DOES THE PERCEPTION OF DISCRIMINATION MITIGATE JUSTICE-BASED OPPOSITION TO AFFIRMATIVE ACTION?

by

Leanne Sui Mei Son Hing

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Abstract

When faced with high levels of workplace discrimination, how do people with strong justice values evaluate affirmative action programs that violate their cherished justice principles? In previous research (Bobocel, Son Hing, Davey, Stanley, & Zanna, 1998; Davey, Bobocel, Son Hing, & Zanna, 1999; Son Hing, 1997), we found that people with strong justice values (e.g., those who strongly endorse the merit principle) tend to oppose affirmative action programs that violate those justice principles. For instance, the more people value meritocracy, the more they oppose a preferential treatment program that allows a target-group member to be hired over a more qualified White male. The goal of this dissertation is to investigate whether people with strong justice values still oppose affirmative action when they perceive high levels of discrimination to exist against the potential beneficiaries of programs (e.g., women and visible minorities).

In line with earlier research, I expect participants' justice values to predict opposition to affirmative action among those who perceive little workplace discrimination. I expect justice-based opposition to affirmative action to be mitigated, however, among those who perceive high levels of workplace discrimination. This mitigation hypothesis derives primarily from the expectation that greater perceptions of discrimination will result in reduced opposition to affirmative action particularly for those with strong justice values. I argue that workplace discrimination can be conceptualized as a form of justice violation. Thus, people who strongly value justice should be most offended by discrimination. Consequently, they should reduce their opposition to affirmative action.

Three studies were run to investigate opposition to a preferential treatment program. Participants were undergraduate students ostensibly responding to a corporate survey on

affirmative action. Results support the mitigation hypothesis when investigating both (a) participants' pre-existing perceptions of workplace discrimination, and (b) experimentally manipulated perceptions of discrimination. In addition, results are consistent with the notion that construal of the program as justice violating/restoring is the mediating mechanism for both the justice and discrimination effects. Practical and theoretical implications of the findings are discussed.

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Dedication

This thesis is dedicated to Jeff Bennett—the partner I always dreamed of having.

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INTRODUCTION

People should be rewarded for hard work. The best and the brightest should rise to the top. The same standards should be applied to everyone. Procedures should favor no individual or group. In North America, these statements are cultural truisms. Still, some people endorse these ideas more than do others. How might we expect individuals with these strong justice values to react to affirmative action programs, such as a preferential treatment program, designed to assist target-group members such as women and visible minorities?[1] Perhaps they would cry out and object that such programs are unfair because they violate cherished justice principles. An interesting question is whether these individuals would still consider affirmative action unfair and objectionable if they perceive high levels of workplace discrimination against women and visible minorities. In such a situation, affirmative action might be seen as more fair, and in perceiving workplace discrimination, people might reduce their opposition to affirmative action; yet, this proposition has never been tested. The purpose of this dissertation research is to investigate how people's justice values interact with their perceptions of workplace discrimination to produce opposition to affirmative action. In three studies, I test the hypothesis that justice-based opposition to affirmative action should be mitigated by the perception of workplace discrimination. Before I describe the rationale for my predictions and the mechanisms through which I expect effects to occur, I will first review the relevant literature to provide a framework for this research.

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[1] In this line of research, "affirmative action" was used as the attitude object rather than "employment equity" because I made the assumption that participants would be more familiar with the term affirmative action and thus have a clearer understanding of the policy.

Are Justice Values a True Source of Opposition to Affirmative Action?

A debate exists in the literature regarding the role of justice in people's opposition to affirmative action: Are justice concerns a real determinant of opposition or are they simply rationalized prejudice (e.g., Murrell, Dietz-Uhler, Dovidio, Gaertner, & Drout, 1994; Sniderman & Tetlock, 1986)? Some (e.g., Nacoste, 1987) argue that opposition to affirmative action stems from perceptions that affirmative action is unfair. Others (e.g., Dovidio & Gaertner, 1996) argue that opposition to affirmative action stems from prejudice toward target-group members (i.e., women, visible minorities, and people who are physically disabled) and that fairness concerns or values are used to justify this opposition.[2]

There is considerable evidence that prejudice relates to increased opposition to affirmative action policies. Researchers have found that multiple forms of prejudice, such as classical racism, symbolic racism, anti-Black affect, and neosexism predict attitudes toward affirmative action (Kluegel & Smith, 1983; Sidanius, Pratto, & Bobo, 1996; Tougas, Brown, Beaton, & Joly, 1995). The more negative respondents' attitudes are toward Blacks or women, the more they oppose affirmative action when the programs are undefined. Furthermore, some researchers (Dovidio & Gaertner, 1996; Murrell et al., 1994) have argued that opposition to affirmative action in the name of justice is simply rationalized prejudice. More specifically, these researchers claim that aversive racists (i.e., people who consciously hold egalitarian attitudes but subconsciously hold racist attitudes) justify their opposition to affirmative action by claiming that the policy is unfair. Dovidio and Gaertner (1996) state, "although concerns about the fairness of affirmative action may be articulated as reasons to oppose these programs, subtle biases may be

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[2] Such rationalizations might take place at a conscious or subconscious level.

operating by influencing these perceptions of fairness, which in turn affect the intensity of the negative reactions" (p. 68). The implication of this argument being that prejudice—not the perception that programs are unfair—is the true source of opposition to affirmative action.

Given these arguments, is there any reason to presume that fairness concerns are a real source of opposition to affirmative action? It seems so. Many (e.g., Heilman, Battle, Keller, & Lee, 1998; Murrell et al., 1994; Smith Winkelman & Crosby, 1994) have noted that affirmative action is often criticized for its violations of the merit principle. The merit principle is a distributive justice rule that prescribes that outcome allocation decisions should be determined by comparing different candidates' inputs (e.g., relative performance should dictate relative pay). Multiple studies have demonstrated that people evaluate affirmative action programs more negatively when they place greater weight on target-group membership than on individual merit (Kravitz, 1995; Kravitz & Platania, 1993; Nosworthy, Lea, & Lindsay, 1995; Tougas & Veilleux, 1988; Veilleux & Tougas, 1989). For example, Nosworthy et al. (1995) had participants read about and evaluate one of four affirmative action programs that their university was ostensibly considering for prospective Black students. Participants' reactions (i.e., perceptions of fairness and ratings of endorsement) varied depending on the type of affirmative action program they evaluated. Participants were most favorable toward a program that involved targeted advertising for prospective Black students. They were also relatively supportive of a program that involved providing special scholarships for Black students based on financial need and past scholarship. Reactions were more negative toward a quota program that involved setting aside a specific number of places in each department for Black students. Finally, participants had the most negative reactions to a program that involved lowering admittance requirements for incoming Black students. One interpretation of these findings is that justice-based opposition to affirmative

action is real because participants' reactions were more negative the less weight merit was given in the decision-making criteria.

In a series of studies, researchers at the University of Waterloo have directly tested the proposition that justice concerns can be a genuine determinant of opposition to affirmative action—not merely rationalized prejudice (Bobocel, Son Hing, Davey, Stanley, & Zanna, 1998; Davey, Bobocel, Son Hing, & Zanna, 1999; Son Hing, 1997). In two early studies, Ramona Bobocel, Liane Davey, David Stanley, and Mark Zanna tested the unique effects of participants' justice values and prejudice levels on their opposition to affirmative action (Bobocel et al., 1998, Study1; Davey et al., 1999, Study 2). They reasoned that if justice concerns are a true source of opposition to affirmative action, then people with strong justice values (i.e., a strong preference for or endorsement of a justice principle) should be more opposed to programs that violate those principles. Specifically, they studied opposition to affirmative action based on violations of the distributive justice principle of merit. In brief, they found that people who strongly endorse meritocracy are more opposed to an affirmative action program, but only if that program violates the merit principle.

For my Master's thesis (Bobocel et al., 1998, Study 2; Son Hing, 1997), I extended this line of research by studying opposition to affirmative action based on violations of distributive and procedural justice criteria because, as others have noted (Bobocel & Farrell, 1996; Heilman, McCullough, & Gilbert, 1996; Leck, Saunders, & Charbonneau, 1996; Nacoste, 1987, 1994), both types of justice are at issue in some forms of affirmative action. Some forms of affirmative action might violate the distributive justice principle of merit because a less qualified target-group member can receive outcomes (e.g., a job) over a more qualified non target-group member. In addition, affirmative action might violate the procedural justice principle of consistency

because programs are often "colour-conscious." The consistency principle, which is a procedural justice rule, prescribes that allocative procedures should treat all individuals or groups the same (Leventhal, 1980). The consistency principle is violated if, under an affirmative action program, target and non target-group members are treated differently. Below, I provide details of the study and its results because my dissertation research is a close extension of this work.

In the first phase of my study, individual differences in participants' prejudice levels (i.e., negative attitudes toward women and visible minorities) and endorsement of, or preference for, the consistency and merit principles were measured. To the extent that justice values are a genuine source of opposition to affirmative action, those who more strongly endorse the justice principles of consistency and merit should be more opposed to programs that violate those principles.

In the second phase of my study, I had participants, under the guise of a corporate survey, indicate their opposition to three affirmative action programs that were designed to vary in the extent to which they violated the consistency and merit principles. Namely, they evaluated an equal treatment program, a differential treatment program, and a preferential treatment program. The equal treatment program was justice upholding (i.e., neither consistency nor merit violating). This program aimed to remove systemic barriers against target-group employees by offering benefits (e.g., maternity and paternity leave) to all employees. The differential treatment or "tie" program was consistency violating (i.e., a target-group member could be hired or promoted over a White male if a tie exists in candidates' qualifications). The preferential treatment program was both merit and consistency violating (i.e., a less qualified target-group member could be hired or promoted over a more qualified non-target-group member).

The results revealed that, when evaluating the justice-upholding equal treatment program, prejudice was the unique predictor of opposition to affirmative action such that more prejudiced participants were more opposed. In contrast, when evaluating justice-violating programs, justice values were unique predictors of participants' opposition, above and beyond prejudice. Specifically, when evaluating the consistency-violating tie program, the greater participants' preference for the consistency principle, the more they opposed affirmative action. The results in the preferential treatment condition replicated those found by my colleagues in their earlier investigations (Bobocel et al., 1998, Study1; Davey et al., 1999, Study 2). When evaluating the merit-violating preferential treatment program, the greater participants' preference for the merit principle, the more they opposed affirmative action.

To summarize, the results were consistent with the notion that both prejudice and justice values are unique determinants of opposition to affirmative action but that the role of each predictor depends on the nature of the affirmative action program. This line of research (Bobocel et al., 1998; Davey et al., 1999, Study 2; Son Hing, 1997) suggests that prejudicial attitudes are the source of opposition to some forms of affirmative action. In addition, however, justice concerns can be a true source of opposition to affirmative action because (a) participants' justice values predicted opposition after controlling for prejudice and (b) their particular justice values predicted opposition only to the relevant justice-violating programs.

The Purpose of my Dissertation Research

Given that people who strongly endorse specific justice principles are generally more opposed to affirmative action programs that violate those principles, will people who strongly endorse justice principles always oppose justice-violating affirmative action programs? If justice-based opposition to affirmative action is absolute, then garnering wide-spread support for affirmative action may be difficult because many programs can be conceptualized as violating justice criteria (Bobocel et al., 1998; Leck et al., 1996; Heilman et al., 1996; Nacoste, 1987, 1994; Tyler, & McGraw, 1986). The purpose of my dissertation research is to extend our previous work on justice-based opposition by examining whether, under some circumstances, justice-based opposition to affirmative action might be mitigated. In particular, I hypothesize that the relation between participants' justice values and their opposition to justice-violating affirmative action programs might be moderated by the extent to which participants perceive discrimination against women and visible minorities to be the current state of affairs in the workplace. In general, I expect to replicate our earlier findings that individuals with a strong preference for the consistency or merit principle oppose consistency-violating and merit-violating programs, respectively. However, in addition, I believe that individuals who strongly endorse the consistency or merit principle should be less opposed than "usual" to justice-violating programs, if these individuals also perceive high levels of discrimination in the workplace. This prediction derives, in part, from past investigations of the relation between perceptions of workplace discrimination and attitudes toward affirmative action.

The perception of workplace discrimination may generally reduce opposition to affirmative action because the explicit goal of affirmative action is to monitor and reduce

discrimination (Kravitz et al., 1997). Some people may oppose affirmative action simply because they do not perceive discrimination in the workplace. If these people began to see discrimination in the workplace, they might believe that affirmative action is justified (Smith Winkelman & Crosby, 1994). Some past research supports this notion; however, the findings are not always clear—many studies report mixed or null effects for the perception of discrimination on affirmative action attitudes. I believe that the relation between perceptions of discrimination and opposition to affirmative action is not always found because in some instances, participants' perceptions of discrimination should interact with their justice values to produce opposition to affirmative action. Before I outline the logic for this hypothesis, I will review past research on the main effect of discrimination on affirmative action attitudes. Researchers have investigated the relation between the perception of discrimination and affirmative action attitudes from the perspective of both target-group members and non target-group members. In addition, experiments have been conducted in which an organization's history of discrimination has been manipulated to study participants' subsequent reactions to affirmative action. I will review each of these literatures in turn.

The Main Effect of the Perception of Discrimination on Affirmative Action Attitudes

A few studies have investigated whether target-group members' support for affirmative action depends on their personal experiences with discrimination. Some researchers (Kravitz & Klineberg, in press) have found that Black and Hispanic respondents report favorable attitudes toward affirmative action, the more they have personally experienced discrimination. In contrast, Asian's personal experiences with discrimination do not appear to relate to their attitudes toward affirmative action (Bell, Harrison, & McLaughlin, 1997). Finally, Kravitz, Klineberg, Avery,

Nguyen, Lund, and Fu (2000) conducted two studies in which they investigated the relations between experiences of employment discrimination based on gender or ethnicity and attitudes toward the typical affirmative action program. In Study 1, they found that personal experiences of discrimination were positively and significantly related to support for affirmative action among women. In addition, personal experiences of discrimination were positively but non-significantly related to support for affirmative action among visible minorities. In contrast, in Study 2, no significant relations were found between experiences with discrimination and affirmative action attitudes for either group.

A construct closely related to personal experiences with discrimination, collective relative deprivation or the belief that one's group is disadvantaged (Crosby, 1976), has been found to relate to attitudes toward affirmative action. Tougas, Beaton and Veilleux (1991) studied the effects of collective relative deprivation on Canadian women's attitudes toward affirmative action programs with female beneficiaries. They found that the more women experience collective relative deprivation (measured as a multiplicative term between perceiving a relative disadvantage for women compared with men in the workplace and feeling dissatisfied with such disadvantage), the more they support affirmative action. Although this research on collective relative deprivation suggests that women's personal experiences with discrimination should increase their support for affirmative action, mathematical and conceptual problems exist with using a cross product as a measure of relative deprivation (Evans, 1991).[3] Thus, the interpretation

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[3] It is problematic that two people with different beliefs and attitudes will score similarly on a measure of relative deprivation (e.g., 1-7 scale). For instance, Maria, who is very upset (7) about the small amount of discrimination that she perceives (2), will score the same on relative deprivation (2 x 7 = 14) as Phyllis, who is not upset (2) about the great amount of discrimination she perceives (7).

of these results is unclear. To summarize, the findings are mixed concerning target-group members' personal experiences of discrimination and their affirmative action attitudes.

Other studies have investigated how non target-group members' affirmative action attitudes are affected by their perceptions of discrimination against target-group members. There is some evidence suggesting that, if people perceive discrimination to exist against target groups, then they have more favorable attitudes toward opportunity-enhancing social programs and affirmative action (Bobo & Kluegel, 1993; Kravitz & Klineberg, in press; Jacobson, 1985; Swim & Miller, 1999; Tougas & Veilleux, 1990; Veilleux & Tougas, 1989). For example, Bobo and Kluegel (1993) found that the more White respondents believed that Blacks face discrimination, the more favorable their attitudes were toward opportunity enhancing social programs for Blacks (i.e., giving businesses a tax break for locating in Black areas, spending more money on schools in Black neighborhoods, and providing special scholarships for Black children who maintain good grades). Furthermore, among Canadian men, relative deprivation on behalf of others (measured as a multiplicative term between perceiving a relative disadvantage for women compared to men in the workforce and feeling dissatisfied with such disadvantage) has also been found to relate to attitudes toward affirmative action (Tougas & Veilleux, 1990; Veilleux & Tougas, 1989). Tougas and Veilleux found that the more men experience relative deprivation on behalf of others, the more they support affirmative action for women. However, as noted above, due to the use of a cross product to measure relative deprivation on behalf of others, the interpretation of these results is unclear. To summarize, among non target-group members, there is some evidence for a main effect of perceptions of discrimination on opposition: The more people perceive discrimination in the workplace, the less they oppose affirmative action.

Finally, researchers have experimentally manipulated an organization's history of discrimination. They tend to find no effect of discrimination history on participants' attitudes toward affirmative action (Heilman et al., 1996; Matheson, Echenberg, Taylor, Rivers, & Chow, 1994; Nacoste, 1985). For example, Matheson et al. (1994) had participants evaluate four different affirmative action programs for graduate student admissions at a fictitious university. Participants were informed that in the past there had been either no, slight, moderate, or severe, discrimination against women in graduate selection. Although the manipulation check revealed that participants in the different conditions had perceived varying levels of past discrimination, these perceptions did not influence their attitudes toward any of the affirmative action programs. Nacoste (1985) and Heilman et al. (1996) similarly found little evidence that an experimental manipulation of an organization's past discrimination influences affirmative action attitudes. To summarize, whether or not participants are told that an organization has a history of discrimination does not appear to affect their attitudes toward affirmative action.

