determinant in predicting attitudes depends on the nature of the program.

Supporters of affirmative action might be disheartened to learn that concerns about meritocracy can lead to opposition to affirmative action because many programs can be construed as violating the merit principle (Bobocel et al., 1998; Leck, Saunders, & Charbonneau, 1996; Heilman, McCullough, & Gilbert, 1996; Nacoste, 1987, 1994; Tyler & McGraw, 1986). Furthermore, in the absence of a detailed description, people often assume that affirmative action programs involve violations of the merit principle (e.g., preferential treatment or quotas; Eberhardt & Fiske, 1994; Kravitz & Platania, 1993). Therefore, it is important to ask whether people who strongly endorse the merit principle will always oppose merit-violating affirmative action programs.

We extend our previous research on opposition to affirmative action (Bobocel et al., 1998; Davey et al., 1999) by examining whether individuals with a strong preference for the merit principle might be less opposed than usual to a preferential treatment program if these individuals also perceive high levels of discrimination in the workplace. In particular, we hypothesize that the relation between endorsement of the merit principle and opposition to a preferential treatment program might be contingent on the extent to which people perceive discrimination against women and visible minorities to be the current state of affairs. We propose that if people who strongly endorse meritocracy view the world as a fair and equitable place, they should oppose policies that potentially violate norms of meritocracy. In contrast, we propose that if these individuals view the world as discriminatory and biased against certain groups, they might make concessions for policies that aim to correct for such bias—even if such policies violate norms of meritocracy. We investigate these issues in both a correlational (Study 1) and an experimental study (Study 2).

Meritocracy is a principle or ideal that prescribes that only the most deserving individuals are rewarded. As such, meritocracy can operate accurately only in an unbiased system (Clayton & Tangri, 1989; Smith-Winkelman & Crosby, 1994). To the extent that

discrimination exists against target-group members, however, the current system of assessing merit is not equitable. Rather, biases in the favor of dominant groups may exist in terms of (a) the criteria chosen to measure merit, (b) the tests used to assess merit, and (c) the subjective evaluation of another's performance (Clayton & Tangri, 1989; Eberhardt & Fiske, 1994; Fraser & Kick, 2000). The aim of preferential treatment programs is to correct for such discrimination by considering target-group membership in the decision-making process (Smith-Winkelman & Crosby, 1994). As suggested elsewhere (Clayton & Tangri, 1989), "including such a factor [i.e., group membership] does not unbalance an equitable state, but rather restores balance by adjusting for the positive weighing of majority group membership that is ingrained within the system" (p. 181).

Considering the above arguments, one might expect a positive relation between perceptions of workplace discrimination and support for affirmative action programs such as a preferential treatment program. However, research reveals that people's perceptions of discrimination typically do not predict their opposition to affirmative action when programs clearly violate the merit principle (Bobocel et al., 1998; Heilman et al., 1996; Matheson, Echenberg, Taylor, Rivers, & Chow, 1994; Nacoste, 1985). People who perceive more discrimination tend to be as opposed to merit-violating affirmative action programs as are people who perceive less discrimination. In contrast, perceptions of discrimination do predict reactions to affirmative action programs that are either (a) undefined and therefore not clearly merit violating or (b) explicitly merit upholding (Bobo & Kluegel, 1993; Bobocel et al., 1998; Heilman et al., 1996; Kravitz & Klineberg, 2000; Kravitz et al., 2000; Matheson et al., 1994; Tougas & Veilleux, 1990).

Previous research is consistent with the notion that the perception of discrimination is not, in itself, sufficient to reduce opposition to a preferential treatment program. We propose that the perception of discrimination should reduce opposition for one group in particular: those who strongly endorse meritocracy. Because discrimination can be conceptualized as a form of merit violation, people who strongly care about merit should be most offended by discrimination. As a result, perceiving high levels of discrimination should motivate individuals who strongly endorse meritocracy to be less opposed to a preferential treatment program (as a means of correcting discrimination and restoring equity) than they would otherwise be. On the basis of this reasoning, we make the following predictions. First, we expect participants who perceive more workplace discrimination to be less opposed to a preferential treatment program, but this should be true primarily among those with a strong preference for the merit principle. Second, consistent with our previous work (Bobocel et al., 1998; Davey et al., 1999), we expect participants who more strongly endorse the merit principle to be more opposed to a preferential treatment program, but this should be true primarily among those who perceive little discrimination in the workplace. Because we expect participants who strongly endorse meritocracy but not those who weakly endorse meritocracy to reduce their opposition in the

¹ Bobocel et al. (1998) also investigated how participants' preference for the consistency principle, which prescribes that all individuals should be treated the same in allocation decisions, predicted opposition to a consistency-violating program.

face of discrimination, the relation between preference for the merit principle and opposition to a preferential treatment program should be mitigated among individuals who perceive high levels of discrimination. We also investigate the processes through which such effects might occur.

Just as people's strongly held attitudes act as a filter through which they view relevant attitude objects (Fazio, 1990), we expect that people's attitudes about meritocracy and discrimination may act as a filter through which they view a preferential treatment program. We hypothesize that, under conditions of low discrimination, when they are evaluating a program that in principle could violate meritocracy, people who strongly endorse meritocracy are more likely to believe that it will, compared with people who weakly endorse meritocracy. Such differential construal could occur because people who strongly endorse meritocracy might be more sensitive to potential merit violations. Furthermore, independent of people's preference for the merit principle, construal of an affirmative action program as more merit violating should lead to greater opposition (see Bobocel et al., 1998, for evidence). Thus, among those who perceive little discrimination, the relation between preference for the merit principle and opposition to a preferential treatment program might be mediated by their construal of the program as more merit violating.

In addition, among people who strongly endorse meritocracy, those who perceive higher levels of discrimination in the workplace might construe a preferential treatment program that promotes a lower-ranked target-group candidate over a higher-ranked White man as less merit violating because, to these individuals, true merit is unknown when indicators of merit are biased. Indeed, a preferential treatment program might be construed as merit restoring to the extent that one views discrimination to underestimate target-group members' merit (Clayton & Crosby, 1992). Perceptions of the program as less merit violating might lead to lessened opposition. Thus, among people with a strong preference for the merit principle, the relation between perceptions of discrimination and opposition to a preferential treatment program might be mediated by their construal of the program as less merit violating.

Study 1

The purpose of Study 1 was to test for the relations of people's preference for the merit principle and their perceptions of workplace discrimination to their opposition to a preferential treatment program. As noted earlier, among participants who perceive low levels of workplace discrimination, we expected stronger preference for the merit principle to predict greater opposition to a preferential treatment program. In addition, among participants with a strong preference for the merit principle, we expected greater perceptions of workplace discrimination to predict lessened opposition. Finally, we tested whether these effects are mediated by the degree to which the program is construed as more or less merit violating.

Method

Participants

For Study 1, data were collected across three semesters. Participants were 108 undergraduate students (40 men, 68 women) at the University of

Waterloo, Waterloo, Ontario, Canada, who participated for course credit. In keeping with the procedure of earlier studies (e.g., Bobocel et al., 1998), only students who had lived in Canada for 13 years or longer were selected to participate in all studies, to increase the likelihood that participants had been socialized with North American equity norms. There were 27 participants in Sample 1, 31 in Sample 2, and 50 in Sample 3. The age range of participants was 17 to 38 years ($M = 19.98$, $SD = 3.20$). Data on participants' ethnicity were not collected in Sample 1. In Samples 2 and 3, 73% of the participants were White.

Procedure

Assessment of individual differences. Following procedures used earlier (Bobocel et al., 1998), approximately 1 month prior to the students' participation in the study, we assessed (in a mass-testing booklet) 555 participants' endorsement of the merit principle and their perceptions of workplace discrimination. Participants completed a 15-item Preference for the Merit Principle (PMP) Scale that measures individuals' preferences for outcomes to be distributed on the basis of merit (Davey et al., 1999).² Respondents rated each item on a 5-point scale (1 = *strongly disagree* to 5 = *strongly agree*). A sample item is "Members of a work group ought to receive different pay depending on the amount each person contributed" (positively keyed). There were 16 items used in Sample 1, but 1 item was dropped in Samples 2 and 3 for psychometric reasons. Because the anchors for the scale were altered between Sample 1 (a 5-point scale) and Samples 2 and 3 (a 7-point scale), PMP scores were standardized within each sample before data from the samples were aggregated to control for unequal variances (Howell, 1992).

In previous research, we developed an eight-item Perceptions of Workplace Discrimination Scale to measure participants' perceptions of general workplace discrimination in the treatment of women and visible minorities that occurs at the personal-individual and at the systemic-organizational level (Bobocel et al., 1998; Son Hing, 1997). Participants in Samples 1 and 2 responded to this measure on a 5-point scale (1 = *strongly disagree* to 5 = *strongly agree*). A sample item is "Women are disadvantaged in their chances of being hired or promoted because of inherent barriers in the workplace (e.g., lack of maternity leave, day care facilities, flex time) that limit their advancement" (positively keyed).

In Sample 3, we broadened the 8-item version to include an additional 10 items that measure more directly the construct of interest, that is, people's perceptions of bias and discrimination against women and visible minorities in how merit is assessed during personnel selection and performance evaluations. In particular, items tapped participants' perceptions of bias in (a) the criteria chosen to indicate merit, (b) the tests used to measure the criteria, and (c) personal evaluations of merit. A sample item is "Visible minorities are unfairly disadvantaged during the selection interview because White interviewers often, consciously and/or unconsciously, exhibit an in-group favoritism in the assessment of candidates' qualifications" (positively keyed). In Sample 3, the original 8 and additional 10 discrimination items correlated at $r(48) = .59$, $p < .001$, and were averaged before the data from the samples were aggregated.