Summary of the Findings

Overall, the findings for the effect of perceptions of discrimination on affirmative action attitudes are mixed. It is not clear whether target-group members' support for affirmative action depends on their personal experiences with discrimination. In contrast, non target-group members' support for affirmative action does appear to be influenced by their perceptions of discrimination against target-group members. Finally, support for affirmative action does not appear to be influenced by experimental manipulations of an organization's history of discrimination. Although I have summarized the discrimination findings based on type of investigation (e.g., experimental manipulation), it is important to note that inconsistencies exist in the effects found for discrimination within each type of investigation. Furthermore,

inconsistencies exist in the effects found for discrimination within studies that use the same paradigm to investigate attitudes toward different types of affirmative action program (e.g., Heilman et al., 1996).

The Potential Interactive Effects of the Perception of Discrimination and Justice Values

Despite past mixed findings, I believe that it is possible for greater perceptions of workplace discrimination to reduce opposition to affirmative action. However, I also believe that the often-found null effect for perceptions of discrimination on opposition might reflect a yet untested and thus hidden interaction effect. More specifically, I believe that people's perceptions of workplace discrimination might interact with their justice values, such as consistency and meritocracy, to produce opposition to affirmative action. Rather than reducing opposition to affirmative action overall, the perception of workplace discrimination might reduce opposition particularly for individuals with a strong preference for the consistency or merit principle. In other words, I expect those who are typically most opposed to affirmative action (i.e., individuals with strong justice values) to reduce their opposition most in the face of workplace discrimination. On the surface, one might expect people with strong justice values to be more opposed to justice-violating forms of affirmative action, compared with those with weak justice values, even when perceptions of workplace discrimination are high. Thus, at first glance, the major hypothesis of this dissertation might seem counterintuitive. However, there are two reasons why this hypothesis is sensible.

First, I posit that workplace discrimination can involve unfair—that is, inconsistent—treatment that favors White males over target-group members. For example, within an organization, mentorship relations might have spontaneously developed such that more senior

employees (who happen to be White men) chose White males as protegees, while women and visible minorities were ignored. In this case, discrimination against target-group members, and a violation of the consistency principle occurred because the mentorship procedure operates differently for, and gives advantage to, White men versus target-group members. In addition, discrimination can involve unfair—that is, unmeritorious—distributions that favor White males over more deserving target-group members in a number of ways. To illustrate, imagine a manager, Ken, must make a decision to promote one of his two subordinates: Catherine or Matt. Based on the usual review of qualifications, Catherine is the stronger of the two candidates. However, Matt is promoted because Ken believes that women should not hold upper management positions. In this example, two things have occurred: discrimination against a women and violation of the merit principle because the most deserving candidate was not promoted.

Second, I believe that, to the extent that workplace discrimination is conceptualized as a form of consistency or merit violation, people who strongly endorse these principles should be more offended by discrimination, compared with those who weakly endorse these principles.[4] Consequently, perceiving high levels of discrimination might motivate individuals who strongly endorse the consistency or merit principle to be less opposed to affirmative action (as a means of combating discrimination) than they would otherwise be. Thus, perceiving more workplace discrimination might serve to reduce opposition to a differential treatment program, but only for individuals who strongly endorse the consistency principle. Similarly, perceiving more

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[4] It is also reasonable to hypothesize that people with a strong preference for consistency or meritocracy might be more likely to conceptualize workplace discrimination against target-group members as a form of consistency or merit violation, compared with people with weak justice principle preferences. However, I did not test this proposition in the current set of studies.

workplace discrimination might serve to reduce opposition to a preferential treatment program, but only for individuals who strongly endorse the merit principle.

The proposed interaction between the perception of workplace discrimination and justice values can be described from a different perspective: The perception of high levels of workplace discrimination should serve to override the typical relation between endorsement of the consistency and merit principles and opposition to affirmative action. Specifically, if individuals perceive low levels of workplace discrimination, then endorsement of the consistency and merit principles should predict opposition to a differential and preferential treatment program, respectively. However, if individuals perceive high levels of workplace discrimination, the effect of people's preference for the consistency and merit principles on opposition should be mitigated because those with strong justice values are less opposed than usual.

In summary, for this dissertation, I plan to investigate the effects of participants' preference for the consistency and merit principles and their perceptions of workplace discrimination on their attitudes toward a differential and preferential treatment program. Based on our past research (Bobocel et al., 1998; Davey et al., 1999; Son Hing, 1997), and on past research on the perception of workplace discrimination on attitudes toward affirmative action (e.g., Bobo & Kluegel, 1993), I expect all predictors to have main effects on attitudes toward affirmative action. I expect these main effects, however, to be qualified by interactions such that (a) participants' preference for the consistency principle will interact with their perceptions of workplace discrimination to produce opposition to a differential treatment program, and (b) participants' preference for the merit principle will interact with their perceptions of workplace discrimination to produce opposition to a preferential treatment program.

Proposed Mechanisms

For my dissertation, I will examine whether the hypothesized effects of (a) justice values (i.e., preference for the consistency and merit principles), (b) perceptions of workplace discrimination, and (c) justice values x perceptions of workplace discrimination on opposition to affirmative action might be mediated by the construal of an affirmative action program as justice violating.

It is possible that people's strongly held attitudes act as a filter through which they view the world, thereby influencing their perceptions of relevant attitude objects (Fazio, 1990). Thus, strong justice values might influence the degree to which an affirmative action program is perceived to be justice violating. For example, people who strongly endorse meritocracy might be more likely to perceive justice violations in an affirmative action program than people who weakly endorse meritocracy. Furthermore, independent of people's preference for the merit principle, construal of an affirmative action program as more justice violating should lead to greater opposition (see Bobocel et al., 1998; Son Hing, 1997, for evidence). In other words, the relation between preference for the merit principle and opposition to a preferential treatment program might be accounted for by people's construal of the program as justice violating. Similarly, the relation between preference for the consistency principle and opposition to a differential treatment program might be accounted for by construal of the program as justice violating. Mediation of the relation between justice values and opposition to affirmative action (through justice construal) could occur either for the hypothesized main effects of justice values or for the hypothesized simple effects of justice values (i.e., only among those who perceive low levels of discrimination).

In addition, it is possible that the effect of people's perceptions of workplace discrimination on their opposition to affirmative action is mediated through justice construal. For example, individuals 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 male as less merit violating because, to these individuals, "true" merit is unknown when indicators of merit are biased. Thus, the relation between people's perceptions of discrimination and opposition to a preferential or differential treatment program might also be accounted for by their construal of the program as justice violating. Again, I believe that such mediation could occur either for the hypothesized main effects of the perception of discrimination or for the hypothesized simple effects of discrimination (i.e., only among those who strongly endorse consistency or meritocracy).

STUDY 1

In the first study of this dissertation, I will test whether participants' "natural" or pre-existing perceptions of workplace discrimination mitigate justice-based opposition toward affirmative action. Under the guise of a corporate survey, I will study participants' justice construals and attitudes toward a differential treatment program that involves consistency violation and a preferential treatment program that involves both consistency and merit violation.

I hypothesize that there may be a main effect of participants' justice values on their opposition such that those with a stronger preference for the consistency and merit principles will be more opposed to programs that violate those principles. In addition, I believe that there may be a main effect of participants' perceptions of workplace discrimination such that those who perceive more workplace discrimination will be less opposed to affirmative action. However, I expect the aforementioned main effects to be qualified by a justice value x perceptions of discrimination interaction. Specifically, I hypothesize that participants' justice values will predict opposition only among those who perceive little workplace discrimination. This hypothesis derives primarily from my expectation that participants' perceptions of workplace discrimination will reduce opposition to affirmative action only for those with strong justice values (i.e., a strong preference for the consistency or merit principle).

Finally, I predict that the effects of justice values and the perception of discrimination on opposition to affirmative action (either the main or simple effects) will be mediated through participants' justice construals of the programs. In other words, I believe that participants who more strongly endorse the consistency and merit principles will be more opposed to affirmative action programs because they construe the programs to be more justice violating, compared with

people with weak justice values. Similarly, I believe that participants who perceive more workplace discrimination will be less opposed to affirmative action because they construe the programs to be less justice-violating, compared with people who perceive less discrimination.

Method

Participants

Study 1 data were collected across three semesters. Participants were 215 undergraduate students (74 men, 141 women) at the University of Waterloo who participated for course credit. There were 58 participants in Sample 1, 59 in Sample 2, and 98 in Sample 3. The age range of participants was 17 to 38 years (M = 19.39, SD = 2.15). In Sample 1, data for participants' race were not collected. In Samples 2 and 3, 73% of participants were White.

Procedure

Assessment of Individual Differences

Following procedures used earlier (Bobocel et al., 1998; Son Hing, 1997), approximately one month prior to participation in the study, I assessed (in a mass-testing booklet) 555 participants' endorsement of the consistency and merit principles and their perceptions of workplace discrimination. Participants completed a 15-item Preference for the Merit Principle Scale (PMP) that measures individual differences in the preference for outcomes to be distributed on the basis of merit (Davey et al., 1999).[5] Respondents rated each item on a 5-point scale (1 = strongly disagree to 5 = strongly agree). Two sample items are "Members of a work group ought to receive different pay depending on the amount each person contributed" (positively keyed) and

[5] The concept labeled "belief in merit" in Bobocel et al. (1998) was renamed "preference for the merit principle" in Davey et al. (1999) because the term "preference" is closer in meaning to endorsement than the term "belief" that was previously used.

"Each employee ought to be named employee of the month at least once, even if he or she is not deserving" (negatively keyed).[6] A complete list of items is provided in Appendix A.

Participants also completed a 25-item Preference for the Consistency Principle (PCP) Scale designed to measure individual differences in the preference for procedures to be implemented consistently across individuals and groups (Son Hing, 1997).[7] Respondents rated each item on a 5-point scale (1 = extremely unfair to 5 = extremely fair). Two sample items are "To treat everyone the same, students for whom English is a second language ought *not* to be given extra time to write exams, even though mental translations would take extra time" (positively keyed) and "To equalize the affordability of entrance, many places (e.g., movie theatres) ought to offer cheaper admission prices for groups with low-fixed incomes like seniors and students" (negatively keyed). A complete list of items is provided in Appendix B.

In addition, participants completed an 18-item Perceptions of Workplace Discrimination Scale that was developed to measure participants' perceptions of two forms of discrimination: general discrimination in the treatment of target-group members and discrimination in the assessment of target-group members' merit. In Samples 1 and 2, I used an 8-item version of the scale that measures perceptions of general workplace discrimination in the treatment of women

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[6] There were 16 items used in Sample 1 but one item was dropped in Samples 2 and 3. Before the predictors were collapsed across sample, we tested for homogeneity of variance for each predictor across samples. Not surprisingly, Levene's test of homogeneity of variance revealed heterogeneity of variance for Preference for the Merit Principle Scale, $F(1, 06) = 6.74$, $p = .01$, because the anchors for the scale were altered between Sample 1 (a 5-point scale) and Samples 2 and 3 (a 7-point scale). To control for unequal variances, preference for the merit principle scores were standardized within each sample before data from the samples were aggregated (Howell, 1992).

[7] The Preference for the Consistency Principle items used in each sample varied slightly in order to maximize internal reliabilities. Twelve items were used in all three samples while an additional eight items were used in two samples.

and visible minorities that occurs at the personal/individual and at the systemic/organizational level (Son Hing, 1997). Respondents rated each item on a 5-point scale (1 = strongly disagree to 5 = strongly agree). Two sample items are "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) and "Members of visible minorities do not receive negative evaluations from their superiors because of racial stereotypes" (negatively keyed). In Sample 3, I broadened the original 8-item version to include an additional 10 items that measure the degree to which people think that there is bias and discrimination against women and visible minorities in how merit is assessed during the personnel selection process and performance evaluations. (In particular, items tapped participants' perceptions of bias in: the criteria chosen to indicate merit, the tests used to measure the criteria, and personal evaluations of merit.) Two sample items are "Typically, criteria used to measure employee performance reflect male-dominated norms of professional behaviour (e.g., competitiveness) and thus criteria are biased against female employees" (positively keyed) and "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). A complete list of items is provided in Appendix C. In Sample 3, the original 8 and additional 10 discrimination items correlated at $r(96) = .57$, $p < .001$ and were averaged before the data from the samples were aggregated.

Main Study

Using the same paradigm as in our earlier research (Bobocel et al., 1998; Davey et al., 1999; Son Hing, 1997), students were contacted approximately one month later, to participate, in

what was ostensibly a corporate survey for a company called Cochrane Industries.[8] To make the situation seem as realistic as possible, participants were told that the research assistant was a University of Waterloo co-op student.[9] He said that Cochrane Industries had hired him to survey students, that is, "tomorrow's workforce," on their reactions to a prospective workplace policy. Participants were given a survey that Bobocel et al. (1998) developed to appear corporate and professional (see Appendix D). In the survey, there was a description of an affirmative action program that Cochrane was considering adopting. Allegedly, the program was operating successfully at another organization labeled "Corporation A." Participants were randomly assigned to evaluate either a preferential or differential treatment program. To create an involved survey, participants were led to believe that their evaluation would serve as a vote on whether or not Cochrane should adopt Corporation A's affirmative action program.

In brief, the preferential treatment program (PT) allowed the hiring of relatively less qualified target-group members over more qualified non-target-group members as long as target-group members met a minimum qualification standard. 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

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[8] Following the procedure of earlier studies (e.g., Bobocel et al., 1998), to increase the likelihood that participants had been socialized with North American justice norms, only students who had lived in Canada for 13 years or longer were selected to participate in Studies 1 and 2.

[9] Studies 1 and 2 were run by a White male research assistant.

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.[10]

In the eyes of most people (see Bobocel et al., 1998, for evidence), this preferential treatment program violates the merit principle because it allows for the hiring of a less qualified individual over a more qualified candidate. It also violates the consistency principle because target and non-target group members are treated differently; however, merit violation is the most salient issue in the preferential treatment program.

In contrast, the differential treatment or tie program (tie) allowed the hiring of target-group members over non-target-group members only if the qualifications of the two candidates are equal or "tied." Specifically, participants read the following:

> Corporation A's affirmative action program is aimed to assist women, minority groups, and the physically challenged. This program has altered Corporation A's hiring and promotion policy. Specifically, if there is an instance in which there are equally qualified candidates competing for a position, preference is given to target-group members. This policy gives women, visible minorities, and the physically challenged an advantage; however, it does not mean that a target-group member with relatively weaker qualifications would ever be hired or promoted before a more qualified non-target group member. Rather, consideration is given to group membership only when candidates for a position are equally qualified.

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[10] This description of the preferential treatment program is the same as the one used in Bobocel et al. (1998). In Studies 2 and 3 the wording was slightly changed to: "A minimum, yet adequate, qualification level for each position has been set."

In the eyes of most people (see Bobocel et al., 1998, for evidence), this program is consistency violating because procedures treat target-group and non target-group members differently. However, it does not violate the merit principle because a less qualified individual could never be hired over a more qualified one.

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. They were then debriefed about the true purpose of the study.

Justice construal and attitude measures

Two items in the Cochrane survey were used to measure participants' justice construals. I measured participants' construal of the program as consistency violating, "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). I also measured participants' construal of the program as merit violating, "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). 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 justice

construal items 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 justice violation and greater opposition.

Results

Preliminary Analyses

Preliminary tests were conducted to ensure that the data could be collapsed across samples. Meta-analytic procedures (as outlined by Rosenthal, 1984) were conducted to test whether the predictors had consistent relations to opposition across the three samples. In brief, each of the predictors (preference for the consistency principle, preference for the merit principle, and perceptions of workplace discrimination) had homogeneous effect sizes across samples.[11]

In addition, preliminary analyses were conducted to test for gender effects. In the tie condition, when gender was entered first in the regression equation, there was neither a main effect (B = -.32, ns) nor any interactive effects of gender with other predictors. Therefore, gender was not included in any of the analyses for the tie condition. In the preferential treatment condition, when gender was entered first in the regression equation, there was a marginal main effect of gender on level of opposition to affirmative action, B = -.48, p = .06 (men = 0, women = 1). Thus, women were less opposed to the preferential treatment program than were men. No gender x predictor interactions (e.g., gender x PMP, gender x PCP, etc.) on opposition emerged. In other words, the predictors operated similarly for both men and women in the preferential

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[11] Across samples, there was a homogeneous effect size for the preference for the merit principle and opposition relation in both the preferential treatment, χ^2 (2, N = 108) = 1.73, ns and tie conditions, χ^2 (2, N = 107) = 1.93, ns. In addition, there was a homogeneous effect size for the preference for the consistency principle and opposition relation in both the preferential treatment, χ^2 (2, N = 108) = 3.85, ns and tie conditions, χ^2 (2, N = 106) = 4.31, ns. Finally, there was a homogeneous effect size for the perceptions of workplace discrimination and opposition relation in both the preferential treatment, χ^2 (2, N = 107) = 3.83, ns and tie conditions, χ^2 (2, N = 107) = 1.34, ns. Therefore, all of the analyses were conducted collapsing across samples. Effect sizes for the interaction terms were not tested because to do so would involve testing simple effects (e.g., preference for the merit principle at low discrimination) with small Ns.

treatment condition. Given that gender did not interact with other predictor variables, it could be used as a covariate (Pedhazur, 1982), and therefore was entered on an initial step in the regression analyses for the preferential treatment condition.[12]

Predictor Characteristics

To estimate the reliabilities of the predictors, I calculated the weighted mean for the Cronbach's alpha estimates of internal consistency across the three samples. The mean alpha for the Preference for the Consistency Scale was .64 (estimates ranged from .60 to .71). The mean alpha for the Preference for the Merit Principle Scale was .70 (estimates ranged from .63 to .73). The mean alpha for the Perceptions of Workplace Discrimination Scale was .69 (estimates ranged from .68 to .70).