Main study. Using the same paradigm as in Bobocel et al. (1998), we contacted students approximately 1 month later, asking them to participate in what was ostensibly a corporate survey for a company called Cochrane Industries. Studies 1 and 2 were run by a White male research assistant. To make the situation seem as realistic as possible, participants were told that our research assistant was a co-op student hired by Cochrane Industries to survey students—that is, tomorrow's workforce—on their reactions to a prospective workplace policy. Participants were given a professional-looking survey in which there was a description of an affirmative action

² We referred to this scale in our initial research as the Belief in Merit Scale (see Bobocel et al., 1998) but relabeled it (see Davey et al., 1999) to better reflect the construct being measured.

program that Cochrane was considering adopting. Allegedly, the program was operating successfully at another organization labeled Corporation A. To create an involved survey, we led participants to believe that their evaluation would serve as a vote on whether Cochrane should adopt Corporation A's affirmative action program.

The program described violates the merit principle in the eyes of most people, because it allows for the hiring of a less qualified individual over a more qualified candidate (see Bobocel et al., 1998, for evidence). Specifically, participants read the following:

When considering employees for hiring and promotion, a new procedure is used with Corporation A's affirmative action policy. A minimum qualification level for each position has been set. The most qualified applicant above this level receives the available position unless there are any target-group members (women, visible minorities, or physically challenged employees) above the minimum qualification level. In this case, the target-group applicant is selected before a potentially better qualified non-target group employee.³

The description of Corporation A's program was followed by questions regarding participants' perceptions of and attitudes toward the program. Participants were led to believe that their responses were anonymous and would be taken into consideration by Cochrane management. After completing the Cochrane survey, participants were probed for suspicion and then debriefed about the true purpose of the study.

Two items in the Cochrane survey were used to measure participants' construal of the program as violating the merit principle: "Under Corporation A's program, what is the likelihood that a less qualified target-group member would be hired or promoted over a more qualified non-target-group member?" (positively keyed) and "Under Corporation A's program, what is the likelihood that all employees will be evaluated by the same standards in hiring and promotions?" (negatively keyed). The construal items were rated on a 7-point scale (1 = *extremely unlikely* to 7 = *extremely likely*).

Participants' opposition to affirmative action was evaluated with the following two items: "What is your opinion of Corporation A's affirmative action program?" (1 = *extremely unfavorable* to 7 = *extremely favorable*; negatively keyed), and "How likely is it that you would recommend to Cochrane's affirmative action committee that Cochrane implement Corporation A's program?" (1 = *extremely unlikely* to 7 = *extremely likely*; negatively keyed). The merit construal items, which appeared first, were separated from the opposition items by a few filler questions about the program. The negatively keyed construal and opposition items were recoded for analyses so that higher numbers indicate greater perceptions of merit violation and greater opposition.

Results

Preliminary Analyses

Preliminary tests were conducted to ensure that the data could be collapsed across samples. Procedures (as outlined by Rosenthal, 1984) were conducted to test whether the predictors had consistent relations to opposition across the three samples (see Table 1). Across samples, there was a homogeneous effect size for the preference for the merit principle and opposition relation, $\chi^2(2, N = 108) = 1.73, ns$. In addition, there was a homogeneous effect size for the perception of discrimination and opposition relation, $\chi^2(2, N = 107) = 3.83, ns$.⁴ Therefore, we conducted all of our analyses collapsing across samples. We did not test effect sizes for the interaction term because to do so would involve testing simple effects (e.g., preference for the merit principle at low discrimination) with small sample sizes (e.g., 12).

Table 1
Study 1: Means, Standard Deviations, and Intercorrelations for Predictors and the Criterion in Samples 1, 2, and 3

Construct	M	SD	Predictor	
			PMP	Discrim
Sample 1 (n = 27)				
PMP	3.76	0.39	(.73)	
Discrim	3.85	0.59	-.03	(.80)
Opposition	5.15	1.03	.19	.09
Sample 2 (n = 31)				
PMP	5.17	0.65	(.64)	
Discrim	3.89	0.49	-.48**	(.67)
Opposition	5.44	1.16	.03	-.36*
Sample 3 (n = 50)				
PMP	5.34	0.62	(.77)	
Discrim	3.53	0.44	.04	(.80)
Opposition	5.10	1.48	.33*	-.35**

Note. Values in parentheses are Cronbach's alpha estimates of internal consistency. PMP was measured by a 5-point scale in Sample 1 and by a 7-point scale in Samples 2 and 3. PMP = preference for the merit principle; Discrim = perceptions of workplace discrimination; Opposition = opposition to the preferential treatment program.

* $p \leq .05$. ** $p \leq .01$.

The weighted mean Cronbach's alpha estimates of internal consistency across the three samples were .72 for the PMP Scale and .76 for the Perceptions of Workplace Discrimination Scale. A marginal inverse relation between preference for the merit principle and perceptions of workplace discrimination was found, $r(105) = -.18, p = .06$. Although there was a slight trend for those who strongly endorse the merit principle to perceive less workplace discrimination, the effect was small, as there was only 3% of shared variance.

The two items that tapped participants' construal of the program as merit violating correlated at $r(106) = .38, p < .001$, and were averaged to create a merit-violation composite ($M = 5.50, SD = 1.21$). It is possible that the relation between the two merit-violation items is underestimated because of ceiling effects or restriction of range for the items. The two items that tapped participants' opposition to the program correlated at $r(106) = .72, p < .001$, and were averaged to create an opposition composite ($M = 5.21, SD = 1.29$).

Opposition to the Preferential Treatment Program

To test the central hypothesis, we regressed opposition on preference for the merit principle, perceptions of workplace discrimination, and the interaction between these variables. Following procedures outlined by Aiken and West (1991), we first centered main effect predictors and then multiplied them to create the

³ In Study 2, the wording of the program was slightly changed to "A minimum, yet adequate, qualification level for each position has been set."

⁴ Data are missing for 1 participant's perceptions of discrimination for all analyses.

interaction term. Centering the main effect predictors allows them to be interpreted in the presence of an interaction (see Aiken & West, 1991, for a discussion of these issues). Thus, main effects and the interaction term were all entered on the same step of the regression equation. Unstandardized regression coefficients and their standard errors are presented because standardized regression coefficients should not be used when an interaction is present (Aiken & West, 1991).

Replicating prior research (Bobocel et al., 1998; Davey et al., 1999), there was a main effect of preference for the merit principle such that greater endorsement of the merit principle was related to greater opposition to the preferential treatment program ($B = 0.22$, $SE = 0.11$), $F(1, 103) = 4.06$, $p = .05$. In addition, there was a main effect of perceptions of discrimination such that greater perceptions of discrimination were related to less opposition to the preferential treatment program ($B = -0.58$, $SE = 0.25$), $F(1, 103) = 5.24$, $p = .02$. However, both main effects were qualified by a Preference for the Merit Principle \times Perceptions of Discrimination interaction ($B = -0.37$, $SE = 0.18$), $F(1, 103) = 4.15$, $p = .04$. To illustrate the form of the interaction, we plotted each simple slope at one standard deviation above and below the means of each predictor, as suggested by J. Cohen and Cohen (1983). We conducted simple regression analyses, as outlined by Aiken and West (1991).

As shown in Figure 1, among people who perceived little workplace discrimination, merit-based opposition to the preferential treatment program was found. That is, there was a significant simple effect for preference for the merit principle ($B = 0.42$), $F(1, 103) = 7.33$, $p = .008$, such that the more strongly participants endorsed the merit principle, the more they opposed the preferential treatment program. However, consistent with the current hypothesis, among people who perceived high levels of workplace

discrimination, those with a strong preference for the merit principle were no more opposed than those with a weak preference for the merit principle ($B = 0.00$), $F(1, 103) = 0.05$, *ns*. Thus, as predicted, merit-based opposition to the preferential treatment program was mitigated when participants perceived high levels of workplace discrimination.

Looking at the interaction from a different perspective, we note that there was a significant simple effect of perceptions of discrimination for people who strongly endorsed the merit principle such that the more participants perceived discrimination to exist, the less they opposed the preferential treatment program ($B = -0.99$), $F(1, 103) = 7.01$, $p = .009$. However, the perception of workplace discrimination did not affect opposition to affirmative action for people who weakly endorsed the merit principle ($B = -0.16$), $F(1, 103) = 0.38$, *ns*. Thus, consistent with our predictions, greater perceptions of workplace discrimination were related to reduced opposition to affirmative action, but only for people who strongly endorsed the merit principle.

Mediation Analyses

Using techniques outlined by Baron and Kenny (1986), we tested for mediation of each of the predicted simple effects; that is, (a) the effect of preference for the merit principle on opposition among people who perceived little workplace discrimination (i.e., those who fell below the median on perceived discrimination) and (b) the effect of perceptions of discrimination on opposition among people who strongly endorsed the merit principle (i.e., those who fell above the median on preference for the merit principle).

To test for mediation of the simple effect of preference for the merit principle, we conducted the following regression analyses. First, opposition to the preferential treatment program was regressed on preference for the merit principle to obtain the total effect of the predictor. Second, perceptions of merit violation were regressed on preference for the merit principle. Third, opposition to the preferential treatment program was simultaneously regressed on perceptions of merit violation and preference for the merit principle. As shown (see top panel of Figure 2), first, the stronger participants' preference for the merit principle was, the more they construed the program as merit violating ($\beta = .25$), $F(1, 52) = 3.33$, $p = .07$. Second, when we controlled for participants' preference for the merit principle, those who construed the program as more merit violating were more opposed ($\beta = .50$), $F(1, 51) = 16.71$, $p < .001$. Third, the effect of participants' preference for the merit principle on opposition ($\beta = .26$), $F(1, 52) = 3.69$, $p = .06$, was reduced ($\beta = .14$), $F(1, 51) = 1.26$, *ns*, once participants' construals of the program were controlled. The Goodman (1960) test was used to test the reduction in the beta, as recommended by David Kenny (personal communication, May 18, 1998; Kenny, 2001). The reduction was marginally significant ($z = 1.80$, $p = .07$). These results are consistent with the notion that the effect of preference for the merit principle among people who perceived little discrimination was partially mediated by construal of the program as more merit violating. It is likely that some of the paths in Figure 2 do not reach conventional levels of significance because of the small sample size ($N = 54$) for these tests. In addition, the low reliability of the perceptions of merit violation measure results in a conservative test of mediation (see Baron & Kenny, 1986, for a discussion of these issues). Nonethe-

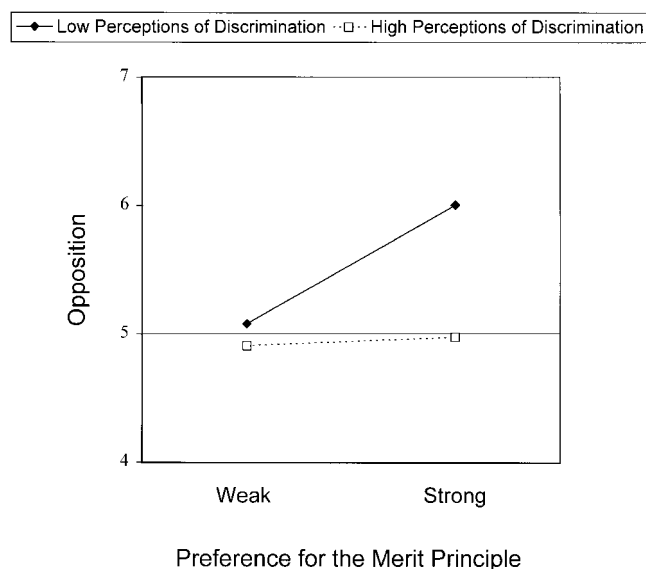


Figure 1. Study 1: The interactive effect of preference for the merit principle (weak vs. strong) and perceptions of workplace discrimination (low vs. high) on opposition to the preferential treatment program. On both predictors, weak/low = one standard deviation below the mean, centered at zero; strong/high = one standard deviation above the mean. $N = 107$.

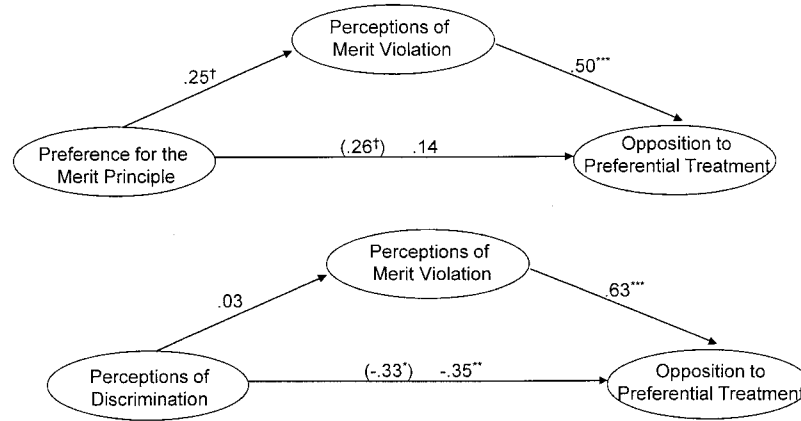


Figure 2. Study 1: Path analyses depicting the mediating role of perceptions of merit violation in (a) the relation between preference for the merit principle and opposition to the preferential treatment program among people who perceive little workplace discrimination (top panel) and (b) the relation between perceptions of workplace discrimination and opposition to the preferential treatment program among people with a strong preference for the merit principle (bottom panel). Numbers on paths are betas. The total effect between predictor and criterion (i.e., before construal is controlled for) is given inside parentheses; the direct effect between predictor and criterion (i.e., after construal is controlled for) is given outside parentheses. $N_s = 54$ and 55 , respectively, because of median splits on the sample used to test mediation of the simple effects. † $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

less, a test of the overall model was significant, $F(2, 51) = 10.76$, $p < .001$, and the adjusted multiple correlation squared was .27.

In addition, we tested for mediation of the simple effect of perceptions of discrimination on opposition among people with a strong preference for the merit principle. In contrast to the meritocracy effect, there was no evidence for mediation (see bottom panel of Figure 2), primarily because participants' perceptions of workplace discrimination did not relate to construal of the preferential treatment program as less merit violating.⁵

Discussion

Replicating our earlier research (Bobocel et al., 1998; Davey et al., 1999), we found that the stronger participants' preference for the merit principle was, the more they opposed a merit-violating preferential treatment program. In addition, we found, although we did not expect to, that the greater participants' perceptions of workplace discrimination were, the less they opposed the preferential treatment program. It is important to note, however, that both of these main effects were qualified by a Preference for the Merit Principle \times Perceptions of Discrimination interaction. Specifically, we found that merit-based opposition to a preferential treatment program exists only for individuals who perceive little discrimination in the workplace. In contrast, preference for the merit principle failed to predict opposition to the preferential treatment program for participants who perceived high levels of discrimination. In other words, the current data support our main hypothesis that merit-based opposition to a preferential treatment program is not absolute; rather, it can be mitigated by perceptions of high workplace discrimination.

These results are consistent with the notion that workplace discrimination can be conceptualized as a form of merit violation against target-group members. Thus, participants who strongly endorse the merit principle are motivated to correct for discrimi-

natory bias, and, consequently, they reduce their opposition to a preferential treatment program. As noted by a reviewer, some may wonder why preference for the merit principle does not predict greater support for a preferential treatment program when perceptions of discrimination are high. We suggest that perceptions of discrimination may be reason to lessen opposition to a preferential treatment program for people who strongly endorse meritocracy but may not be sufficient reason for these individuals to reverse their attitudes toward a program that is still construed as violating merit (i.e., 5.50 on a 7-point scale).

The mediation results are consistent with the notion that, among people who perceived little workplace discrimination, those who more strongly endorsed meritocracy were more opposed to the preferential treatment program in part because they construed the program as more likely to violate the merit principle. Specifically, they construed the program as more likely to involve (a) the evaluation of employees by different standards in hiring and promotion and (b) the hiring and promotion of less qualified target-group members over White men.

In contrast, the simple effect of perceptions of discrimination on opposition does not appear to be driven by construal of the program as less merit violating. In other words, among people with a strong preference for the merit principle, greater perceptions of workplace discrimination produced lesser opposition to a preferential treatment program but not altered construal of the program as merit violating. We were surprised that, among participants who strongly endorse meritocracy, those with greater perceptions of discrimination did not construe the preferential treatment program

⁵ Mediation analyses for the main effects of preference for the merit principle and perceptions of workplace discrimination were consistent with those for the simple effects of preference for the merit principle and perceptions of workplace discrimination.

as less merit violating. Why should perceptions of discrimination lead to lessened opposition to a preferential treatment program among people who care about merit if not for its effects on construal of the program as less merit violating?

To get a better sense of why people who strongly endorse meritocracy and who perceive discrimination might lessen their opposition to a preferential treatment program, we asked participants themselves in a follow-up study.⁶ Following procedures similar to those in Study 1, we measured 94 participants' preference for the merit principle and their perceptions of workplace discrimination. Then, in the context of a corporate survey, we asked participants to list the arguments or type of proof they thought Cochrane Industries could provide to their employees that would sell the need and/or the desirability of an affirmative action policy for their organization. Three judges coded participants' responses as they related to the merit principle. Specifically, they coded whether participants suggested the argument that the program would uphold the merit principle for (a) all employees (e.g., "everyone would be judged on his or her achievements"), (b) White men (e.g., "assurances that the program will not hinder the advancement of non-target group members"), and (c) target-group members (e.g., "it helps the company recognize that there are a lot of qualified minorities who don't get the recognition they deserve"). Cronbach's alpha estimates of internal consistency reveal that the interrater reliability for each of the above constructs was high (.85, .91, .84, respectively).

A mixed analysis of variance (ANOVA; Preference for the Merit Principle \times Perceptions of Discrimination \times Type of Merit Argument, with repeated measures on the last factor) revealed only a significant Preference for the Merit Principle \times Perceptions of Discrimination interaction, $F(1, 90) = 4.48, p = .04$. Among participants with a strong preference for the merit principle, those who perceived more discrimination were more likely to suggest that the company generate the argument that affirmative action is merit upholding, compared with those who perceived less discrimination, $F(1, 90) = 3.77, p = .05$. Therefore, a viable justification for affirmative action among people who strongly endorse meritocracy and believe that discrimination exists is that affirmative action upholds meritocracy. On the basis of these additional data, we believe that our mediation prediction in Study 1 was on track. However, rather than simply assessing participants' belief that the program was less merit violating, we should have also measured their belief that the program was merit restoring for target-group members. We correct for this in Study 2.