There was a weak positive relation between preference for the consistency principle and preference for the merit principle, $r(213) = .15$, $p = .03$, which suggests that, overall, there is a slight trend for participants with a strong preference for the consistency principle to also have a strong preference for the merit principle. There was also a tendency for participants who perceive more workplace discrimination to hold weaker justice values. First, a marginal inverse relation between perceptions of workplace discrimination and preference for the merit principle was found, $r(213) = -.12$, $p = .08$. Second, there was a stronger and significant inverse relation between perceptions of workplace discrimination and preference for the consistency principle.

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[12] Meta analytic procedures revealed that gender effects in the preferential treatment condition were consistent across sample. There was a homogeneous effect size for the gender and opposition relation, χ^2 (2, $N = 108$) = 2.46, ns.

$r(213) = -.23$, $p = .001$. Thus, the more participants perceived discrimination, the less they endorsed both the merit and, especially, the consistency justice principles.

Construal of, and Attitudes Toward, the Two Programs

Construal of the affirmative action program as violating merit and consistency differed depending on the program that participants evaluated (i.e., preferential treatment or tie). Specifically, participants who evaluated the preferential treatment program rated merit violation as more likely to occur ($M = 5.81$, $SD = 1.34$), compared with those who evaluated the tie program ($M = 3.41$, $SD = 1.73$), $t(213) = 14.16$, $p < .001$. In addition, participants who evaluated the preferential treatment program rated consistency violation as more likely to occur ($M = 5.19$, $SD = 1.56$), compared with those who evaluated the tie program ($M = 3.53$, $SD = 1.59$), $t(213) = 9.71$, $p < .001$. In summary, participants rated the preferential treatment program as strongly justice violating and the tie program as mildly justice violating. That is, participants' scores on merit and consistency violation for the tie program were near the neutral point on the scale (i.e., 4 on a 7-point scale). [13]

The two opposition items in the tie condition intercorrelated at $r(105) = .91$, $p < .001$, and were thus averaged to create an opposition to the tie composite. The two opposition items in the preferential treatment condition intercorrelated at $r(106) = .72$, $p < .001$, and were thus averaged

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[13] To determine whether participants perceived the tie program as consistency violating compared to a program that was designed to be consistency upholding, I compared ratings of consistency violation for the tie program with ratings for the equal treatment program from my Master's research. Participants in the current study evaluated the tie program as significantly more consistency violating ($M = 3.53$, $SD = 1.59$), compared with participants who evaluated the equal treatment program in my Master's research ($M = 3.14$, $SD = 1.65$), $t(191) = 2.11$, $p = .03$.

to create an opposition to the preferential treatment program composite. Participants' attitudes toward affirmative action varied as a function of program evaluated. Results revealed that participants who evaluated the preferential treatment program that violates both the consistency and merit justice principles were more opposed to affirmative action (M = 5.21, SD = 1.29) than were those who evaluated the tie program that violates only the consistency principle (M = 3.34, SD = 1.44), $t(213) = 11.73$, $p < .001$. Thus, participants evaluated the preferential treatment program negatively and the tie program neutrally.

Opposition to the Tie and Preferential Treatment Programs

To test my central hypothesis, I regressed opposition on preference for the consistency principle, preference for the merit principle, perceptions of workplace discrimination, and the relevant justice value x discrimination interaction within each condition (i.e., preference for the consistency principle x discrimination in the tie; preference for the merit principle x discrimination in the preferential treatment condition). Following procedures outlined by Aiken and West (1991), main effect predictors were first centered and then multiplied to create the interaction term. Main effects and the interaction term were all entered on the same step of the regression equation. Gender was treated as a covariate and was thus entered on an initial step of the regression equation for the preferential treatment program. The regression coefficients and their standard errors are presented in Table 1. Unstandardized regression coefficients are presented because standardized regression coefficients are uninterpretable when an interaction term is included in a regression equation (Aiken & West, 1991, pp. 40-43).

Table 1

Study1: Within-Cell Regression Coefficients (Bs) for Justice Values and Perceptions of Workplace Discrimination Predicting Opposition to Affirmative Action

Type of Affirmative Action Program					
Preferential Treatment			Tie		
Predictor	B	SE B	Predictor	B	SE B
PMP	.24*	.11	PMP	-.00	.14
PCP	.56†	.31	PCP	.62†	.34
Discrimination	-.36	.26	Discrimination	-.95***	.26
PMP x Discrimination	-.48**	.19	PCP x Discrimination	.50	.78

Note: R^2 = .16 for the preferential treatment condition. R^2 = .17 for the tie condition. PMP = preference for the merit principle; PCP = preference for the consistency principle; Discrimination = perceptions of discrimination in the workplace.

N = 108 for the preferential treatment program; N = 107 for the tie program.

† p = .07. * p <.05. ** p = .01. *** p < .001.

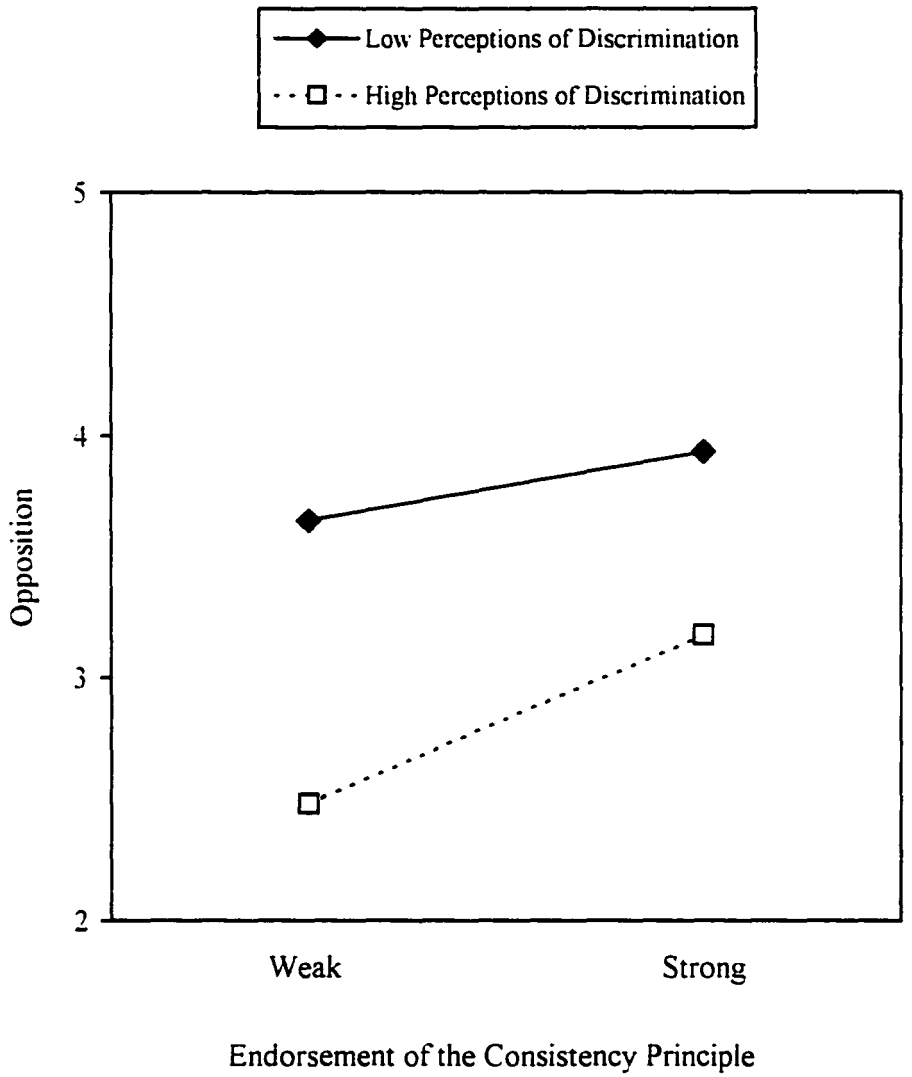
Replicating earlier findings (Bobocel et al., 1998; Son Hing, 1997), in the tie condition (see Table 1), there was a marginally significant main effect for preference for the consistency principle, such that, the stronger participants' preference for the consistency principle, the more they tended to oppose this consistency-violating program (B = .62, p = .07). In addition, there was a significant main effect of participants' perceptions of workplace discrimination, such that, the more they perceived discrimination in the workplace, the less they opposed the tie program (B = -.95, p <.001). However, there was no significant preference for the consistency principle x

perceptions of discrimination interaction (B = .50, ns). To illustrate the two main effects, I plotted each simple slope at one standard deviation above and below the means of each predictor as suggested by Cohen and Cohen (1983). As shown in Figure 1, the results did not support the hypothesis that perceptions of discrimination should mitigate justice-based opposition to the tie. Rather, regardless of participants' perceptions of workplace discrimination, those with a stronger preference for the consistency principle were more opposed to this consistency-violating program. Consequently, participants' perceptions of workplace discrimination did not reduce opposition only for those who strongly endorse consistency. Rather, regardless of participants' preference for the consistency principle, those who perceived more workplace discrimination were less opposed to the tie program.

Regression analysis revealed a different pattern of results for the preferential treatment program. As shown in Table 1, there was a marginal main effect of preference for the consistency principle, such that the greater participants' endorsement of the consistency principle, the greater their opposition tended to be to the preferential treatment program. In addition, replicating prior research (Bobocel et al., 1998; Davey et al., 1999; Son Hing, 1997), there was a significant main effect of preference for the merit principle, such that the greater participants' endorsement of the merit principle, the greater their opposition to the preferential treatment program. However, this main effect was qualified by the predicted preference for the merit principle x perceptions of discrimination interaction. To illustrate the shape of the interaction, I plotted each simple slope at one standard deviation above and below the means of each predictor as suggested by Cohen and Cohen (1983, see Appendix E for the regression equation). Simple regression analyses were

Figure 1.

Study 1. The two main effects of preference for the consistency principle (weak vs. strong) and perceptions of workplace discrimination (low vs. high) on opposition to the tie program.



On both predictors, weak/low = one standard deviation below the mean, centered at zero, strong/high = one standard deviation above the mean.
N = 108.

conducted as outlined by Aiken and West (1991). As shown in Figure 2, 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 = .48, p = .002), 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 = -.00, ns). Thus, as predicted, the effect of participants' preference for the merit principle on their opposition was mitigated, when they perceived high levels of workplace discrimination.

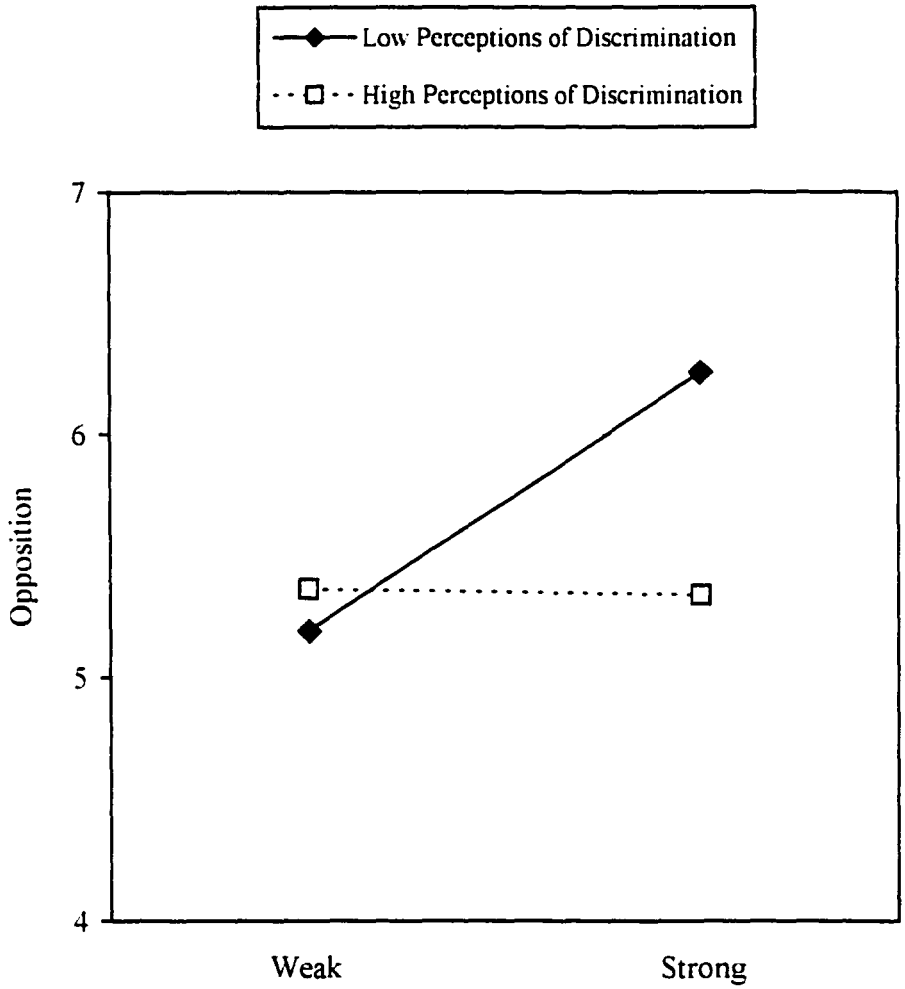
Looking at the interaction from a different perspective, there was a significant simple effect of perceptions of discrimination for people who strongly endorsed the merit principle such that the more participants perceived discrimination to exist, the less they opposed the preferential treatment program, (B = -.89, p = .02). However, the perception of workplace discrimination did not affect opposition to affirmative action for people who weakly endorsed the merit principle, (B = .17, ns). Thus, consistent with my prediction, greater perceptions of workplace discrimination were related to a drop in opposition to the preferential treatment program, but only for participants who strongly endorsed the merit principle.

Mediation Analyses

The relation between preference for the consistency principle and opposition to the tie program, was tested for mediation through justice construal using techniques outlined by Baron

Figure 2.

Study 1. The interactive effects of preference for the merit principle (weak vs. strong) and perceptions of workplace discrimination (low vs. high) on opposition to the preferential treatment program.

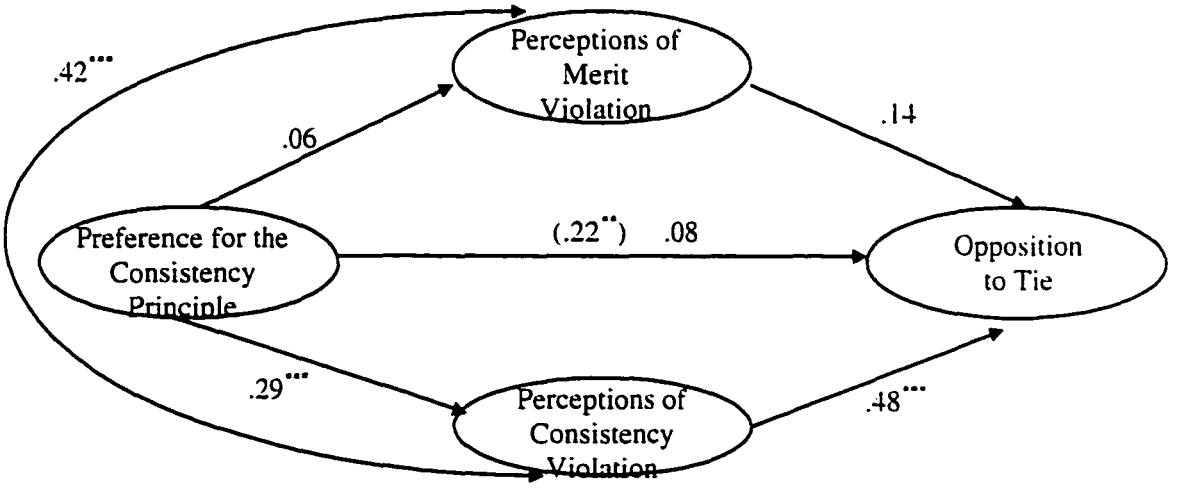


On both predictors, weak/low = one standard deviation below the mean, centered at zero, strong/high = one standard deviation above the mean.
N = 107.

and Kenny (1986, see Figure 3). First, opposition to the tie program was regressed on preference for the consistency principle to obtain the total effect of the predictor. Second, perceptions of merit violation were regressed on preference for the consistency principle. Third, perceptions of consistency violation were regressed on preference for the consistency principle. Fourth, opposition to the tie program was simultaneoulsy regressed on perceptions of merit violation, perceptions of consistency violation, and preference for the consistency principle. As shown, first, participants with a stronger preference for the consistency principle perceived more consistency violation in the tie program ($\beta = .29$, $p = .001$). Second, participants who perceived greater consistency violation were more opposed to the tie program ($\beta = .48$, $p < .001$). Third, the effect of participants' preference for the consistency principle on their opposition ($\beta = .22$,

Figure 3.