Study 2

In Study 1, we measured the predictor variables 1 month prior to the criterion measure; thus, results are consistent with the idea that perceiving greater levels of workplace discrimination leads people who strongly endorse meritocracy to reduce their opposition to the preferential treatment program. However, the data are correlational and thus open to alternative interpretations. For example, it is quite possible that, among those who strongly endorse meritocracy, people who perceive workplace discrimination also differ from those who do not along some unmeasured dimension (e.g., political liberalism) that drives attitudes toward affirmative action. Therefore, one major purpose of Study 2 was to develop an

experimental manipulation of the perception of workplace discrimination and test for replication of Study 1.

One potential way to manipulate participants' perceptions of discrimination is to provide direct, persuasive appeals about the existence of discrimination (e.g., a short essay). However, with such a manipulation, it would be difficult to determine whether its effects on opposition to affirmative action were due to participants' new perceptions of discrimination or to demand characteristics (i.e., participants might presume that we expect lessened opposition in the high-discrimination condition). To avoid this potential problem, we chose to manipulate perceptions of discrimination by subtle means rather than by a persuasive appeal.

Our manipulation of perceptions of workplace discrimination derives from the general finding that, when participants are answering survey questions, formal features of the questionnaire (e.g., question wording and response format) can affect not only how they respond to survey items but also their subsequent judgments (Haddock, 1998; Olson & Ross, 1984; Schwarz, 1990; Schwarz, Hippler, Deutsch, & Strack, 1985; Schwarz & Scheuring, 1989). When filling out questionnaires, participants do not passively circle numbers to indicate their response to items. Rather, they actively infer information about themselves on the basis of their pattern of responses (e.g., "I am at the high end of the scale on this question about how much TV I watch—I guess I watch much more TV than others"). It has been demonstrated that the self-inferences that participants make can then influence later self-judgments—for example, "I might not do well in school this term" (Haddock, 1998; Olson & Ross, 1984; Schwarz et al., 1985; Schwarz & Scheuring, 1989).

On the basis of the above research, we developed a manipulation that required participants to complete one of two versions of a survey based on the Perceptions of Workplace Discrimination Scale used in Study 1. The discrimination items were nearly identical in the two survey versions. However, by wording the items slightly differently in the two conditions (low vs. high perceptions of discrimination) in a manner that should influence their pattern of responses, we intended to manipulate participants' self-inferences concerning their perceptions of workplace discrimination. Following the logic of Salancik and Conway (1975), we presumed that participants' endorsement of a statement should depend on the qualifiers (e.g., *sometimes* vs. *always*) used in that statement. If participants in the high-discrimination condition are presented with items that are easy to agree with (e.g., discrimination sometimes occurs), then they should indicate high levels of agreement and subsequently infer that they perceive a lot of discrimination to exist. Similarly, if participants in the low-discrimination condition are presented with items that are difficult to agree with (e.g., discrimination always occurs), then they should indicate low levels of agreement and subsequently infer that they perceive little discrimination to exist. Thus, participants' perceptions of workplace discrimination should be manipulated by a self-inference or self-persuasion technique.

The primary goal of Study 2 was to test whether merit-based opposition to the preferential treatment program is mitigated when participants are experimentally induced to perceive high levels of

⁶ Please inquire with Leanne S. Son Hing for the details of the methodology and results of this study.

workplace discrimination. To test the effectiveness of our manipulation, we investigated its effects on (a) participants' agreement with the discrimination survey items (i.e., the manipulation itself) and (b) participants' later endorsement of items concerning bias in the workplace for the assessment of target-group members' knowledge, skills, and abilities. To replicate Study 1, we also tested whether the relation between preference for the merit principle and opposition is mediated by construal of the preferential treatment program as merit violating among people who are induced to perceive low levels of workplace discrimination.

The second major purpose of Study 2 was to investigate how people who strongly endorse meritocracy might differentially construe the preferential treatment program under conditions of high discrimination (vs. low). In Study 1, we found that greater perceptions of workplace discrimination are related to lessened opposition to the preferential treatment program among participants who strongly endorse meritocracy but not to construal of the program as less merit violating. Thus, under conditions of high discrimination, people with a strong preference for the merit principle perceive the preferential treatment program as merit violating in some sense (because the most qualified White man might not be hired or promoted). However, more important, these people may also perceive it as restoring meritocracy in another sense. In particular, if discrimination indeed occurs in the assessment of target-group members' qualifications, then participants may perceive target-group members as more qualified than they appear to be on paper. As a consequence, they might reason that a preferential treatment program would hire target-group candidates who are, in fact, deserving.

We hypothesize that among people who strongly endorse meritocracy, greater perceptions of discrimination might lead to construal of the preferential treatment program as more merit restoring for target-group members. However, many theories in the affirmative action literature suggest other reasons why perceptions of discrimination should influence affirmative action attitudes. Thus, we also explored how perceptions of discrimination might impact nonmerit-related construal of the preferential treatment program.

First, some researchers (e.g., Kluegel, 1985; Smith-Winkelman & Crosby, 1994) have suggested that to support affirmative action, one must perceive it to be needed or necessary, and that this perception arises from the acknowledgement that discrimination currently exists. Therefore, greater perceptions of discrimination might increase perceptions that an affirmative action program is necessary. Second, Crosby and Cordova (1996) posited that preferential treatment programs can be viewed as a short-term, stopgap measure to deal with underrepresentation of target groups in the workplace. Thus, it is possible that greater perceptions of discrimination increase perceptions that the program is a viable short-term solution for unequal representation. Third, Swim and Miller (1999) hypothesized that when White people become more aware of the discrimination that exists against Blacks, they reduce their opposition to affirmative action because of feelings of White guilt. Swim and Miller (1999) conceptualized White guilt as feelings of guilt and shame that result from the privileges at the expense of Black people that are associated with being White. They tested this hypothesis and found support for it in two of three studies. Therefore, among White participants, greater perceptions of discrimination might lead to increased feelings of White guilt. To investigate participants' construal of the preferential treatment program, we

first tested for a Preference for the Merit Principle \times Discrimination Condition interaction for the above constructs. If any interaction was significant, we then examined the simple effect of discrimination among participants who strongly endorse meritocracy.

Method

Participants

For Study 2, data were collected across two semesters. Participants were 83 undergraduate students (42 men, 41 women) at the University of Waterloo who participated for course credit. There were 40 participants in Sample 1 and 43 in Sample 2. The age range of participants was 18 to 23 years ($M = 19.80$, $SD = 1.25$), and 72% of participants were White. One participant was dropped from the analyses because of her suspicions that the Cochrane survey was indeed a psychological study.

Procedure

Assessment of individual differences. Following procedures used in Study 1, 637 students completed mass-testing booklets that included the 15-item PMP Scale and the 8-item Perceptions of Workplace Discrimination Scale, which measures participants' perceptions of general discrimination in the treatment of target-group members.

To identify potential participants, we first excluded participants with extreme preexisting beliefs about the existence of workplace discrimination. We were concerned that they might not be affected in the intended direction by the wording of the discrimination manipulation items. For example, in the low-discrimination condition, we designed the items to be difficult to agree with (e.g., "Discrimination always occurs") and, hence, to induce disagreement. However, people who perceive a great deal of discrimination to exist very well might agree with these items. Therefore, we selected participants with initially moderate perceptions of discrimination in the workplace. To avoid extreme groups, we selected participants who fell within the middle 50% of scores on the Perceptions of Workplace Discrimination Scale. There was a marginally significant difference between men's ($M = 3.18$, $SD = 0.75$) and women's scores ($M = 3.36$, $SD = 0.70$) on the Perceptions of Workplace Discrimination Scale, $t(230) = 1.92$, $p = .06$; therefore, we calculated the 25th and 75th percentiles for each gender separately. Selection criteria were set during the first term of data collection ($N = 232$). Potential participants included men whose Perception of Workplace Discrimination score fell between 2.75 and 3.75 and women whose score fell between 2.88 and 3.92 on a 5-point scale.

Second, we investigated participants' preference for the merit principle. Participants' scores tended to fall near the top range of the 7-point scale ($M = 5.24$), and there was little variance ($SD = 0.60$). To create more distinct groups, we identified participants as having either a weak or a strong preference for the merit principle on the basis of 40th and 60th percentile cuts on the PMP Scale distribution. Participants were classified as weakly endorsing the merit principle if their scores ranged from 3.27 to 5.07 on a 7-point scale and as strongly endorsing the merit principle if their scores ranged from 5.40 to 6.73. In total, 319 participants met both selection criteria.

Main study. Approximately 1 month later, using the same procedure as in Study 1, we randomly selected 83 students to participate in the Cochrane Industries corporate survey. At the beginning of each session, participants were told that Cochrane Industries needed to assess respondents' beliefs about various issues related to affirmative action to better interpret their responses on the affirmative action survey. However, because of time limits, participants would be surveyed on only one issue. After a fake draw, participants were informed that discrimination in the workplace was the topic randomly selected for that session. Participants were randomly assigned to either the low- or the high-discrimination condition. Although the

research assistant was aware of experimental condition, he was unaware of participants' strength of preference for the merit principle.

Participants were given the discrimination in the workplace survey, which was, of course, our experimental manipulation. Participants were told to indicate the extent to which they agreed with six statements concerning discrimination in the workplace on an 11-point scale (0 = *very strongly disagree* to 10 = *very strongly agree*). They were led to believe that their responses were anonymous. In the low-discrimination condition, participants responded to statements that used qualifiers to make agreement difficult. Two sample items are "During selection interviews, personal biases that interviewers have against women (e.g., the belief that males are more competent) nearly always affect the assessment of female job applicants" and "In almost all organizations, visible minorities are unfairly disadvantaged because most co-workers and superiors hold negative racial stereotypes." In the high-discrimination condition, participants responded to statements that used qualifiers to make agreement easy. Two sample items are "At times, subtle personal biases of some job interviewers (e.g., beliefs that males are more competent) may inadvertently disadvantage female job applicants in the assessment of their qualifications" and "Visible minorities are unfairly disadvantaged at times because some co-workers and superiors may hold negative racial stereotypes." We presumed that respondents would infer their perceptions of workplace discrimination on the basis of their level of agreement with the discrimination manipulation items.

After completing the experimental manipulation, participants were given the affirmative action survey, in which the preferential treatment program was described. The opposition and merit-violation items were the same as in Study 1. In addition, we included items to explore the effects of perceptions of discrimination on construal of the preferential treatment program among those who strongly endorse merit. In particular, we measured construal of the program as merit restoring, specifically as assisting underrated target-group members, with the following item: "Corporation A's program would facilitate the hiring and promotion of women and visible minorities whose qualifications (given current assessment procedures) underestimate their actual abilities." Participants' perceptions of the program as necessary were measured by the item, "Corporation A's program is necessary to eliminate any current discrimination that exists against women and visible minorities at Cochrane Industries." In addition, we measured participants' perceptions of the program as a short-term solution for unequal representation: "Corporation A's program is a short-term solution to ensure equal representation of all groups in workplaces of the future." Finally, participants' feelings of White guilt were measured: "I feel guilty about any current discrimination that exists against women and visible minorities." All of these construal items were rated on a 7-point scale (1 = *strongly disagree* to 7 = *strongly agree*). When participants had completed the survey, they were probed for suspicion and fully debriefed.

Independent manipulation check. To test the effectiveness of our manipulation, we ran an independent sample of participants through a procedure similar to Study 2. In an initial phase, 742 introductory psychology students completed mass-testing booklets that included the 15-item PMP Scale and the 8-item Perceptions of Workplace Discrimination Scale, which measures participants' perceptions of general discrimination in the treatment of target-group members.

In a secondary phase, approximately 3 months later, a subset of the same students ($N = 110$) completed a second mass-testing booklet outside of class. In the second booklet, mixed among other researchers' measures, was our experimental manipulation of perceptions of discrimination followed by the manipulation check. The experimental manipulation and the manipulation check were on different pages of the questionnaire, and they were separated by another researcher's scale. On the first page, respondents were told to indicate the extent to which they agreed with six statements concerning discrimination in the workplace on an 11-point scale (0 = *very strongly disagree* to 10 = *very strongly agree*).

The manipulation check consisted of seven items designed to tap perceptions of bias against women and visible minorities in the assessment of their merit (i.e., skills, abilities, and knowledge). Respondents rated each item on a 7-point scale (1 = *strongly disagree* to 7 = *strongly agree*). A sample item is, "Overall, in both personnel selection and performance evaluation, there are no biases against women and visible minorities in the assessment of their skills, abilities, and knowledge" (negatively keyed). The manipulation check was not included in the main study to avoid potential contamination of the item used to measure construal of the program as merit restoring (i.e., as assisting underrated target-group members).

To identify potential participants, we first excluded participants with extreme preexisting beliefs about the existence of workplace discrimination. There was a significant difference between men's ($M = 3.03$, $SD = 0.68$) and women's scores ($M = 3.32$, $SD = 0.52$) on the Perceptions of Workplace Discrimination Scale, $t(108) = 2.34$, $p = .02$; therefore, we calculated the 25th and 75th percentiles for each gender separately. Potential participants included men whose Perception of Discrimination score fell between 2.69 and 3.50 and women whose score fell between 2.87 and 3.75 on a 5-point scale. Second, we identified participants as having either a weak or a strong preference for the merit principle on the basis of 40th and 60th percentile cuts on the PMP Scale distribution. Participants were classified as weakly endorsing the merit principle if their scores ranged from 3.53 to 5.07 and as strongly endorsing the merit principle if their scores ranged from 5.53 to 6.73 on a 7-point scale. In total, 56 participants met both selection criteria. Seventy-five percent of participants were White.

Results

Independent Manipulation Check

To investigate the success of the manipulation, we tested whether participants responded to the discrimination manipulation in the predicted manner. Participants' responses to the six discrimination manipulation items were averaged to calculate an agreement score. We expected participants in the high-discrimination condition to endorse the discrimination items more, compared with those in the low-discrimination condition. We conducted a 2 (discrimination condition) \times 2 (preference for the merit principle) analysis of covariance (ANCOVA) on participants' mean agreement with the discrimination items, with participants' initial perceptions of general workplace discrimination as a covariate. Participants' perceptions of general discrimination (as measured in mass testing) did not interact with predictors for any analyses.

Participants' initial perceptions of workplace discrimination did not predict endorsement of the discrimination items, $F(1, 51) = 0.19$, *ns*, nor did participants' preference for the merit principle, $F(1, 51) = 0.32$, *ns*. As expected, there was a large effect of experimental condition on participants' responses, $F(1, 51) = 27.17$, $p < .001$, such that participants in the high-discrimination condition endorsed the discrimination items more ($M = 6.74$), compared with participants in the low-discrimination condition ($M = 4.78$). Thus, the use of different qualifiers in the two conditions led participants to differentially endorse the manipulation items as intended: Participants in the high-discrimination condition agreed more with the discrimination items, compared with those in the low-discrimination condition. The interaction was not significant, $F(1, 51) = 0.61$, *ns*.

We tested whether the experimental manipulation of perceptions of discrimination influenced participants' judgments of the degree to which bias exists in the assessment of target-group members' knowledge, skills, and abilities. Reliability analyses revealed that one of the seven bias items had a low item-total correlation. Therefore, we averaged six items with a Cronbach's alpha of .78 to create a manipulation check for perceptions of bias. Similar to the above analysis, a 2 (condition) × 2 (preference for the merit principle) ANCOVA was conducted. Data were missing for 1 participant. Neither participants' initial perceptions of discrimination nor their preference for the merit principle predicted their response to the manipulation check, $F(1, 50) = 0.33, ns$, and $F(1, 50) = 1.16, ns$, respectively. As predicted, there was a significant effect of experimental condition, $F(1, 50) = 5.45, p = .02$, such that participants in the high-discrimination condition indicated that more bias exists in the assessment of target-group members' knowledge, skills, and abilities ($M = 5.10$), compared with those in the low-discrimination condition ($M = 4.63$). The experimental manipulation affected participants' later judgments of how much bias exists in the assessment of target-group members' knowledge, skills, and abilities. The interaction was not significant, $F(1, 50) = 0.43, ns$.

Main Study Preliminary Analyses

Initial analyses using a 2 (discrimination condition: low vs. high) × 2 (preference for the merit principle: weak vs. strong) ANOVA revealed that participants in the two experimental conditions differed in respect to their initial perceptions of general workplace discrimination, as measured in the mass-testing booklet. As shown in Table 2, there was an effect of discrimination condition as well as a Preference for the Merit Principle × Discrim-

ination Condition interaction on participants' initial perceptions of workplace discrimination. Therefore, in all analyses, we controlled for participants' initial perceptions of general discrimination in the workplace. Participants' perceptions of general discrimination (as measured in mass testing) did not interact with any predictors for any analyses. Participants in the two conditions did not differ with regard to their PMP scores (see Table 2). It is important to note that participants in the low-discrimination condition endorsed the merit principle to the same degree as the participants in the high-discrimination condition.

We tested whether participants responded to the discrimination manipulation in the intended manner. We calculated an average agreement score for the six discrimination manipulation items. A 2 (discrimination condition) × 2 (preference for the merit principle) ANCOVA was then conducted on participants' mean agreement with the discrimination items. As can be seen in Table 2, there was a large effect of experimental condition on participants' responses, $F(1, 77) = 40.85, p < .001$. As expected, just as in our independent manipulation check study (described above), participants in the high-discrimination condition endorsed the discrimination items significantly more ($M = 6.22$) than did participants in the low-discrimination condition ($M = 4.70$).

Opposition to the Preferential Treatment Program

The two opposition items correlated at $r(80) = .82, p < .001$, and thus were averaged to create an opposition composite. To investigate opposition to the preferential treatment program, we conducted a 2 (discrimination condition) × 2 (preference for the

Table 2
Study 2: Participant Distribution, Reactions to the Experimental Manipulation, and Construal of the Preferential Treatment Program

Dependent variable	Condition/participant group				Analyses of variance and of covariance			
	Low discrimination		High discrimination		PMP	F condition	PMP × Condition	df
	Weak PMP (22)	Strong PMP (22)	Weak PMP (19)	Strong PMP (19)				
Initial disc	3.21	3.42	3.49	3.38	0.47	3.58†	6.30*	1, 78
PMP ^a	4.62	5.81	4.66	5.66	229.77***	0.46	1.58	1, 77
Agreement ^a	4.79	4.61	6.08	6.37	0.05	40.85***	0.91	1, 77
UR ^{a,b}	4.50	4.01	4.32	4.84	0.01	1.58	3.70†	1, 76
Necessary ^{a,b}	3.74	2.93	2.86	3.26	0.41	0.70	3.26†	1, 76
Short-term ^{a,b}	3.87	4.71	4.33	5.16	6.85**	1.98	0.00	1, 76
Guilt ^{a,b,c}	4.25	4.34	3.22	4.12	1.38	1.83	0.89	1, 48

Note. $N = 82$. Cell sample sizes are in parentheses. Condition = experimental condition (low discrimination vs. high discrimination); PMP = preference for the merit principle; Initial disc = participants' initial perceptions of general workplace discrimination; Agreement = participants' endorsement of the discrimination manipulation items; UR = perception that the program will assist underrated target-group members; Necessary = perception that the program is necessary to eliminate discrimination; Short-term = perception that the program is a short-term solution for equal representation; Guilt = feelings of guilt about discrimination.