Study 1. Mediation of the Preference for the Consistency Principle to Opposition to the Tie Relation.



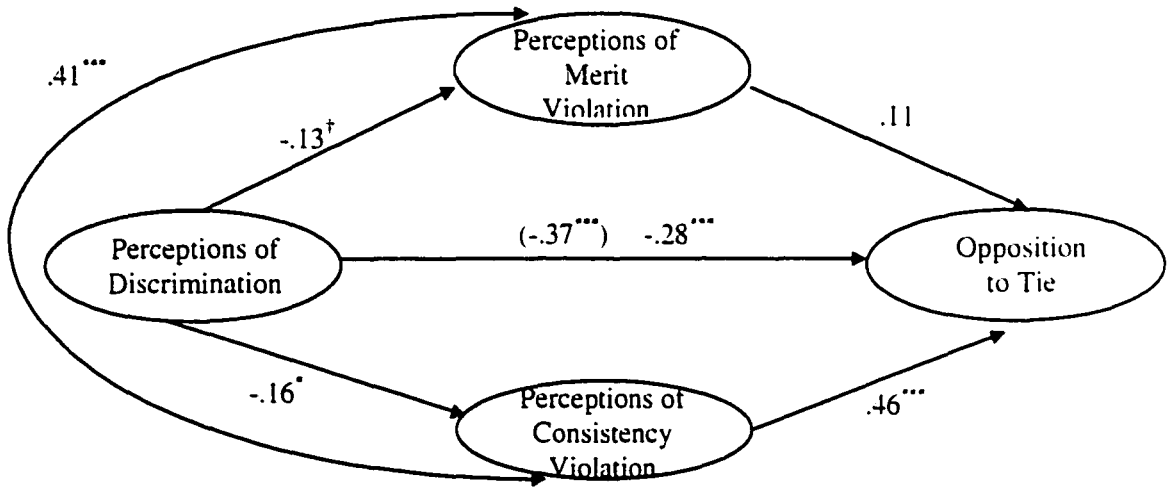
Path analyses depicting the mediating role of justice construal in the relation between preference for the consistency principle and opposition to the tie program. Numbers on paths are betas. The total effect between predictor and criterion (i.e., before controlling construal) is given inside parentheses; the direct effect between predictor and criterion (i.e., after controlling construal) is given outside parentheses. $N = 108$. $^{**}p \leq .01$. $^{***}p \leq .001$.

$p = .01$) was reduced to zero ($\beta = .08$, ns) once participants' construals of the program were controlled. A test of the indirect effect of preference for the consistency principle on opposition through consistency violation was significant, $z = 2.67$, $p = .008$ (Goodman, 1960, see Appendix F for the Goodman equation). Thus, mediation results were consistent with the notion that people with a strong preference for the consistency principle were more opposed to the tie program, compared with their low-scoring counterparts, because they perceived the program to be more justice violating.

In addition, in the tie condition, I tested whether the relation between the perception of workplace discrimination and opposition was mediated through justice construal (see Figure 4). As shown, first, participants who perceived more workplace discrimination perceived the tie program to be less merit and consistency violating ($\beta = -.13$, $p = .10$; $\beta = -.16$, $p = .05$, respectively). Second, participants who perceived greater consistency violation were more opposed to the tie program ($\beta = .46$, $p < .001$). Third, the effect of participants' perceptions of workplace discrimination on opposition ($\beta = -.37$, $p < .001$) was reduced ($\beta = -.28$, $p = .001$) once participants' construals of the program were controlled. Although there are some indications of partial mediation through construal of the program as consistency violating, a test of the indirect effect of perceived workplace discrimination on opposition through consistency violation did not reach conventional levels of significance, $z = 1.58$, ns. Thus, the data are consistent with the notion that the relation between perceptions of discrimination and opposition to the tie is largely direct or mediated in some other way.

Figure 4.

Study1. Mediation of the Perceptions of Discrimination to Opposition to the Tie Relation.



Path analyses depicting the mediating role of justice construal in the relation between perceptions of workplace discrimination and opposition to the tie program. Numbers on paths are betas. The total effect between predictor and criterion (i.e., before controlling construal) is given inside parentheses: the direct effect between predictor and criterion (i.e., after controlling construal) is given outside parentheses.
N = 108.
† $p = .10$. * $p \leq .05$. *** $p \leq .001$.

In the preferential treatment condition, I first tested whether the preference for the merit principle x perceptions of discrimination interaction was mediated through justice construal. There was no evidence of mediation for the full interaction (see Appendix G); therefore, I tested for mediation of each of the significant simple effects, that is: (a) the effect of preference for the merit principle among people who perceived little workplace discrimination, and (b) the effect of perceptions of discrimination among people who strongly endorsed the merit principle.

The simple effect of preference for the merit principle, among people who perceived little discrimination, appears to be partially mediated by justice construal (see Figure 5). As shown, first, the stronger participants' preference for the merit principle, the more they construed the program as consistency violating ($\beta = .29$, $\underline{p} = .02$). Second, controlling for participants' preference for the merit principle, those who construed the program as more consistency and merit violating were more opposed ($\beta = .33$, $\underline{p} = .01$; $\beta = .29$, $\underline{p} = .02$, respectively). Third, the effect of participants' preference for the merit principle on opposition ($\beta = .26$, $\underline{p} = .03$) was reduced ($\beta = .14$, $\underline{ns}$) once participants' construals of the program were controlled. A test of the indirect effect of preference for the merit principle on opposition through consistency violation was marginally significant, $\underline{z} = 1.74$, $\underline{p} = .08$. Thus, results are consistent with partial mediation. (see Appendix H for mediation of the main effect of preference for the merit principle).[14]

Finally, I 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 justice effect, there was no evidence for mediation (see Figure 6). Among people with a strong

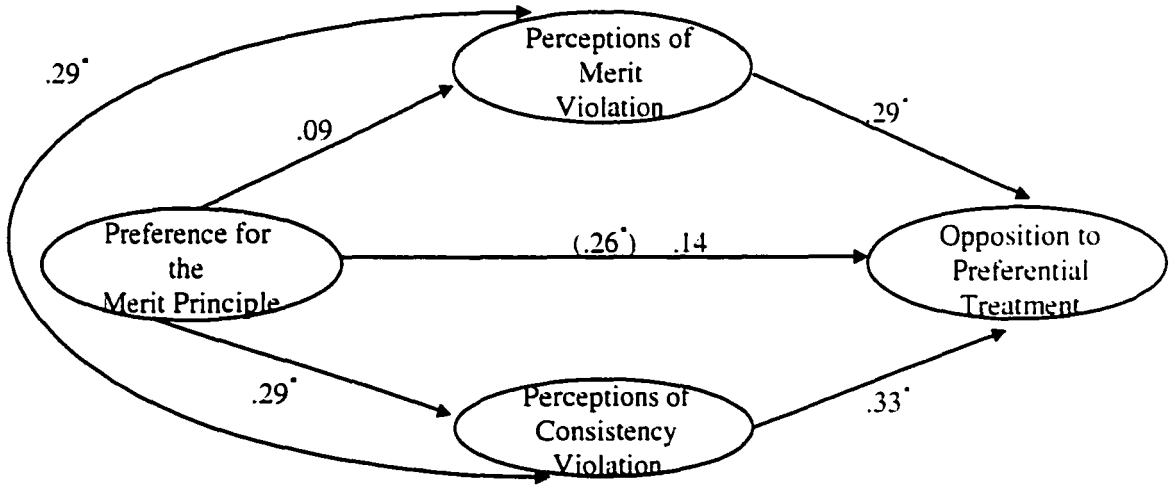
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[14] The marginal main effect of preference for the consistency principle on opposition to the preferential treatment program did not meet the requirements to test mediation that were set out by Baron and Kenny (1986).

preference for the merit principle, the perception of workplace discrimination had no effect on construal of the preferential treatment program as justice violating, primarily because those with a strong preference for the merit principle who perceived greater discrimination did not perceive greater justice violation.

Figure 5.

Study 1. Mediation of the Simple Effect of Preference for the Merit Principle on Opposition to the Preferential Treatment Program.

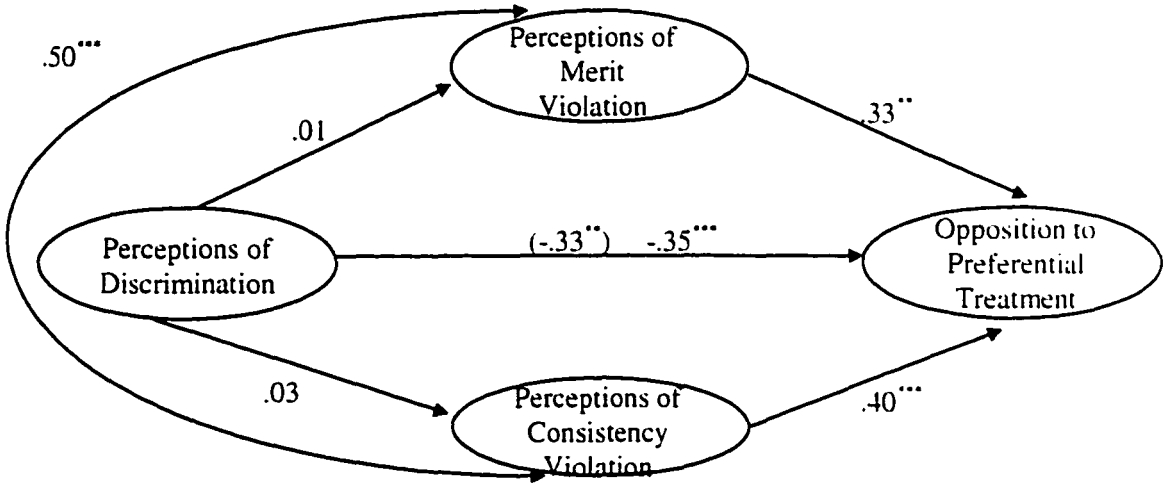


Path analyses depicting the mediating role of justice construal in the relation between preference for the merit principle and opposition to the preferential treatment program, among people who perceive little workplace discrimination. Numbers on paths are betas. The total effect between predictor and criterion (i.e., before controlling construal) is given inside parentheses; the direct effect between predictor and criterion (i.e., after controlling construal) is given outside parentheses. $N = 54$ because of median splits on sample used to test mediation of the simple effects.

*$p < .05$.

Figure 6.

Study 1. Mediation of the Simple Effect of Perceptions of Discrimination on Opposition to the Preferential Treatment Program.



Path analyses depicting the mediating role of justice construal in the relation between perceptions of workplace discrimination and opposition to the preferential treatment program, among people with a strong preference for the merit principle. Numbers on paths are betas. The total effect between predictor and criterion (i.e., before controlling construal) is given inside parentheses; the direct effect between predictor and criterion (i.e., after controlling construal) is given outside parentheses. $\underline{N} = 55$ because of median splits on sample used to test mediation of the simple effects.
** $\underline{p} < .01$. *** $\underline{p} \leq .001$.

Discussion

In general, the results of Study 1 support the hypotheses. Replicating our earlier research (Bobocel et al., 1998; Davey et al., 1999, Study 2; Son Hing, 1997), I find strong evidence for justice-based opposition to affirmative action. Namely, the stronger individuals' preference for the consistency principle, the more they oppose the consistency-violating tie program. Similarly, the stronger individuals' preference for the merit principle, the more they oppose the merit-violating preferential treatment program.

In addition, I had hypothesized that participants' justice values should interact with their perceptions of workplace discrimination to produce opposition to affirmative action. Specifically, I expected justice-based opposition to be mitigated for participants who perceive high levels of workplace discrimination. This mitigation hypothesis was based on the premise that greater perceptions of workplace discrimination should be associated with reduced opposition to affirmative action, but only for individuals with a strong preference for the consistency or merit principle. The results support this prediction in the preferential treatment, but not in the tie condition.

In the preferential treatment condition, merit-based opposition exists only for individuals who perceive little discrimination to exist in the workplace. Importantly, preference for the merit principle fails to predict opposition to the preferential treatment program for participants who perceive high levels of workplace discrimination. In other words, the current data suggest that merit-based opposition to a preferential treatment program is not absolute; rather, it can be mitigated by perceptions of high workplace discrimination. This mitigation occurs, primarily because the perception of greater workplace discrimination reduces opposition to the preferential

treatment program only for participants with a strong preference for the merit principle. Among participants with a weak preference for the merit principle, the perception of workplace discrimination does not affect opposition. These results are consistent with the notion that discrimination might be conceptualized as a form of merit violation. If workplace discrimination is conceived as a form of merit violation, then it is sensible that participants who strongly endorse the merit principle are motivated to reduce discrimination. Thus, their opposition to a preferential treatment program is reduced.

I was surprised to find a different pattern of results in the tie condition. When evaluating this program, participants' preference for the consistency principle predicts opposition regardless of their perceptions of workplace discrimination. Among participants who both perceive little and more workplace discrimination, stronger endorsement of the consistency principle relates to more opposition to the tie program. Mitigation of the consistency effect does not occur, primarily because the perception of workplace discrimination reduces opposition to the tie program for all individuals regardless of their justice values.

The lack of consistency for the discrimination effects between the two types of affirmative action program was unexpected, but it is interesting and may be explicable in hindsight. Several explanations exist for why perceptions of workplace discrimination may have had a main effect in the tie condition and a simple effect in the preferential treatment condition. First, these results are consistent with past research (Bobocel et al., 1998; Son Hing, 1997), in which multiple psychologies of opposition to affirmative action have been found. In other words, the predictors of opposition to affirmative action appear to depend on the characteristics of the specific program. Others (Harrison, Kravitz, & Stahl, 2000) have also noted that the individual differences relevant to opposition to affirmative action may depend on the type of program

evaluated. For example, in my Master's research, I found that prejudice predicts opposition to justice-upholding but not justice-violating affirmative action programs. In the current study, preference for the merit principle predicts opposition to a preferential treatment program but not a tie program. With the benefit of hindsight, I believe that it is reasonable for perceptions of workplace discrimination to play a different role in predicting opposition to the tie and preferential treatment programs because the nature of the programs differ.

For the tie program, perceiving discrimination may be sufficient reason to reduce opposition to the tie program for participants regardless of how strongly they value consistency in treatment, perhaps, because the program is construed as only mildly justice violating and it is evaluated neutrally. In contrast, for the preferential treatment program, perceiving discrimination may not be sufficient reason to reduce opposition for everyone, in particular, for those with a weak preference for the merit principle, perhaps, because the program is construed as strongly justice violating and it is evaluated quite negatively by most people. However, perceiving discrimination may be sufficient reason to reduce opposition to the preferential treatment program for those with a strong preference for the merit principle because workplace discrimination can be conceptualized as a form of merit violation. Thus, it is possible that the different role perceptions of discrimination play in the preferential treatment and tie programs is due to the differences in participants' construal and evaluation of the two programs.

Second, it is possible that the discrimination measure is better equipped to moderate the relation between preference for the merit principle and opposition to affirmative action, compared with the relation between preference for the consistency principle and opposition. The discrimination measure was designed to tap both the distributive and the procedural elements of discrimination. However, if the discrimination scale more accurately measures discrimination in

merit assessment than discrimination in consistent treatment, then it makes sense that it should moderate merit-based but not consistency-based opposition to affirmative action.

Third, a related possibility is that people may spontaneously conceptualize discrimination as a distributive rather than a procedural injustice. Thus, the measure of discrimination might accurately tap perceptions of merit and consistency bias. However, people may be more sensitive to discrimination as it leads to distributive injustice rather than procedural injustice. If workplace discrimination is spontaneously conceptualized as a form of merit—not consistency—violation, then people who strongly endorse the merit principle should be more motivated to reduce discrimination by supporting affirmative action, compared with people who strongly endorse the consistency principle.

In general, as predicted, the mediation results are consistent with the notion that participants with a stronger preference for the consistency or merit principle are more opposed to the tie and preferential treatment programs, respectively, due to their construals of the programs as justice violating. More specifically, holding a strong preference for the justice principles of consistency or merit leads to increased perceptions of affirmative action as unjust, which in turn leads to greater opposition. Although construal of the program as consistency violating is implicated as the mediator in both conditions, construals of the programs as merit and consistency violating correlate; thus, it is difficult to draw strong distinctions between them. Therefore, I tentatively conclude that the reason people with a strong preference for the consistency principle are more opposed to the tie program, compared with people with a weak preference for the consistency principle, is that they construe the program to be more justice violating. In addition, among people who perceive little workplace discrimination, part of the reason people with a strong preference for the merit principle are more opposed to a preferential

treatment program, compared with people with a weak preference for the merit principle, is that they construe the program to be more justice violating.