^a Participants' initial perceptions of general workplace discrimination was a covariate for these analyses. ^b The survey version that participants completed was a covariate for these analyses. ^c $N = 54$.
† $p < .10$. * $p < .05$. ** $p \leq .01$. *** $p < .001$.

merit principle) ANCOVA.⁷ Results of the ANCOVA revealed a marginal effect of initial perceptions of discrimination, $F(1, 76) = 3.27, p = .07$. Participants who initially perceived more workplace discrimination tended to be less opposed to the preferential treatment program. Preference for the merit principle did not predict opposition to the program, $F(1, 76) = 0.14, ns$, nor did discrimination condition, $F(1, 76) = 0.29, ns$. However, the Preference for the Merit Principle \times Discrimination Condition interaction was significant, $F(1, 76) = 4.39, p = .04$ (see Figure 3). Simple effects analyses revealed a marginally significant relation between preference for the merit principle and opposition to the preferential treatment program in the low-discrimination condition, $F(1, 76) = 2.98, p = .08$. More specifically, when induced to perceive little workplace discrimination, participants with a strong preference for the merit principle tended to be more opposed to the preferential treatment program ($M = 5.57$), compared with their low-scoring counterparts ($M = 4.82$). In contrast, in the high-discrimination condition, preference for the merit principle had no effect on opposition, $F(1, 76) = 1.49, ns$ (strong preference for the merit principle, $M = 4.77$; weak preference for the merit principle, $M = 5.30$). Thus, replicating Study 1, the effect of preference for the merit principle on opposition existed when participants were induced to perceive little workplace discrimination, but it was mitigated when participants were induced to perceive more workplace discrimination.

Looking at the interaction a different way, we note that among participants who strongly endorsed meritocracy, those induced to perceive more workplace discrimination tended to be less opposed to the program, compared with those who were induced to perceive little workplace discrimination, $F(1, 76) = 3.61, p = .06$. Thus, greater perceptions of workplace discrimination led people who strongly endorsed meritocracy to reduce their opposition to affirmative action. In contrast, among participants who weakly endorsed the merit principle, discrimination condition did not affect

opposition to the preferential treatment program, $F(1, 76) = 0.84, ns$. Therefore, we replicated the simple effect of perceptions of discrimination found in Study 1 with an experimental manipulation. These results suggest that people who strongly endorse meritocracy are more offended by and are willing to combat workplace discrimination to the extent that they perceive it.

Mediation of the Preference for the Merit Principle Simple Effect

To replicate Study 1, we tested whether the simple effect of preference for the merit principle for people in the low-discrimination condition was mediated by construal of the program as merit violating (see Figure 4). To be consistent with our major analyses, we conducted mediation analyses, controlling for initial perceptions of workplace discrimination and survey version. Mediation analyses indicated that, first, the stronger participants' preference for the merit principle was, the more they construed the program as merit violating ($\beta = .39, F(1, 40) = 6.40, p = .02$). Second, when we controlled for participants' preference for the merit principle, those who construed the program as more merit violating were more opposed ($\beta = .78, F(1, 39) = 53.25, p < .001$). Third, the effect of participants' preference for the merit principle on opposition ($\beta = .29, F(1, 40) = 3.42, p = .07$), was reduced ($\beta = -.01, F(1, 39) = 0.01, ns$, once participants' construal of the program as merit violating was controlled. A test of the reduction in the beta was significant ($z = 2.41, p = .02$). Furthermore, a test of the overall model was significant, $F(4, 39) = 16.18, p < .001$, and the adjusted multiple correlation squared was .59. Thus, results are consistent with full mediation. When participants were induced to perceive little workplace discrimination, those with a strong preference for the merit principle were more opposed to the preferential treatment program, compared with their low-scoring counterparts, because of their construal of the program as more merit violating.

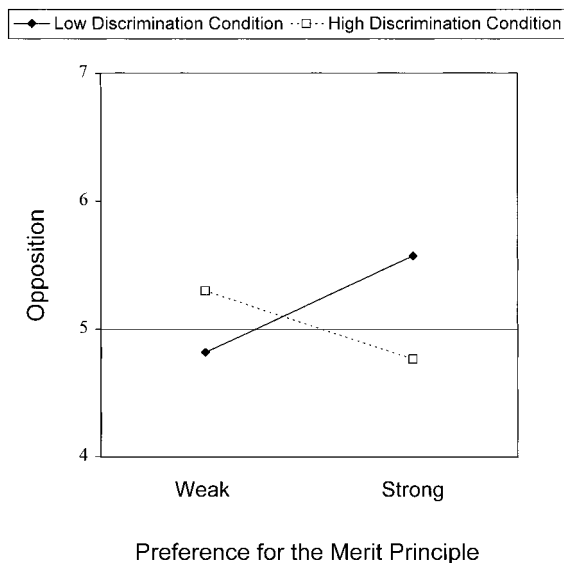


Figure 3. Study 2: The interactive effect of preference for the merit principle (weak vs. strong) and discrimination condition (low vs. high) on opposition to the preferential treatment program. $N = 82$.

The Effects of Discrimination Condition on Construals for Those Who Strongly Endorse Merit

We hypothesized that, under conditions of high (vs. low) discrimination, people with a strong preference for the merit principle might construe a preferential treatment program as more likely to assist target-group members whose abilities are underrated. Therefore, we conducted a 2 (discrimination condition) \times 2 (preference for the merit principle) ANCOVA on construal of the program as assisting underrated target-group members. Results of the ANCOVA revealed a marginal effect of initial perceptions of discrimination, $F(1, 76) = 3.07, p = .08$. Participants who initially perceived more workplace discrimination tended to construe the

⁷ Participants were randomly assigned to complete one of two different versions of the affirmative action survey that was administered. In both versions, the merit violation items were administered first. In one version, the opposition items followed the other construal items and filler items (coded as -1). In the second version, the other construal and filler items followed the opposition items (coded as 1). There was no main effect of survey version, nor did it interact with any of the predictors for any analyses. Thus, the survey version that participants completed was used as a covariate for all subsequent analyses.

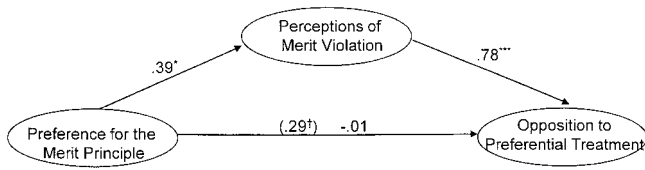


Figure 4. Study 2: Path analysis depicting the mediating role of perceptions of merit violation in the relation between preference for the merit principle and opposition to the preferential treatment program among those in the low-discrimination condition. Numbers on paths are betas. The total effect between predictor and criterion (i.e., before construal is controlled for) is given inside parentheses; the direct effect between predictor and criterion (i.e., after construal is controlled for) is given outside parentheses. $N = 44$. † $p < .10$. * $p < .05$. *** $p < .001$.

preferential treatment program as more likely to assist underrated target-group members. We also found a marginally significant Merit Principle \times Discrimination Condition interaction, $F(1, 76) = 3.70, p = .06$ (see Figure 5, Table 2). As predicted, among participants who strongly endorsed meritocracy, those induced to perceive more workplace discrimination perceived the program as more likely to assist target-group members whose abilities are underrated, compared with those who were induced to perceive little workplace discrimination, $F(1, 76) = 5.26, p = .02$. No other simple effects approached significance.

To explore other effects of the discrimination manipulation on construal of the program for those who strongly endorsed meritocracy (i.e., the program is necessary; the program is a short-term solution for unequal representation; feelings of White guilt), we conducted 2 (discrimination condition) \times 2 (preference for the merit principle) ANCOVAs. (The White guilt analysis was conducted only on White participants.) As shown in Table 2, no Preference for the Merit Principle \times Discrimination Condition interactions emerged for participants' perceptions of the preferential treatment program as a short-term solution to ensure equal representation of all groups or for participants' feelings of White guilt. Because the item used to tap feelings of White guilt referred to both racial and gender discrimination, we reran this analysis only with White male participants. Still, no effects emerged. A marginal Preference for the Merit Principle \times Discrimination Condition interaction was found for perceptions of the program as necessary. However, among participants who strongly endorsed meritocracy, those induced to perceive more workplace discrimination construed the program as no more necessary, compared with those who were induced to perceive little workplace discrimination, $F(1, 76) = 0.57, ns$ (see Table 2). Quite inexplicably, among those who weakly endorsed meritocracy, the program was construed as more necessary under conditions of low (vs. high) discrimination, causing the interaction trend.