Finally, there is little evidence that the effects of the perception of discrimination on opposition to the tie and preferential treatment programs operate through justice construal. There is some evidence that participants who perceive more discrimination construe the tie program as less consistency violating and that those who perceive the program as less consistency violating are less opposed. However, a test of this indirect effect did not approach conventional levels of statistical significance. Therefore, the effect of participants' perceptions of discrimination on opposition to the tie appears to be largely direct or mediated in some other way.

The simple effect of perceptions of discrimination on opposition to the preferential treatment program also does not appear to be mediated through justice construal. In other words, among people with a strong preference for the merit principle, greater perceptions of workplace discrimination results in reduced opposition to a preferential treatment program, but not in altered construals of the program as merit or consistency violating. Rather than operating through justice construal, it is possible that, among people with a strong preference for the merit principle, the perception of discrimination affects attitudes toward the preferential treatment program directly or that some other construct mediates an indirect effect. As discussed in the next study, I will explore other potential mediators of the discrimination effect.

STUDY 2

Because the primary objective of this dissertation research is to study how perceptions of workplace discrimination mitigate justice-based opposition to affirmative action and there was no evidence of such an effect in the tie condition, I will continue to study opposition only to the preferential treatment program. I have three major objectives for this second study. First, I aim to replicate the preference for the merit principle x discrimination interaction with an experimental manipulation of participants' perceptions of workplace discrimination. Although the results of Study 1 are consistent with the idea that perceiving greater levels of workplace discrimination leads people who strongly endorse meritocracy to reduce their opposition to affirmative action, the data are correlational and thus open to alternate interpretations. For example, it is quite possible that, among those who strongly endorse meritocracy, people who perceive workplace discrimination differ from those who do not along some dimension (e.g., political conservatism) that drives attitudes toward affirmative action. Therefore, I will experimentally manipulate the degree to which people perceive discrimination to exist in the workplace and assess the effect of this manipulation on justice-based opposition to affirmative action.

The manipulation of perceptions of workplace discrimination derives from the general finding that, when answering survey questions, formal features of the questionnaire (e.g., question wording and response format) can affect, not only how participants respond to survey items, but also their subsequent judgments (Haddock, 1998; Olson, & Ross, 1984; Schwarz, 1990; Schwarz, Hippler, Deutch, & 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 based on their pattern of responses (e.g.,

"I am at the low end of the scale on this question about how often I have sexual relations with my partner—I guess we aren't very active compared to others"). It has been demonstrated that the self-inferences that participants make can then influence later self-judgments, for example, "I am not very satisfied with my relationship." (Haddock, 1998; Olson & Ross, 1984; Schwarz et al., 1985; Schwarz & Scheuring, 1989).

On the basis of the above research, the manipulation I will use involves having participants complete one of two versions of a survey based on the extended Perceptions of Workplace Discrimination Scale used earlier. The discrimination items are nearly identical in the two survey versions. However, by wording the items slightly differently in the two conditions (low vs. high perception of discrimination) in a manner that should influence their pattern of responses, I intend to manipulate participants' self-inferences concerning their perceptions of workplace discrimination. Following the logic of Salancik and Conway (1975), I presume that participants' endorsement of a statement should depend on the qualifiers (e.g., sometimes vs. always) used in that statement. I expect that, 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, I intend to manipulate participants' perceptions of workplace discrimination via a self-inference or self-persuasion technique.

The second goal of Study 2 is to reexamine whether the simple effect of preference for the merit principle on opposition to the preferential treatment program (among those who

perceive little workplace discrimination) is mediated by justice construals. It is important to test for replication because, in Study 1, the test for mediation was only marginally significant. Furthermore, in Study 1, preference for the merit principle did not affect construal of the preferential treatment program as merit violating. Therefore, in the current study, justice construal will be assessed using a new merit-violation item. The current test of mediation extends that in Study1 because mediation will be tested among people induced to perceive little workplace discrimination.

The third goal of Study 2 is to begin to explore possible mechanisms driving the effect of participants' perceptions of discrimination on their opposition to a preferential treatment program, for those who strongly endorse meritocracy. The results of Study 1 indicate that participants' perceptions of discrimination do not affect construal of the program as justice violating. In other words, both participants who perceive little and those who perceive a lot of workplace discrimination construe the preferential treatment program as equally likely to treat target group members and non target-group members inconsistently and equally likely to hire a less qualified target-group candidate over a more qualified White male. Why then do people who strongly endorse meritocracy lessen their opposition to a preferential treatment program when they perceive greater levels of discrimination in the workplace? I believe that these individuals may construe the preferential treatment program as justice violating in some sense, but as restoring meritocracy in another sense. My reasoning hinges on the premise that target-group members may in fact be more qualified than they appear on paper, if discrimination occurs in the assessment of their qualifications. Thus, a preferential treatment program may hire a target-group candidate who deserves the job more than he or she appears, given biased assessment procedures. Therefore, under conditions of high discrimination, people with a strong preference for the merit

principle may perceive the preferential treatment program as potentially merit violating (because the most qualified White male might not be hired or promoted). However, they may also believe that it, more importantly, has the potential to establish meritocracy (by helping to hire and promote deserving but under-rated target-group members).

There is some empirical evidence for the notion that participants should perceive target-group members as more deserving under conditions of high versus low discrimination. Nacoste (1985) conducted a study in which female participants were instructed to imagine that they were rewarded a grant from a committee that had an affirmative action program. He experimentally manipulated whether the university granting committee had a history of discriminating on the bases of gender. As I stated in the general introduction, the experimental manipulation of discrimination had no effect on participants' fairness ratings of the procedure or the outcome. However, female participants who were informed that the granting committee had a past history of gender discrimination felt more deserving of the grant than did participants who were told nothing of the committee's history.

Therefore, in Study 2, I will test for a preference for the merit principle x discrimination condition interaction on construal of the preferential treatment program as assisting under-rated target-group members. Specifically, I expect that, when induced to perceive high levels of workplace discrimination, people who strongly endorse meritocracy should construe the preferential treatment program as more likely to hire under-rated target-group members, compared with those who are induced to perceive low levels of workplace discrimination.

Although I believe that participants who strongly endorse meritocracy will 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 under-rated target-group

members, I will not test for such mediation because perceptions of discrimination are experimentally manipulated. When a strong manipulation is used, the variance in participants' ratings on the purported mediator should be driven by the manipulation. Therefore, there should be little within condition variance on the purported mediator. Thus, all of the relevant variance in construal of the program as assisting under-rated 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 should not be met: The purported mediator should not affect opposition while controlling for the independent variable (i.e., experimental condition). Taking the above into account, I will 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, the results of Study 2 might, at best, suggest a potential mediator of the simple effect of discrimination condition on opposition.

I have proposed a potential mechanism driving the discrimination effect that I believe should be particularly compelling for people who strongly endorse meritocracy. However, there are many non-merit-related reasons why participants with a strong preference for the merit principle might reduce opposition to affirmative action when they perceive high levels of workplace discrimination. Indeed, many different theories exist in the affirmative action literature as to why perceptions of workplace discrimination should influence affirmative action attitudes. First, some researchers (e.g., Kluegel, 1985; Smith Winkelman & Crosby, 1994) put forth the simple notion that in order to support affirmative action, one must perceive that it is needed and 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) posit that preferential treatment programs can be viewed as a short-term, stop-gap measure to deal with under-representation of target-groups in the workplace. Thus, it is possible that greater perceptions of discrimination increase perceptions that the program is a short-term solution for equal representation. Third, Swim and Miller (1999) hypothesize that, when people become more aware of the discrimination that exists against Blacks, they reduce their opposition to affirmative action due to feelings of "White guilt." Swim and Miller (1999) conceptualize White guilt as feelings of guilt and shame that result from the privileges associated with being White at the expense of Black people. They tested this hypothesis and found support for it in two of three studies. Therefore, greater perceptions of discrimination might lead to increased feelings of White guilt.

I will test whether each of the above constructs (i.e., target group members are under-rated; the program is necessary; the program is a short-term measure; and feelings of White guilt) has the potential to mediate the simple effect of perceptions of discrimination among participants with a strong preference for the merit principle. Specifically, I will test for a preference for the merit principle x discrimination condition interaction on each construct. If an interaction emerges, I will test for a simple effect of discrimination on opposition for people who strongly endorse meritocracy. If these effects are found, I will consider the construct to "pass" as a potential mediator. However, because it may be inappropriate to actually test mediation for an experimentally manipulated variable, I will not run mediation analyses on any potential mediators.

To summarize, the goals of Study 2 are threefold. First, I will test for a preference for the merit principle x perceptions of discrimination interaction on opposition to the preferential

treatment program with an experimental manipulation of perceptions of discrimination. Second, I will test for mediation through justice construal for the relation between preference for the merit principle and opposition among people who are induced to perceive low levels of workplace discrimination. Third, I will test the potential for a variety of theoretically chosen constructs (i.e., target group members are under-rated; the program is necessary; the program is a short-term measure; and feelings of White guilt) to mediate the simple effect of discrimination on opposition among people who strongly endorse the merit principle.

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. One participant was dropped from the analyses because of her suspicions that the Cochrane survey was indeed a psychology study. The age range of participants was 18 to 23 years (M = 19.80, SD = 1.25) and 72% of participants were White.

Procedure

Assessment of Individual Differences

Following procedures used in Study 1, 637 students completed a mass-testing booklet that included the 15-item Preference for the Merit Principle Scale and the 8-item Perceptions of Workplace Discrimination Scale that measures participants' perceptions of general discrimination in the treatment of target-group members.

To identify potential participants, I first selected participants with moderate perceptions of discrimination in the workplace. I was concerned that, for people who have strong beliefs regarding discrimination prior to the study, the experimental manipulation may not be effective. For example, in the low discrimination condition I designed the discrimination manipulation items to be difficult to agree with (e.g., discrimination always occurs) and hence induce disagreement. However, people who perceive a great deal of discrimination to exist very well might agree with these items. Thus, their pattern of responses would not be affected by the

wording of the items in the intended direction. To avoid extreme groups, I selected participants who fell within the middle 50% of scores on the Perceptions of Workplace Discrimination Scale.[15] 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 discrimination scale, $t(230) = 1.92$, $p = .06$; therefore, I calculated the 25th and 75th percentiles for each gender separately. Potential participants included men whose perception of 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, I identified participants having either a weak or strong preference for the merit principle based on 40th and 60th percentile cuts on the Preference for the Merit Principle 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. Participants were classified 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 one month later, using the same paradigm as in Study 1, 83 students were randomly selected to participate in the Cochrane Industries corporate survey. At the beginning of each session, participants were told that, in order for Cochrane Industries to best understand respondents' attitudes toward affirmative action, they need to assess respondents' beliefs about issues related to affirmative action (i.e., beliefs about government intervention, beliefs about discrimination, and beliefs about corporate responsibility). They were told that assessing respondents' beliefs about these issues would help Cochrane to interpret participants' responses

[15] The 25th and 75th cut scores were determined using participants who completed the mass-testing booklet in Sample 1.

on the affirmative action survey but that, due to 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 high discrimination condition. Although the research assistant was not blind to experimental condition, he was unaware of participants' preference for the merit principle.

Participants were given a two-page discrimination in the workplace survey that was, of course, the experimental manipulation. On the first page, 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). Participants 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." See Appendix I for the experimental manipulation. I presumed that participants would infer their perceptions of workplace discrimination based on their level of agreement to the discrimination manipulation items.

On the second page of the discrimination in the workplace survey, I tested whether participants' responses to the manipulation would generalize to their summary ratings of how much discrimination exists in the workplace (see Appendix J). Participants were instructed as follows:

> Taking into consideration your responses to the questions on the previous page about specific forms of discrimination, we would like you to provide a summary rating of your perceptions of discrimination against women and visible minorities in the workplace. Below, you will see something that looks like a thermometer. You will use this to indicate your summary rating of how much discrimination exists in the workplace. To indicate your summary rating, please use any number between 0^{o} and 100^{o}.

Higher numbers on the thermometer indicated greater perceptions of discrimination. Once participants had completed the thermometer rating, they were given the affirmative action survey in which the preferential treatment program was described (see Appendix K). The opposition and consistency-violation items were the same as in Study 1. However, I changed the merit-violation item to the following: "Under Corporation A's program, what is the likelihood that the most deserving (or meritorious) candidate would be hired or promoted?" (1 = extremely unlikely to 7 = extremely likely; negatively keyed).

In addition, I included items to begin to further explore possible mediators of the discrimination effect among people with a strong preference for the merit principle. In particular, I measured participants' perceptions of the program as assisting under-rated target-group members, "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." I also measured participants' perceptions of the program as necessary.

"Corporation A's program is necessary to eliminate any current discrimination that exists against women and visible minorities at Cochrane Industries." In addition, I measured participants' perceptions of the program as a short-term solution, "Corporation A's program is a short-term solution that will ensure equal representation of all groups in workplaces of the future." Finally, I measured participants' feelings of White guilt, "I feel guilty about any current discrimination that exists against women and visible minorities." All of the potential mediators of the discrimination effect were rated on a 7-point scale (1 = strongly disagree to 7 = strongly agree).

Participants were randomly assigned to complete one of two different versions of the affirmative action survey that were administered. In one version, the opposition items followed potential mediators of the discrimination effect and filler items. In the second version, the potential mediators of the discrimination effect and filler items followed the opposition items.

After completing the Cochrane survey, participants were probed for suspicion and fully debriefed.

Results

Predictor Characteristics

To estimate the reliabilities of the predictors, I calculated the Cronbach's alpha estimates of internal consistency for participants in the main study. The alpha for the Preference for the Merit Principle Scale was .76. The alpha for the Perceptions of Workplace Discrimination Scale was .07. The low reliability for the Perceptions of Workplace Discrimination Scale for the main study sample was most likely a result of limited variance (all participants scored in the middle 50% of the scale's distribution). The Cronbach's alpha for the Perceptions of Workplace Discrimination Scale for all of the participants who completed the mass-testing booklets in Phase 1 was .81 ($N = 627$).

Checking Random Assignment

Initial analyses using a 2 (preference for the merit principle: weak vs. strong) x 2 (discrimination condition: low vs. high) analysis of variance (ANOVA) revealed that random assignment was not achieved for participants' initial perceptions of general workplace discrimination, as measured in the mass-testing booklets. As can be seen in Table 2, there was a significant effect of discrimination condition, as well as a preference for the merit principle x discrimination condition interaction, on participants' initial perceptions of workplace discrimination. Therefore, I controlled for participants' initial perceptions of general discrimination in the workplace for all analyses.[16]

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[16] Participants' scores on the general discrimination measure from mass-testing did not interact with any of the predictors in subsequent analyses.

Random assignment was successfully achieved for participants' preference for the merit principle scores (see Table 2). Importantly, participants in the low discrimination condition endorsed the merit principle to the same degree, as did the participants in the high discrimination condition. In addition, not surprisingly, participants with a weak preference for the merit principle had lower scores ($\underline{M} = 4.64$, $\underline{SD} = 0.35$), compared with participants with a strong preference for the merit principle ($\underline{M} = 5.74$, $\underline{SD} = 0.30$).

Manipulation Check

First, I tested whether participants responded to the discrimination manipulation in the predicted manner. To do so, I calculated an average agreement score for the 6 discrimination manipulation items and I conducted a 2 (preference for the merit principle) x 2 (discrimination condition) ANCOVA on participants' mean agreement to the discrimination items. As can be seen in Table 2, there was a large effect of experimental condition on the manipulation check. $\underline{F}(1,77) = 40.85$, $\underline{p} < .001$. Participants in the high discrimination condition endorsed the discrimination items significantly more ($\underline{M} = 6.22$) than did participants in the low discrimination condition ($\underline{M} = 4.70$). Thus, the use of different qualifiers in the two conditions led participants to differentially endorse the manipulation items in the expected direction: participants in the high discrimination condition agreed more that discrimination exists, compared with participants in the low discrimination condition.

Second, using a 2 (preference for the merit principle) x 2 (discrimination condition) ANCOVA, I tested whether participants' responses to the manipulation would generalize to their thermometer summary ratings of discrimination. I found only a significant effect of participants' initial perceptions of discrimination $F(1, 77) = 11.18$, $p = .001$, such that participants with greater

Table 2

Study 2: Checking Random Assignment and Participants' Reactions to the Experimental Manipulation

	Condition/Participant Group				Analyses of Variance and Analyses of Covariance		
	Low Discrimination		High Discrimination		F		
Dependent Variable	Weak PMP (22)	Strong PMP (22)	Weak PMP (19)	Strong PMP (19)	PMP	Condition	PMP x Condition
Initial Discrim	3.21	3.42	3.49	3.38	0.47	3.58†	6.30
PMP[a]	4.62	5.81	4.66	5.66	229.77***	0.46	1.58
Agreement[a]	4.79	4.61	6.08	6.37	0.05	40.85***	0.91
Thermom[a]	44.80	47.96	46.60	52.06	1.28	0.57	0.09

Note. N = 83. Cell ns are in parentheses.

Initial Discrim = participants initial perceptions of general workplace discrimination: PMP = Preference for the Merit Principle; Agreement = participants' endorsement of the discrimination manipulation items; Thermom = participants' summary ratings of discrimination on the thermometer measure (0-100); Condition = experimental condition (low discrimination vs. high discrimination).

[a] Participants' initial perceptions of general workplace discrimination was a covariate for these analyses.

† $p < .10$. * $p < .05$. *** $p < .001$.

initial perceptions of discrimination indicated on the thermometer measure that they perceived more discrimination. However, the thermometer ratings of perceived discrimination did not differ significantly for participants in the low discrimination condition (M = 46.38) versus those in the high discrimination condition (M = 49.33, see Table 2).

Although participants' responses to the manipulation did not generalize to their summary ratings of discrimination, I do have some indication that participants in both conditions inferred their perceptions of discrimination from their pattern of response to the manipulation items. In both the low and high discrimination conditions, greater agreement to the manipulation items correlated with higher summary ratings of discrimination ($r(42) = .50$, $p = .001$; $r(36) = .61$, $p < .001$, respectively). These relations hold when controlling for participants' initial perceptions of workplace discrimination ($r(41) = .50$, $p = .001$; $r(35) = .59$, $p < .001$).

Opposition to the Preferential Treatment Program

Preliminary analyses were conducted to test for gender effects using a 2 (preference for the merit principle) x 2 (discrimination condition) x 2 (gender) ANCOVA.[17] Although there was a slight tendency for women (M = 4.87) to be less opposed to the preferential treatment program, compared with men (M = 5.26), this effect wasn't significant, $F(1, 72) = 1.43$, ns. In addition,

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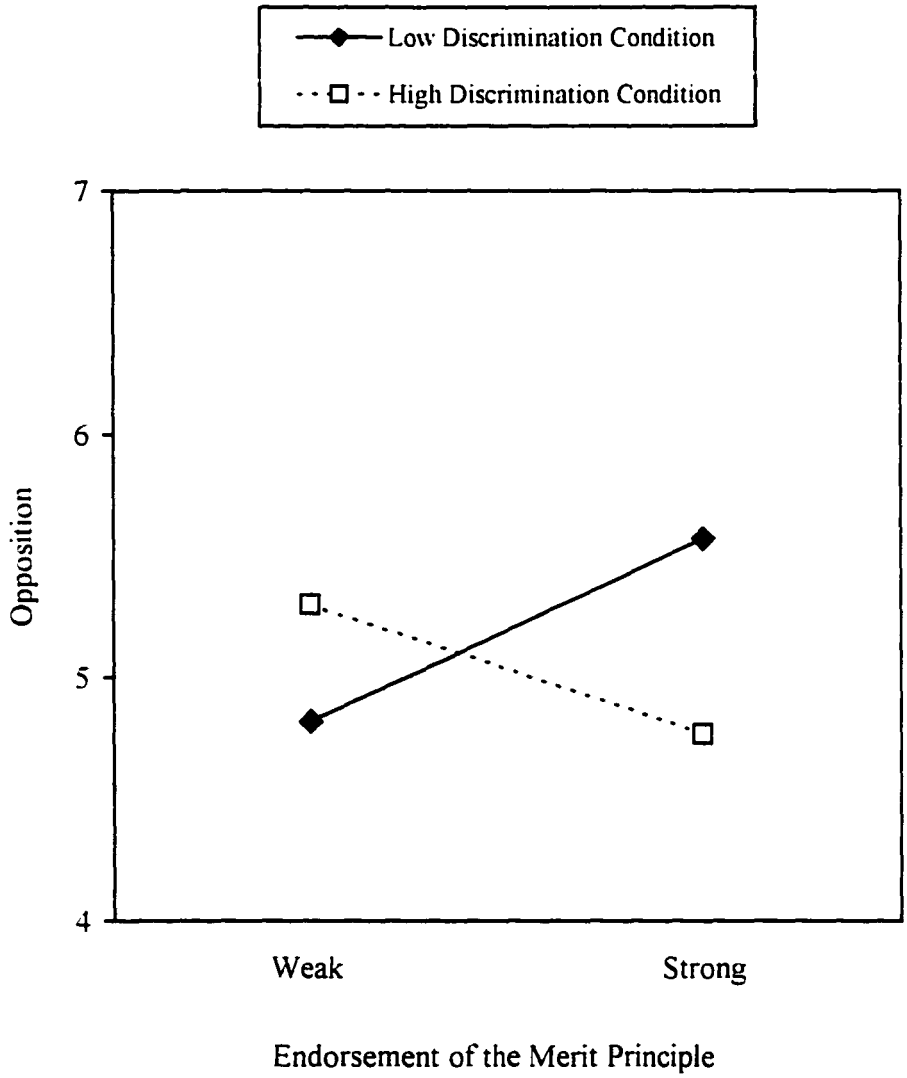
[17] The survey version that participants completed was used as a covariate for all subsequent analyses. Survey version was coded as –1 when the opposition items followed potential mediators of the discrimination effect and filler items and as 1 when the potential mediators of the discrimination effect and filler items followed the opposition items. Survey version did not interact with any of the predictors when predicting: opposition, construal of the program as justice violating, construal of the program as assisting under-rated target-group members, construal of the program as necessary, construal of the program as a short-term solution, or feelings of white guilt.

gender did not interact with other predictors. Therefore, all predictors operated similarly for men and women. Thus, gender was not included in any of the analyses in Study 2.

The two opposition to the preferential treatment program 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, I conducted a 2 (preference for the merit principle) x 2 (discrimination condition) ANCOVA. 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 expected preference for the merit principle x discrimination condition interaction was significant, $F(1, 76) = 4.39$, $p = .04$ (see Figure 7). Simple effects analyses revealed that preference for the merit principle predicted 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 Study1, the effect of preference for the merit principle on opposition exists when participants were induced to perceive little workplace discrimination, but it is mitigated when participants were induced to perceive a lot of workplace discrimination.

Figure 7.

Study 2. The interactive effects of preference for the merit principle (weak vs. strong) and discrimination condition (low vs. high) on opposition to the preferential treatment program.



N = 82.

Looking at the interaction a different way, 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 endorse meritocracy to reduce their opposition to affirmative action. In contrast, among participants who weakly endorse the merit principle, discrimination condition did not affect opposition to the preferential treatment program, $F(1, 76) = 0.84$, ns. Therefore, I 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 willing to combat workplace discrimination to the extent that they perceive it.

Mediation of the Preference for the Merit Principle Simple Effect

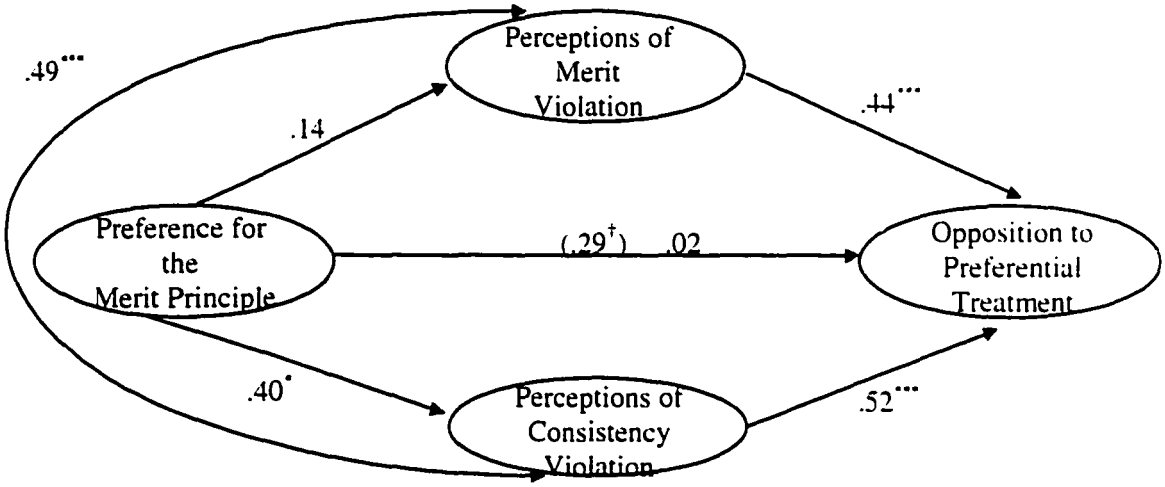
To replicate Study 1, I tested whether the simple effect of preference for the merit principle is mediated by justice construal for people in the low discrimination condition (see Figure 8).[18] Mediation analyses indicated, first, that the stronger participants' preference for the merit principle the more they construed the program as consistency violating ($\beta = .40$, $p = .01$). Second, controlling for participants' preference for the merit principle, those who construed the program as more consistency and merit violating were more opposed ($\beta = .52$, $p < .001$; $\beta = .44$, $p < .001$, respectively). Third, the effect of participants' preference for the merit principle on opposition ($\beta = .29$, $p = .07$) was reduced ($\beta = .02$, ns) once participants' construals of the program were controlled. A test of the indirect effect of preference for the merit principle on

[18] To be consistent with the major analyses, mediation analyses were conducted controlling for initial perceptions of workplace discrimination and survey version.

opposition through consistency violation was significant, $z = 2.35$, $p = .02$. Thus, results are consistent with full mediation. It appears that when participants are induced to perceive little workplace discrimination, those with a strong preference for the merit principle are more opposed to the preferential treatment program, compared with their low-scoring counterparts, due to their construal of the program as more justice violating.

Figure 8.

Study 2. Mediation of the Simple Effect of Preference for the Merit Principle on Opposition to the Preferential Treatment Program.



Path analyses depicting the mediating role of justice construal in the relation between preference for the merit principle and opposition to the preferential treatment program, among those in the low discrimination condition in Study 2. Numbers on paths are betas. The total effect between predictor and criterion (i.e., before controlling construal) is given inside parentheses; the direct effect between predictor and criterion (i.e., after controlling construal) is given outside parentheses.
$N = 44$.
† $p = .07$. * $p < .05$. *** $p < .001$.

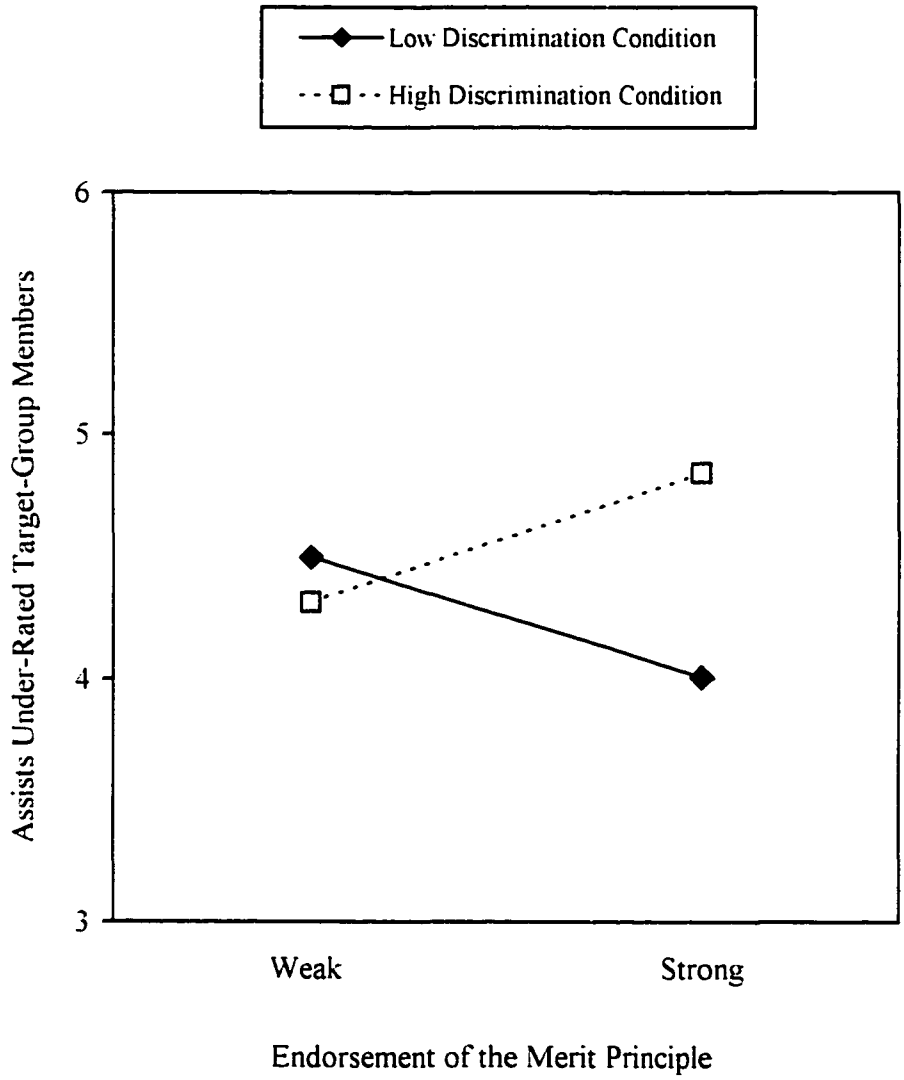
Exploring Potential Mediators of the Discrimination Simple Effect

As described earlier, I wanted to explore some potential mediators of the discrimination effect among people with a strong preference for the merit principle. First, I tested whether people who strongly endorse meritocracy were more likely, under conditions of high versus low discrimination, to construe the preferential treatment program as assisting under-rated target-group members. To do so, I conducted a 2 (preference for the merit principle) x 2 (discrimination condition) ANCOVA on construal of the program as assisting under-rated 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 preferential treatment program as more likely to assist under-rated target-group members. I also found a marginal preference for the merit principle x discrimination condition interaction, $F(1, 76) = 3.70$, $p = .06$ (see Figure 9, Table 3). As predicted, among participants who strongly endorsed meritocracy, those induced to perceive more workplace discrimination tended to construe the program as more likely to assist under-rated target-group members, compared with those who were induced to perceive little workplace discrimination. $F(1, 76) = 5.26$, $p = .02$. No other simple effects approached significance.

Second, I tested whether people who strongly endorse meritocracy were more likely, under conditions of high versus low discrimination, to construe the preferential treatment program as necessary to eliminate any discrimination that exists at Cochrane Industries. To do so, I conducted a 2 (preference for the merit principle) x 2 (discrimination condition) ANCOVA on

Figure 9.

Study 2. The interactive effects of preference for the merit principle (weak vs. strong) and perceptions of workplace discrimination (low vs. high) on construal of the preferential treatment program as assisting under-rated target-group members.



N = 82.

Table 3

Study 2: Potential Mediators of the Simple Effect of Perceptions of Discrimination

	Condition/Participant Group				Analyses of Covariance		
	Low Discrimination		High Discrimination		F		
Dependent Variable	Weak PMP (22)	Strong PMP (22)	Weak PMP (19)	Strong PMP (19)	PMP	Condition	PMP x Condition
Under-Rated[a]	4.50	4.01	4.32	4.84	0.01	1.58	3.70†
Necessary[a]	3.74	2.93	2.86	3.26	0.41	0.70	3.26†
Short-term[a]	3.87	4.71	4.33	5.16	6.85**	1.98	0.00
White guilt[a]	4.49	4.16	3.77	4.21	0.02	0.99	1.29

Note. N = 83. Cell ns are in parentheses.

Under-rated = perception that the program will assist under-rated 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. White guilt = feelings of guilt about discrimination. [a] Participants' initial perceptions of general workplace discrimination and the survey version that participants completed were covariates for these analyses. Condition = experimental condition (low discrimination vs. high discrimination).

† $p < .10$. ** $p \leq .01$.

construal of the program as necessary. Results of the ANCOVA revealed a significant effect of initial perceptions of discrimination, $F(1,76) = 6.34$, $p = .01$. Participants who initially perceived more workplace discrimination tended to construe the preferential treatment program as more necessary to eliminate discrimination. I also found a marginal preference for the merit principle x discrimination condition interaction, $F(1, 76) = 3.26$, $p = .08$. Simple effects analyses revealed that among participants in the low discrimination condition, those with a strong preference for the merit principle tended to perceive the program as less necessary ($M = 2.93$), compared with those with a weak preference for the merit principle ($M = 3.74$), $F(1,76) = 2.71$, $p = .10$. No other simple effects approached significance. Of particular importance, among participants who strongly endorsed meritocracy, those induced to perceive more workplace discrimination construed the program as no more necessary ($M = 3.26$), compared with those who were induced to perceive little workplace discrimination ($M = 2.93$), $F(1, 76) = 0.57$, ns.

Third, I tested whether people who strongly endorse meritocracy were more likely, under conditions of high versus low discrimination, to construe the preferential treatment program as a short-term solution to ensure equal representation of all groups. To do so, I conducted a 2 (preference for the merit principle) x 2 (discrimination condition) ANCOVA on construal of the program as a short-term solution. Results of the ANCOVA revealed a significant effect of participants' preference for the merit principle, $F(1,76) = 6.85$, $p = .01$. Participants with a strong preference for the merit principle were more likely to construe the preferential treatment program as a short-term solution for achieving equal representation for all groups ($M = 4.93$), compared with their low-scoring counterparts ($M = 4.10$). No other effects approached significance.

Finally, I tested whether people who strongly endorse meritocracy felt more White guilt under conditions of high versus low discrimination. To do so, I conducted a 2 (preference for the

merit principle) x 2 (discrimination condition) ANCOVA on feelings of White guilt. No effects approached significance. Because feelings of White guilt should be experienced only by those who benefit from racial and gender discrimination, I re-ran this analysis with only White male participants. Still, no effects were significant.