Discussion

The results for the independent manipulation check indicate that we successfully created an experimental manipulation of participants' perceptions of workplace discrimination. We found that participants responded to the discrimination manipulation in the predicted manner: Those in the high-discrimination condition endorsed the discrimination items more than did participants in the

low-discrimination condition. Furthermore, participants' responses to the manipulation generalized to their judgments of the degree to which bias exists in the assessment of target-group members' knowledge, skills, and abilities. In other words, participants in the high-discrimination condition later indicated that they perceive more bias in the evaluation of target-group members' merit, compared with participants in the low-discrimination condition.

Using an experimental manipulation of participants' perception of workplace discrimination in Study 2, we have replicated and extended our initial findings. First, we found that participants' perceptions of workplace discrimination interacted with their preference for the merit principle to produce opposition to a preferential treatment program. Among those experimentally induced to perceive little workplace discrimination, participants who strongly endorsed meritocracy tended to oppose a preferential treatment program, compared with those who weakly endorsed meritocracy. However, this effect was mitigated for participants who were experimentally induced to perceive more workplace discrimination. Thus, the typical relation between participants' preference for the merit principle and opposition to a preferential treatment program did not hold for participants who were experimentally induced to perceive high levels of workplace discrimination.

Considering the same interaction from a different perspective, we found that, among participants with a strong preference for the merit principle, those induced to perceive more workplace discrimination tended to reduce their opposition to a preferential treatment program, compared with those induced to perceive little workplace discrimination. Thus, greater perceptions of workplace discrimination caused participants who strongly endorsed meritocracy to reduce their opposition to a preferential treatment program. In contrast, the experimental manipulation of perceptions of discrimination did not affect opposition for participants with a weak preference for the merit principle.

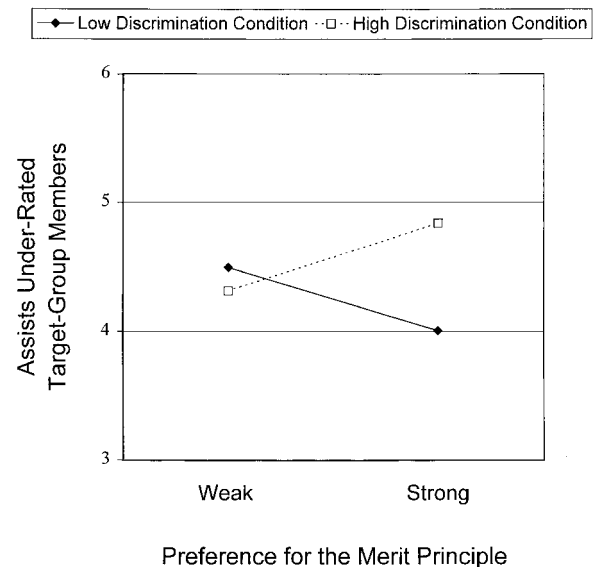


Figure 5. Study 2: The interactive effect of preference for the merit principle (weak vs. strong) and discrimination condition (low vs. high) on construal of the preferential treatment program as assisting underrated target-group members. $N = 82$.

Second, among participants in the low-discrimination condition, we replicated the preference for the merit principle mediation effects found in Study 1. Mediation analyses were consistent with the notion that when participants perceive little workplace discrimination, those with a stronger preference for the merit principle are more opposed to a preferential treatment program because of their construal of the program as more merit violating.

Third, as predicted, participants with a strong preference for the merit principle in the high-discrimination condition construed the preferential treatment program as more likely to facilitate the hiring and promotion of underrated target-group members, compared with those in the low-discrimination condition. In contrast, discrimination condition did not influence construal of the program as assisting underrated target-group members for participants with a weak preference for the merit principle. Although we believe that people who strongly endorse meritocracy should reduce their opposition to a preferential treatment program when they are induced to perceive high levels of workplace discrimination because they construe the program as hiring underrated target-group members, we did not conduct a formal test of mediation. When an experimental manipulation is expected to influence the variance in participants' ratings on the purported mediator, there should be little meaningful within-condition variance on the purported mediator. Thus, much of the relevant variance in construal of the program as assisting underrated target-group members should exist between conditions (i.e., low vs. high discrimination), not within condition. Consequently, with an experimental manipulation of the independent variable, an important condition for mediation may not be met: The purported mediator may not affect opposition while controlling for the independent variable (i.e., experimental condition). Taking the above into account, we did not formally test mediation for the simple effect of perceptions of discrimination on opposition to the preferential treatment program among those with a strong preference for the merit principle. Therefore, at best, the results of Study 2 suggest a potential mediator of the simple effect of discrimination condition on opposition for those who strongly endorse merit.

Exploratory analyses provided no evidence for the notion that people with a strong preference for the merit principle alter their construal of a preferential treatment program under conditions of high workplace discrimination such that they are more likely to perceive the program as (a) more necessary to reduce discrimination or (b) a short-term solution for unequal representation. In addition, these participants did not report feeling any greater White guilt.

General Discussion

Predicting Opposition to a Preferential Treatment Program

The starting point for this research was the assumption that merit-based opposition to affirmative action is real. What was less clear, however, was whether merit-based opposition to affirmative action is absolute and unchangeable. In other words, do people who strongly endorse meritocracy always oppose merit-violating affirmative action programs? We hypothesized that merit-based opposition to a preferential treatment program should be mitigated when participants perceive high levels of workplace discrimination

against women and visible minorities (i.e., two of the intended beneficiary groups). Because discrimination can involve unmerited outcomes, people who strongly endorse meritocracy should be offended by discrimination and, thus, motivated to reduce it (see Bobocel et al., 2002, for a fuller discussion of these issues). Furthermore, the presence of discrimination can imply that target-group members are being undervalued in terms of their deservingness. Consequently, participants with a strong preference for the merit principle should reduce their opposition to a preferential treatment program when they perceive high levels of workplace discrimination.

Across two studies, the relation between participants' preference for the merit principle and their opposition to the preferential treatment program was contingent on their perceptions of workplace discrimination. In Study 1, using participants' preexisting perceptions of workplace discrimination, and in Study 2, using an experimental manipulation of perceptions of workplace discrimination, we found that participants' preference for the merit principle and perceptions of discrimination significantly interacted to produce opposition to a preferential treatment program. When we combined Studies 1 and 2 using Bush and Mosteller's (1954) Stouffer method for adding z s, as recommended by Rosenthal (1984), the Preference for the Merit Principle \times Discrimination interaction term was significant ($z = 2.45, p = .01$). Furthermore, the pattern of the interaction was highly consistent across studies (see Figures 1 and 3).

Combining the two studies, we find that when participants perceive little workplace discrimination, those who more strongly endorse meritocracy are more opposed to a preferential treatment program ($z = 2.71, p = .007$). In contrast, when participants perceive more workplace discrimination, this effect is mitigated ($z = 0.55, ns$). Examining the interaction from a different perspective shows that when participants who strongly endorse meritocracy perceive more discrimination against women and visible minorities in the assessment of their merit, they are less opposed to a preferential treatment program than they would otherwise be ($z = 2.77, p = .006$). It is important to note that perceiving more discrimination does not lessen opposition to the preferential treatment program for those who weakly endorse meritocracy ($z = 0.23, ns$). In conclusion, in both a correlational and an experimental study, we consistently find that people who strongly care about merit reduce their opposition to a preferential treatment program when they perceive high levels of workplace discrimination against women and visible minorities.

Mediation of the Preference for the Merit Principle Effect Among Participants Who Perceive Little Discrimination

We had hypothesized that, among people who perceive little discrimination, those who strongly endorse meritocracy are more opposed to a preferential treatment program because they construe it to be more merit violating. This hypothesis was partially supported by mediation analyses in Studies 1 and 2. When we combine the mediation results across both studies, the evidence for mediation is strong. First, greater endorsement of the merit principle is related to greater perceptions of the program as merit violating ($z = 2.57, p = .01$). Second, when we controlled for individual differences in endorsement of meritocracy, greater perceptions of the program as merit violating were related to greater

opposition ($z = 5.32, p < .0001$). Third, the relation between endorsement of the merit principle and opposition to the program ($z = 2.14, p = .03$) was no longer significant when construal of the programs as merit violating was controlled ($z = 0.44, ns$), and a test of this reduction in the beta is highly significant ($z = 2.91, p = .004$). Thus, among people who perceive little workplace discrimination, those who more strongly endorse the merit principle construe the preferential treatment program as more merit violating and, consequently, are more opposed.

It appears that people with weak versus strong preference for the merit principle have different attitudes toward the preferential treatment program because, in essence, they are evaluating different programs. The potential for the program to violate meritocracy is likely more important to people who strongly care about merit. Therefore, participants with a strong preference for the merit principle might have selectively elaborated relevant information (e.g., spent more time reading the details of the program), which led them to construe it as more merit violating (see Boninger, Krosnick, Berent, & Fabrigar, 1995, for a review). In addition, participants with a strong preference for the merit principle might have retrieved these attitudes from memory, which influenced their construal of the program (see Fazio, 1995, for a review). Future research could investigate some of the cognitive processes that might lead participants who strongly endorse meritocracy to construe affirmative action as merit violating.

Construal of the Program When Perceptions of Discrimination Are High

As predicted, participants with a strong preference for the merit principle were more likely to perceive the preferential treatment program as facilitating “the hiring and promotion of women and visible minorities whose qualifications (given current assessment procedures) underestimate their actual abilities” under conditions of high versus low discrimination. Furthermore, this is the only construct that we tested, which could potentially mediate the simple effect of discrimination among participants who strongly endorse meritocracy. It makes sense that people who care about meritocracy might be less opposed to affirmative action under conditions of high discrimination because they perceive the beneficiaries of affirmative action as meritorious—rather than because they perceive the program as necessary or as a quick fix for unequal representation or because of increased feelings of guilt.

Future research should further investigate the specific processes through which increased perceptions of workplace discrimination lead people who strongly value merit to reduce their opposition to affirmative action. We propose that when people recognize discrimination in the assessment of merit, they then view target-group members’ qualifications as greater than they appear on paper. For instance, if an organization ignores the contributions that employees from diverse groups can bring (e.g., plurality of ideas, ability to communicate with a diverse customer base), then the merit of these employees is undervalued. Consequently, a program that promotes target-group members, who rank lower than a White man on traditional criteria, could restore meritocracy to a biased system.

Limitations of the Current Research

There are four major criticisms that might limit the conclusions that can be drawn from the present research. First, we have argued that people with a strong preference for the merit principle who perceive high levels of workplace discrimination will reduce their opposition to a preferential treatment program to correct for discrimination. Indeed, the data from both a correlational (Study 1) and an experimental study (Study 2) indicate that this is true. However, participants in these studies were given only one means of combating discrimination. It is possible that, if given the chance, participants would choose other means of reducing discrimination (e.g., changing selection criteria) over a preferential treatment program.

Second, in examining how the perception of discrimination mitigates merit-based opposition to affirmative action, we focused on opposition to a preferential treatment program. In reality, many different forms of affirmative action exist (see Kravitz & Platania, 1993, for examples), and the psychology of opposition to each of these programs might differ (see Bobocel et al., 1998). Thus, we cannot presume that the predictors of opposition to the preferential treatment program generalize to other types of programs.

Third, all participants were University of Waterloo undergraduate students. Therefore, it is unclear whether the results would generalize to other populations, such as employees of an organization. Other variables may likely become important determinants of opposition when people evaluate their company’s affirmative action policy (e.g., self-interest and trust in the organization and its leaders) and might weaken the effects found in the current research. In addition, it is unclear whether the experimental manipulation of perceptions of discrimination would be effective with (a) a workforce population and (b) people with more extreme attitudes about workplace discrimination. It is also unclear whether the current findings would be replicated with a more direct manipulation of perceptions of discrimination (e.g., a persuasive appeal). Future research should test the generalizability of the current findings.

Fourth, the studies were not specifically designed to test for the effects of ethnicity and gender. Yet past research indicates that ethnicity is often related to attitudes toward affirmative action. Whites are generally more opposed to affirmative action than are visible minorities (Kravitz & Platania, 1993; Kravitz et al., 2000; Parker, Baltes, & Christiansen, 1997). And women are sometimes more opposed (Murrell et al., 1994), sometimes equally opposed (Kravitz & Klineberg, 2000; Kravitz et al., 2000), and sometimes less opposed to affirmative action (Kravitz & Platania, 1993; Tougas & Beaton, 1993), compared with men. The majority of our participants were White and female, reflecting the demographic make-up of the Waterloo introductory psychology population. Therefore, we ran only cursory analyses to investigate gender and ethnicity effects. In Study 2, White participants were more opposed to the preferential treatment program than were visible minority participants. However, ethnicity did not interact with any predictors. In both studies, gender was unrelated to opposition. Finally, through internal analyses, we investigated whether our major findings were perhaps stronger among nonbeneficiaries of affirmative action (i.e., men or White men). It is interesting that this was not the case.

It is possible that target-group status played only a small role in the current research because an individual-differences measure was included that is psychologically more relevant to attitudes toward affirmative action: perceptions of discrimination against target-group members. Past research reveals that group membership is related to perceptions of discrimination (Kravitz & Klineberg, 2000; Tougas & Beaton, 1993), which in turn are related to opposition to affirmative action (Kravitz & Klineberg, 2000; Jacobson, 1985; Swim & Miller, 1999; Tougas & Veilleux, 1990; Veilleux & Tougas, 1989). Perhaps group membership affects opposition to affirmative action because different groups perceive differing levels of discrimination in the workplace.

Theoretical Implications of the Current Research

Despite the potential limitations of the current research, some important theoretical and practical implications can be drawn. First, because only participants who value meritocracy reduce their opposition to a preferential treatment program under conditions of high discrimination, our data suggest that people who value meritocracy care more about reducing discrimination, compared with those who weakly value merit. This conclusion is consistent with the notion that participants conceptualize workplace discrimination as a form of merit violation. It would be interesting in future research to investigate directly how people who weakly and strongly endorse meritocracy conceptualize discrimination. Are participants with a strong preference for the merit principle more likely to conceptualize discrimination in selection and assessment as merit violating, compared with their low-scoring counterparts? Or are the two groups equally likely to conceptualize discrimination as merit violating, but those with a strong preference for the merit principle are then more offended?

Second, our findings indicate that people can construe a policy as both merit violating and merit restoring depending on their point of reference. Participants who strongly endorsed meritocracy and who perceived high levels of workplace discrimination construed the program as merit violating for White men but as merit restoring for target-group members. In addition, our results are consistent with the notion that participants were influenced by both these considerations when determining their level of opposition. Indeed, it is likely that the perception of workplace discrimination was not sufficient to induce support for the program among participants who highly value merit because of the fact that, whereas these people perceived the program as restoring merit for target-group members, they also perceived it to be merit violating for White men. The finding that people can evaluate a policy as fair for some and unfair for others has implications for justice theory in general as well as for theory on policy preferences.

Third, the current research sheds some light on the motivations and concerns of people who strongly endorse meritocracy. It has been argued that concerns about meritocracy serve to justify opposition to affirmative action (Dovidio & Gaertner, 1996; Murrell et al., 1994). More broadly, meritocracy has been described as an ideology that helps to maintain group inequality and legitimize discrimination because the dominant group controls the inputs that society considers when evaluating merit (Pratto, 1999; Pratto, Sidanius, Stallworth, & Malle, 1994; Sidanius et al., 1996). Furthermore, the perception that outcomes are distributed on the basis of merit has been described as a belief that rationalizes or justifies

the status quo (Garcia, Pancer, Desmarais, & Jackson, 2001; Just & Banaji, 1994). However, the current research reveals that participants who value meritocracy do not persist in their opposition to a preferential treatment program in the face of high discrimination, as individuals who want to maintain the status quo might. Rather, these individuals oppose affirmative action when they perceive it to be unjust but are more supportive when they perceive injustice in the form of workplace discrimination.

In discussions of meritocracy, it is critical to distinguish between meritocracy as a prescriptive norm (i.e., the belief that meritocracy should be operating in society) versus a descriptive norm (i.e., the belief that meritocracy is currently operating in society; Davey et al., 1999; Garcia et al., 2001). The current research focuses on people who strongly believe that the merit principle should ideally be used to allocate resources. In future research, it would be interesting to investigate how both prescriptive and descriptive meritocratic norms relate to opposition to affirmative action.

There are three important practical implications of our mitigation finding. First, when one is speculating how people who strongly endorse meritocracy will respond to an affirmative action program, it is important to consider societal shifts in views about the prevalence of discrimination. Individuals who value merit should be less opposed to affirmative action programs such as the preferential treatment program at times when workplace discrimination is believed to be prevalent. In contrast, they should be more opposed to such programs at times when workplace discrimination is believed to be scarce.

Second, the current set of studies suggest that if organizations increase employees' awareness of the existence of discrimination against beneficiaries, they might be able to garner more support among those who strongly value merit than is typical for affirmative action programs that can be construed as violating the merit principle. Furthermore, organizations might increase perceptions of the program as fair, compliance to the program, and respect for the beneficiaries of the program. We discuss this issue in greater detail shortly.

Increasing the awareness of discrimination against women and visible minorities might result in greater support for other organizational initiatives designed to restore equity to selection and job performance processes, particularly among people who strongly endorse meritocracy. For instance, employees might be more receptive to job analyses being conducted to determine the actual skills, knowledge, and abilities needed to perform a job so that bias is less likely to influence the criteria chosen for selection or performance appraisals. Employees might also support the elimination of tests that result in adverse impact in selection procedures. Finally, they might support new policies and procedures that aim to reduce bias in the assessment of merit, such as having representative committees rather than an individual review job applicants or switching to a structured (rather than an unstructured) interview. In contrast to a preferential treatment program, the initiatives described above should be construed only as merit restoring. Thus, when perceptions of discrimination are high, preference for the merit principle should predict support for such initiatives. The challenge faced by organizations is how to admit to employees that, in the past, their practices may have been discriminatory.

Finally, the current research suggests a potential solution for one of the negative consequences of preferential treatment faced by beneficiaries. In many studies, participants—including those in the beneficiary role—evaluate women as less competent if they are selected under a preferential treatment program, compared with a program in which merit is the only selection criteria (Heilman et al., 1996, 1998; Major, Feinstein, & Crocker, 1994). It is both ironic and discouraging that a preferential treatment program, designed to counteract the biases faced by women and visible minorities, results in attributional ambiguity concerning their deservingness. Perhaps the most heartening finding in the current research is that participants with a strong preference for the merit principle in the high-discrimination condition perceived the beneficiaries of affirmative action as underrated in terms of their qualifications. Thus, the current research suggests means through which beneficiaries can be seen as deserving the leg up in the workplace that affirmative action provides.

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