Discussion

With an experimental manipulation of the perception of workplace discrimination, the results of Study 2 replicate and extend my initial findings. First, I again find that participants' perceptions of workplace discrimination interact 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 endorse meritocracy tend to oppose a preferential treatment program, compared with those who weakly endorse meritocracy. However, this effect is mitigated for participants experimentally induced to perceive more workplace discrimination. The results of Studies 1 and 2 reveal that the typical relation between participants' preference for the merit principle and opposition to a preferential treatment program does not hold for participants who (a) initially or spontaneously perceive high levels of discrimination, or (b) perceive high levels of discrimination through a self-inference process.

Considering the same interaction from a different perspective, I find that, among participants with a strong preference for the merit principle, those induced to perceive more workplace discrimination reduce their opposition to a preferential treatment program, compared with those induced to perceive little workplace discrimination. Thus, it appears that greater perceptions of workplace discrimination cause participants who strongly endorse meritocracy to reduce their opposition to a preferential treatment program. In contrast, the experimental manipulation of perceptions of discrimination does not effect opposition for participants with a weak preference for the merit principle.

Second, among participants in the low discrimination condition, I replicate the preference for the merit principle mediation effects found in Study 1. Mediation analyses are 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 due to their construals of the program as justice violating.

Third, I have some preliminary evidence that people with a strong preference for the merit principle might reduce their opposition to a preferential treatment program under conditions of high workplace discrimination because they perceive the program as restoring meritocracy for target-group members. More specifically, participants with a strong preference for the merit principle in the high discrimination condition construe the preferential treatment program as more likely "to facilitate the hiring and promotion of women and visible minorities whose qualifications (given current assessment procedures) underestimate their actual abilities." compared with those in the low discrimination condition. In contrast, discrimination condition does not influence construals of the program as assisting under-rated target-group members for participants' with a weak preference for the merit principle.

Exploratory analyses provide no evidence for the notion that people with a strong preference for the merit principle reduce their opposition to a preferential treatment program under conditions of high workplace discrimination because (a) they perceive the program as more necessary to reduce discrimination, or (b) they perceive the program as more of a short-term solution, or (c) they feel more White guilt. Although none of these non-merit-related constructs appears to drive the discrimination effect for people with a strong preference for the merit principle, they might mediate a main effect of discrimination. For example, people (regardless of their justice values) might reduce their opposition to another type of affirmative action program under conditions of high discrimination because they see the program as necessary.

Overall, the pattern of results indicates that it is possible to experimentally manipulate people's perceptions of workplace discrimination through a self-persuasion or self-inference process. I successfully manipulated the degree to which participants endorsed items concerning perceptions of workplace discrimination using biased qualifiers. Unfortunately, the experimental manipulation did not affect participants' summary ratings of general workplace discrimination. There are several explanations for why this might have occurred. First, it is possible that participants' summary ratings of discrimination did not differ between the two conditions because the thermometer was an unreliable measure.

Second, it is possible that participants' responses to the experimental manipulation affected their implicit or subconscious perceptions but not their explicit or conscious perceptions of workplace discrimination. In other words, the self-persuasion process might not have been a self-inference process per se, but an implicit persuasion process. After responding to the workplace discrimination survey manipulation, participants may not have been consciously aware that their perceptions of discrimination changed. Consequently, participants' explicit summary ratings of discrimination should not be affected by the manipulation.

Third, it is possible that the experimental manipulation affected participants' definition of workplace discrimination rather than their perceptions of how much discrimination exists. Responding to the workplace discrimination survey manipulation might have changed what participants thought discrimination looks like. In the high discrimination condition, particularly, the survey items might have educated participants about forms of discrimination they had never considered. Thus, the workplace discrimination survey could have expanded participants' definition of discrimination. A change in participants' definition of discrimination might not be

detected by a manipulation check item designed to tap perceptions of the degree to which discrimination exists.

Fourth, it is possible that I experimentally manipulated participants' perceptions of discrimination and bias in the assessment of target-group members' merit but not their perceptions of general workplace discrimination, which is a broader concept. Workplace discrimination involves many forms of systemic and personal discrimination beyond of the realm of merit assessment. To illustrate, imagine that a manager submits only his Black subordinates to drug testing. This is an example of racial discrimination that should have no impact on the assessment of subordinates' merit or qualifications. Thus, it may have been unrealistic to expect the experimental manipulation that focuses on merit bias to affect participants' perceptions of how much general discrimination occurs. The third study will test the possibility that the experimental manipulation affects participants' perceptions of discrimination and bias in the assessment of target-group members' merit.

STUDY 3

The purpose of Study 3 is twofold. The first purpose is to test whether the experimental manipulation of perceptions of discrimination will influence participants' later judgments of discrimination in merit assessment. In Study 2, the experimental manipulation of perceptions of discrimination clearly affected participants' responses to the manipulation items as well as their subsequent reactions to the preferential treatment program. However, participants' responses to the manipulation items did not generalize to their summary ratings of how much discrimination exits in the workplace. As noted earlier, it is possible that I manipulated participants' perceptions of discrimination in the assessment of merit, but not their more general perceptions of workplace discrimination. Therefore, in Study 3, I will test whether the experimental manipulation of perceptions of discrimination in the assessment of merit affects participants' later judgments of a directly relevant construct: perceptions of bias in the assessment of women's and visible minorities' knowledge, skills, and abilities.

The second purpose of Study 3 is to increase the generalizability of the findings. I will test the interactive effects of participants' preference for the merit principle and the discrimination manipulation on opposition to the preferential treatment program with a different experimental procedure than the Cochrane Industries corporate survey. From Studies 1 and 2, I know that under conditions of high workplace discrimination (vs. low), participants who strongly endorse meritocracy will report more favorable attitudes toward, and will be more likely to recommend that Cochrane Industries implement, a preferential treatment program. However, I did not know whether perceptions of workplace discrimination will mitigate justice-based opposition to a preferential treatment program with a different paradigm. Thus, I will test

whether the observed interaction effect of preference for the merit principle x perceptions of workplace discrimination generalizes to a situation in which participants are simply reporting their attitudes on a questionnaire.

Method

Participants and Procedure

Phase 1

Following procedures used in Studies 1 and 2, students from two introductory psychology classes (N = 742) completed mass-testing booklets that included the 15-item Preference for the Merit Principle Scale and the 8-item Perceptions of Workplace Discrimination Scale that measures participants' perceptions of general discrimination in the treatment of target-group members.

Phase 2

Approximately three months later, students from three introductory psychology classes (N = 243) completed a second mass-testing booklet. The booklets were distributed and collected before class. Participants took the booklets home and were asked to complete them in private and independently. Of the students who completed the second booklet, 144 had completed the Phase 1 booklet and 99 did not. In the second booklet, among other researchers' measures, was the experimental manipulation of perceptions of discrimination followed by the new manipulation check on a second page. This manipulation check consisted of 7-items designed to tap perceptions of bias against women and visible minorities in the assessment of merit (i.e., skills, abilities, and knowledge). Respondents rated each item on a 7-point scale (1 = strongly disagree to 7 = strongly agree). Two sample items are "During the job interview, managers' racial prejudices may affect perceptions of visible minorities' skills and abilities, regardless of personal intentions" (positively keyed) and "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). See Appendix L for a complete list of items.

In addition, for two of the classes (the same two that completed the Phase 1 mass-testing booklet), the new manipulation check was followed by a separate page with the preferential treatment materials. (Seventy four percent of these participants were White.) Participants were told that the researcher was interested in how people evaluate affirmative action programs designed to assist women and minority-group members. They then read the description of the preferential treatment program and responded to the justice construal and opposition items that were used in Study 2 (see Appendix M).

Results

Predictor Characteristics

To estimate the reliabilities of the predictors, I calculated the Cronbach's alpha estimates of internal consistency for participants in Phase 2. The alpha for the Preference for the Merit Principle Scale was .66. The alpha for the Perceptions of Workplace Discrimination Scale was -.18. As in Study 2, the low reliability for the Perceptions of Workplace Discrimination Scale for the Phase 2 sample was most likely a result of limited variance (all participants scored in the middle 50% of the scale's distribution). The Cronbach's alpha for the Perceptions of Workplace Discrimination Scale for participants who completed the mass-testing booklets in Phase 1 was .77 (N = 727).

Manipulation Check

To investigate the success of the manipulation, as in Study 2, I calculated an average agreement score for participants' responses to the 6 manipulation items. I analyzed responses to the manipulation for all three classes (N = 243); however, I did not have data for participants' Preference for the Merit Principle and Perceptions of Discrimination for one class (42% of the sample). Therefore, to account for as much variance as possible in participants' responses to the manipulation without their data on the predictor scales, I conducted a 2 (discrimination condition) x 2 (gender) x 2 (race: White vs. visible minority) ANCOVA.[19] The number of years

[19] Including race as a factor should account for more error variance because race has been found to relate to perceptions of discrimination (Friedman & Davidson, 1999).

each participant had lived in Canada was treated as a covariate (range 0 – 40 years).[20] Results revealed a marginal main effect of gender, $F(1, 234) = 3.72$, $p = .06$, such that women tended to endorse the discrimination items more ($M = 5.91$) than men ($M = 5.47$). The was also a main effect of race, $F(1, 234) = 9.13$, $p = .003$, such that visible minority participants' endorsed the discrimination items more ($M = 6.06$) than did White participants ($M = 5.31$). Finally, as expected, there was a large effect of experimental condition on the manipulation check, $F(1, 234) = 54.84$, $p < .001$, such that participants in the high discrimination condition endorsed the manipulation items significantly more ($M = 6.54$), than did participants in the low discrimination condition ($M = 4.84$). No interactions were significant. Thus, replicating Study 2 findings, I found that the experimental manipulation successfully affected participants' endorsement of the discrimination items. Participants in the high discrimination condition agreed more that discrimination exists compared with participants in the low discrimination condition.

The primary goal of Study 3 was to test whether participants' responses to the manipulation would generalize to their 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 7 bias items had a low item-total correlation. Therefore, 6-items with a Cronbach's alpha of .78 were averaged to create a bias manipulation check. Similar to the above analysis, a 2 (discrimination condition) x 2 (gender) x 2 (race) ANCOVA was conducted. Results revealed a significant effect of the number of years participants have been in Canada, $F(1, 233) = 7.23$, $p = .008$. The longer participants had lived in Canada, the more they indicated that bias

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[20] To maximize sample size in Study 3, I controlled for the number of years participants had lived in Canada rather than selecting only those who had lived in Canada for 13 years or more (as in Studies 1 and 2).

exists in the assessment of target-group members' merit. In addition, there was a significant effect of gender, $F(1, 233) = 8.85$, $p = .003$, such that women indicated that more bias exists ($M = 4.94$), compared with men ($M = 4.59$). Finally, there was a significant effect of experimental condition, $F(1, 233) = 4.69$, $p = .03$, such that participants in the high discrimination condition indicated that more bias exists in the assessment of target-group members' knowledge, skills, and abilities ($M = 4.89$), compared with those in the low discrimination condition ($M = 4.64$). Thus, as predicted, the effect of the manipulation generalized to participants' judgments of how much bias exists in the assessment of target-group members' knowledge, skills, and abilities.

In addition, in both the low and high discrimination conditions, greater agreement to the manipulation items correlated with greater judgments of how much bias exists in the assessment of target-group members' knowledge, skills, and abilities ($r(102) = .31$, $p = .001$; $r(139) = .48$, $p < .001$; respectively). Thus, participants' responses to the manipulation affected their later judgments of the degree to which bias exists in the assessment of women's and visible minorities' merit.

The Preferential Treatment Program

It is important to recall that data for participants' preference for the merit principle, perceptions of workplace discrimination, justice construals of, and opposition to, the preferential treatment program was available for only two of the three classes. The two opposition to the preferential treatment program items correlated at $r(76) = .72$, $p < .001$, and were thus aggregated to create an opposition composite. To be consistent with Study 2 analyses, I investigated opposition to the preferential treatment program for participants' with moderate initial

perceptions of workplace discrimination.[21] Participants whose scores on the general discrimination measure fell in the middle 50% of the distribution were included in the analyses (i.e., scores ranging from 2.75 - 3.75 on a 5-point scale). Participants were classified as having either a weak or strong preference for the merit principle based on a median split (Mdn = 5.27).

Checking Random Assignment

Initial analyses using a 2 (preference for the merit principle) x 2 (discrimination condition) analysis of variance (ANOVA) revealed that random assignment was successfully achieved for participants' initial perceptions of general workplace discrimination, as measured in the first mass-testing booklet. There were no main effects for preference for the merit principle ($F(1,74) = .94$, ns), discrimination condition ($F(1, 74) = .39$, ns), or the interaction between preference for the merit principle and discrimination condition ($F(1,74) = .48$, ns). Similar analyses revealed that random assignment was achieved for participants' preference for the merit principle scores. Importantly, participants in the low and high discrimination conditions did not differ in their endorsement of the merit principle, $F(1, 74) = .04$, ns. Not surprisingly, participants with a weak preference for the merit principle had lower scores ($M = 4.79$, $SD = 0.33$), compared with participants with a strong preference for the merit principle ($M = 5.69$, $SD = 0.32$). No significant interaction emerged, $F(1,74) = 2.78$, ns.

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[21] When analyses were run with participants with any level of initial perceptions of workplace discrimination (to be consistent with the manipulation check analyses), a marginally significant preference for the merit principle x discrimination condition interaction was found, $F(1, 133) = 3.32$, $p = .07$. Simple effects analyses revealed that there was a significant effect of preference for the merit principle on opposition to the preferential treatment program in the low discrimination condition ($F(1, 133) = 11.37$, $p = .001$) but not in the high discrimination condition ($F(1, 133) = 2.59$, ns). There were no simple effects of discrimination condition among either people with a weak ($F(1, 133) = 1.15$, ns) or strong preference for the merit principle ($F(1, 133) = 1.74$, ns).

Opposition to the Preferential Treatment Program

Given the weak paradigm with which I was testing the hypothesis (i.e., surveys within a mass-testing booklet), I wanted to account for as much variance as possible in participants' opposition to the preferential treatment program. Therefore, to investigate opposition to the preferential treatment program, a 2 (preference for the merit principle) x 2 (discrimination condition) ANCOVA was conduced with number of years in Canada, race, gender, and initial perceptions of workplace discrimination as covariates.[22] There was a marginal effect of the number of years participants had lived in Canada on opposition, such that, the longer participants had lived in Canada, the more opposed they were to the preferential treatment program, $F(1, 70) = 3.48$, $p = .07$. In addition, there was a significant effect of preference for the merit principle, $F(1, 70) = 9.15$, $p = .003$. However, this effect was moderated by the expected preference for the merit principle x discrimination condition interaction, $F(1, 70) = 3.90$, $p = .05$ (see Figure 10).

Simple effect analyses revealed that preference for the merit principle predicted opposition to the preferential treatment program, in the low discrimination condition, $F(1, 70) = 7.81$, $p = .007$. When induced to perceive little workplace discrimination, participants with a strong preference for the merit principle were more opposed to the preferential treatment program ($M = 6.03$), compared with their low-scoring counterparts ($M = 4.58$). In contrast, when participants were induced to perceive more workplace discrimination, preference for the merit principle no longer predicted opposition ($F(1, 70) = 0.53$, ns), as those with a strong preference

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[22] Including race as a covariate should account for more error variance because race has been found to relate to opposition to affirmative action (see Kravitz et al., 1997 for a review). Race was not investigated in Study 1 because I did not have this data for participants in Sample 1. In Study 2, when race is included as a covariate a significant main effect is found such that Whites are more opposed to the preferential treatment program compared with visible minority participants.

for the merit principle were as equally opposed (M = 5.34) as their low scoring counterparts (M = 5.03). Thus, replicating Studies 1 and 2, I found that the more participants endorsed the merit principle, the more they opposed the preferential treatment program, but only when they perceived little discrimination to exist against women and visible minorities.

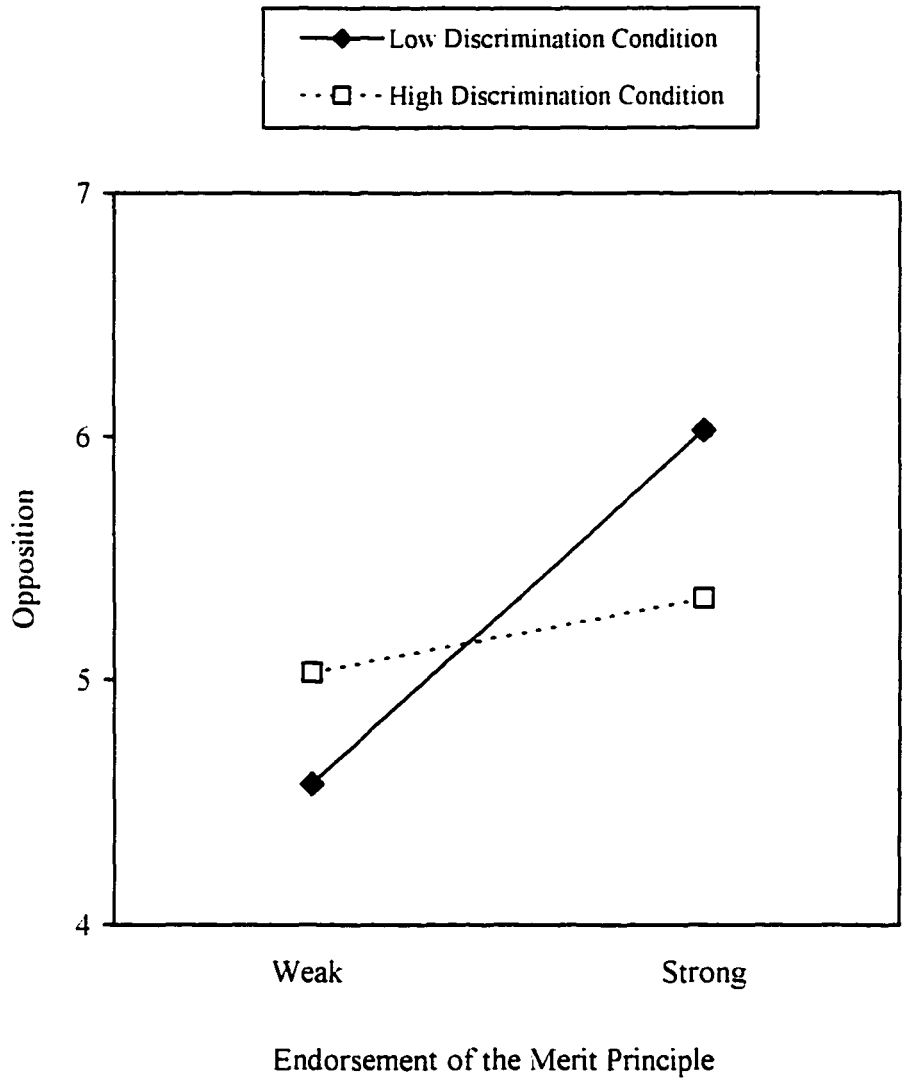
Looking at the same interaction from another perspective, participants who strongly endorsed meritocracy tended to reduce their opposition to the preferential treatment program when they were induced to perceive high levels of discrimination, compared with those induced to perceive low levels of workplace discrimination $F(1, 70) = 3.34$, $p = .07$. However, the experimental manipulation of perceptions of discrimination did not influence level of opposition for participants with a weak preference for the merit principle, $F(1, 70) = 1.26$, ns. Thus, replicating Studies 1 and 2, I found that increasing participants' perceptions of workplace discrimination resulted in lowered opposition only for those who strongly endorse meritocracy.

Combining Studies: Meta-Analyses for Opposition to the Preferential Treatment Program

A meta-analysis was conducted to combine the major results across the three studies. I used Mosteller and Bush's (1954) Stouffer method for adding Z's that is recommended by Rosenthal (1984). Combining Studies 1, 2, and 3, the preference for the merit principle x discrimination interaction term was significant, $z = 3.80$, $p = .0002$. In addition, the simple effect of preference for the merit principle among those who perceive little workplace discrimination was significant, $z = 4.30$, $p = .00003$. Finally, the simple effect of the perception of discrimination among those with a strong preference for the merit principle was significant, $z = 3.47$, $p = .001$.

Figure 10.

Study 3. The interactive effects of preference for the merit principle (weak vs. strong) and discrimination condition (low vs. high) on opposition to the preferential treatment program.



N = 78.

A second meta-analysis was conducted to combine the major results across the two experimental studies. The merit principle x discrimination interaction term was significant, $z = 2.84$, $p = .01$. In addition, the simple effect of preference for the merit principle among those who perceive little workplace discrimination was significant, $z = 3.15$, $p = .003$. Finally, the simple effect of the perception of discrimination among those with a strong preference for the merit principle was significant, $z = 2.61$, $p = .02$.

Mediation of the Simple Effect of Preference for the Merit Principle

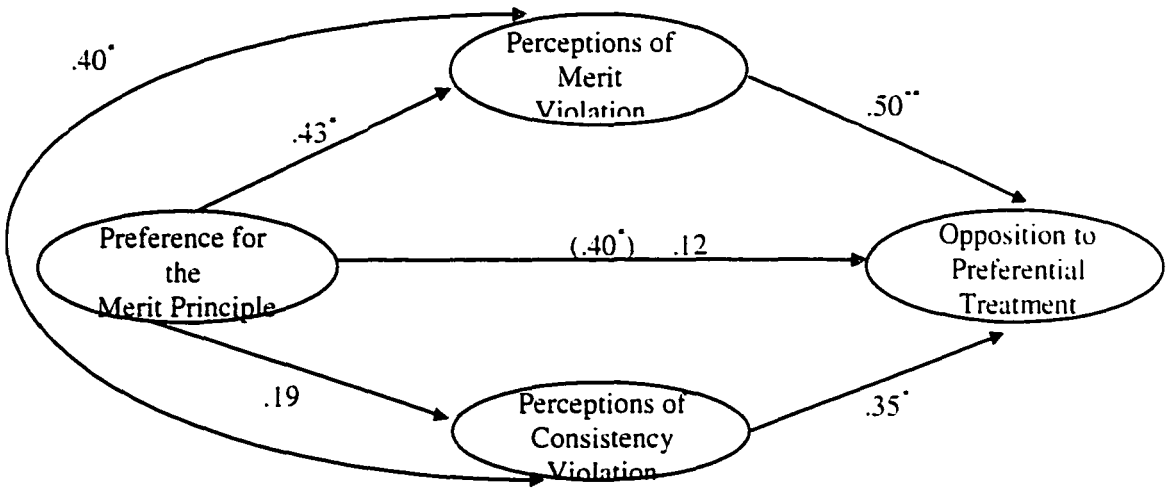
To replicate Studies 1 and 2, I tested for mediation of the simple effect of preference for the merit principle among people in the low discrimination condition.[23] As shown in Figure 11, mediation analyses indicated, first, that the stronger participants' preference for the merit principle, the more they construed the preferential treatment program as merit-violating ($\beta = .43$, $p = .01$). Second, the more participants construed the program as merit and consistency violating, the more opposed they were ($\beta = .50$, $p = .004$; $\beta = .35$, $p = .03$, respectively). Third, the effect of participants' preference for the merit principle on opposition ($\beta = .40$, $p = .04$) was reduced ($\beta = .12$, ns) once participants' construals of the program were controlled. A test of the indirect effect of preference for the merit principle on opposition through merit violation was significant, $z = 1.98$, $p = .05$. Thus, results are consistent with partial mediation. (See Appendix N for mediation of the main effect of preference for the merit principle.)

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[23] Participants' initial perceptions of workplace discrimination were controlled in the first step of the mediation analyses.

Figure 11.

Study 3. Mediation of the Simple Effect of Preference for the Merit Principle on Opposition to the Preferential Treatment Program.



Path analyses depicting the mediating role of justice construal 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 controlling construal) is given inside parentheses; the direct effect between predictor and criterion (i.e., after controlling construal) is given outside parentheses.

N = 29.

* p < .05. ** p < .01.

Discussion

Findings from studies 1 and 2 are replicated and extended in the current study. First, I again find that participants respond to the discrimination manipulation in the predicted manner. Those in the high discrimination condition endorse the manipulation items more than do participants in the low discrimination condition. It is important to note that for these analyses, I was unable to select participants with moderate initial perceptions of workplace discrimination or control for such initial perceptions. Thus, the experimental manipulation was successful regardless of the extremity of participants' preexisting perceptions of workplace discrimination. Importantly, 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 indicate that they perceive more bias in the evaluation of target-group members' merit, compared with participants in the low discrimination condition. Although weak, it is impressive that this effect is significant, considering that I was unable to control for participants' initial perceptions of workplace discrimination. This finding suggests that the experimental manipulation affects participants' explicit perceptions of workplace discrimination.

In addition, the opposition to the preferential treatment findings of Studies 1 and 2 are replicated in the current study with a different experimental paradigm. Specifically, I again find that participants' justice principles interacted with their perceptions of workplace discrimination to produce their opposition to affirmative action. When experimentally induced to perceive low levels of workplace discrimination, participants with a strong preference for the merit principle are more opposed to a preferential treatment program than are participants with a weak

preference for the merit principle. However, this merit-based opposition to affirmative action is mitigated among participants experimentally induced to perceive high levels of workplace discrimination. This mitigation effect occurs, primarily because experimentally increasing participants' perceptions of workplace discrimination leads to reduced opposition to the preferential treatment program, but only for participants who strongly endorse meritocracy.

In addition, I again find that among those induced to perceive little workplace discrimination, the simple effect of preference for the merit principle on opposition appears to be mediated though construal of the program as justice violating. Interestingly, in the current study, construal of the program as merit, rather than consistency, violating is implicated as the mediator. Specifically, for this group of participants, those with a stronger preference for the merit principle perceive the program as more likely to *not* hire the most deserving or meritorious candidate. Importantly, results are consistent with the notion that it is this construal of the program as merit violating that drives people who strongly value this principle to oppose the program.

GENERAL DISCUSSION

Predicting Opposition to Affirmative Action

The starting point for this dissertation research was the assumption that justice-based opposition to affirmative action is genuine. What was less clear, however, was whether justice-based opposition to affirmative action is absolute and unchangeable. In other words, do people with strong justice values always oppose justice-violating affirmative action programs? I hypothesized that justice-based opposition should be mitigated when participants perceive high levels of workplace discrimination against women and visible minorities (i.e., some intended beneficiaries of affirmative action). I reasoned that, because discrimination can involve inconsistent treatment or unmeritorious outcomes, people who strongly endorse consistency or meritocracy should be offended by discrimination and, thus, motivated to reduce it. Consequently, I expected participants with a strong preference for the consistency or merit principle to reduce their opposition to affirmative action when they perceive high levels of workplace discrimination.

In Study 1, I investigated how participants' pre-existing perceptions of workplace discrimination might mitigate justice-based opposition to affirmative action. I found support for the mitigation hypothesis in one of the two experimental conditions. When participants evaluated a preferential treatment program, their preference for the merit principle and perceptions of discrimination interacted to produce opposition. Specifically, preference for the merit principle predicted opposition only among participants who perceived little workplace discrimination and perceptions of discrimination predicted opposition only among participants with a strong preference for the merit principle. In comparison, the results did not support my hypothesis in the

tie condition. When participants evaluated a tie program, their preference for the consistency principle and perceptions of discrimination each resulted in a main effect. Regardless of their perceptions of discrimination, participants with a stronger preference for the consistency principle were more opposed to the tie program. Similarly, regardless of their preference for the consistency principle, participants who perceived greater discrimination were less opposed.

Although I did not expect a different pattern of results in each condition, such effects are consistent with the notion of multiple psychologies of opposition to affirmative action (Bobocel et al., 1998). Many individual difference variables (e.g., prejudice, self-interest) have been found to be differentially predictive of attitudes depending on the type of affirmative action program evaluated (Bobocel et al., 1998; Davey et al., 1999; Harrison et al., 2000). Therefore, it is not too surprising that participants' perceptions of discrimination had a main effect in the tie program but interacted with preference for the merit principle in the preferential treatment program. On average, participants had neutral attitudes toward the tie program and they perceived the program as only mildly justice violating. Thus, greater perceptions of discrimination might have been sufficient reason to reduce opposition to the tie for all participants. In contrast, on average, participants had negative attitudes toward the preferential treatment program and they perceived the program as strongly justice violating. Thus, greater perceptions of discrimination might have been sufficient reason to reduce opposition to the preferential treatment program only for those participants who were more offended by workplace discrimination (i.e., those with a strong preference for the merit principle). By this logic, the mitigation hypothesis should be supported if participants were to evaluate a consistency-violating program that is perceived as strongly justice violating and that is negatively evaluated. In this case, greater perceptions of discrimination should be sufficient reason to reduce opposition to the program only for those who are more

offended by discrimination (i.e., those with a strong preference for the consistency principle). This could be tested in future research.

Although the results of Study 1 are consistent with the notion that the perception of discrimination leads to mitigation of justice-based opposition to the preferential treatment program, the data were correlational. Therefore, it was important to demonstrate that when participants with a strong preference for the merit principle are experimentally induced to perceive more discrimination, they later reduce their opposition. Impressively, in Studies 2 and 3, using an experimental manipulation of perceptions of workplace discrimination, the preference for the merit principle x discrimination interaction was replicated. Across three studies, results supported the prediction that participants who strongly endorse meritocracy should reduce their opposition to a preferential treatment program if they perceive high levels of workplace discrimination.

In summary, across three studies, using both correlational and experimental methods, I find that participants' justice values interact with their perceptions of workplace discrimination to produce opposition to a preferential treatment program. When participants perceive little workplace discrimination, those who more strongly endorse meritocracy are more opposed to a preferential treatment program. However, this effect is mitigated by greater perceptions of workplace discrimination. When participants who strongly endorse meritocracy perceive discrimination against women and visible minorities in the assessment of their merit, they are less opposed to a preferential treatment program than they would be otherwise.

There are two important practical implications of this mitigation finding. First, when 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 supportive of affirmative action programs like the preferential treatment program at times when workplace discrimination is believed to be prevalent. In contrast, they should oppose such programs at times when workplace discrimination is believed to be scarce. Second, it may be possible to garner support for affirmative action programs that violate some people's justice values. If organizations want employees to support affirmative action programs that violate justice principles, they should first try to increase employees' awareness of the existence of discrimination against beneficiaries. The theoretical implications of this finding will be discussed later.

Mediation of the Justice Effects

I had hypothesized that people with strong justice values are more opposed to affirmative action because they construe the programs to be more justice violating. This hypothesis was supported by mediation analyses for the effect of preference for the consistency principle on opposition to the tie program (see Figure 3). It was also supported by mediation analyses for the simple and main effects of preference for the merit principle on opposition to the preferential treatment program (see Figures 5, 8, 11; Appendices H and N). Each mediation figure displays how participants with stronger justice values construe the programs as more justice violating, and how these perceptions, in turn, lead to greater opposition. Thus, it appears that people with weak and strong justice values have different attitudes toward affirmative action because, in essence, they are evaluating different programs.

The mediation findings are consistent with theory and research on the consequences of strong attitudes. Participants' strong justice values might have influenced their construal of the affirmative action programs as justice violating in various ways. For example, researchers have

found that people seek out and selectively elaborate information that is relevant to attitudes that are personally important (see Boniger, Krosnick, Berent, & Fabrigar, 1995, for a review). Therefore, participants with strong justice values might have spent more time reading the details of the program, which led them to construe it as more justice violating. In addition, strong attitudes (e.g., ones that are automatically activated upon exposure to an attitude-relevant object) have been found to bias information processing (see Fazio, 1995, for a review). Fazio (1995) states, "the findings clearly indicate that highly accessible attitudes act as a filter through which attitude-relevant information is processed and judged" (p.259). Thus, it is also possible that when evaluating an affirmative action program, participants with strong justice values retrieved these attitudes from memory and, as a result, they influenced participants' construals of the program as justice violating. In future research, I could investigate some of the cognitive processes that might lead participants with strong justice values to construe affirmative action as justice violating.

Potential Mechanism Driving the Discrimination Effect

I tested many potential mediators of the simple discrimination effect among participants who strongly endorse meritocracy. The only construct that could potentially mediate the simple effect of discrimination is the perception of the program as facilitating "the hiring and promotion of women and visible minorities whose qualifications (given current assessment procedures) underestimate their actual abilities." It makes sense that people who care about meritocracy support affirmative action under conditions of high discrimination because they perceive the beneficiaries of affirmative action as meritorious—not because the program is necessary or a quick fix, or because of feelings of guilt.

Based on findings from Studies 2 and 3, it is plausible that participants in the high discrimination condition who value the merit principle follow a long chain of reasoning to determine their attitudes toward a preferential treatment program.[24] First, they agree to statements that discrimination sometimes occurs in the assessment of target-group member's merit. Second, they infer from their pattern of responses, and subsequently indicate on a manipulation check, that discrimination exists in the assessment of target-group members' skills, abilities, and knowledge. Third, they deduce that target-group members are more qualified than they appear given current assessment procedures. Fourth, they reduce their opposition to a preferential treatment program that will hire target-group members who meet minimum qualification standards.

To examine whether people who strongly endorse meritocracy, do in fact, reduce opposition to affirmative action under conditions of high (vs. low) discrimination because they perceive target-group members as more qualified, I plan to conduct the following study. In Phase 1, participants' preference for the merit principle and their general perceptions of workplace discrimination will be assessed. To keep the design manageable, only participants with a strong preference for the merit principle will be selected for the study. In Phase 2, participants' perceptions of discrimination in the assessment of target-group members' merit will be experimentally manipulated (low or high discrimination condition). In Phase 3, participants will read about a specific female candidate that was hired under Cochrane Industries' preferential treatment program for a management position. In the under-rated condition, participants will

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[24] I don't actually know how cognizant participants were of their reasoning due to the use of close-ended questionnaires. However, different methodologies such as focus groups or interviewing could be used to investigate participants' "stream of thought."

receive information about the candidate that suggests that she is more qualified than she appears given current assessment procedures. For instance, she might have exceptional "people" skills (i.e., interpersonal and communication skills) but the formal selection criteria consists of intelligence test scores only. In the not-under-rated condition, participants will receive information that the candidate is as qualified as she appears given current assessment procedures (e.g., she has average people skills). In Phase 4, participants will advise Cochrane Industries as to whether it should retract its current preferential treatment program. If the perception of target-group members as under-rated is the mechanism driving those who strongly endorse meritocracy to reduce their opposition under conditions of high discrimination, then I would expect the following pattern of results. Only in the under-rated condition will participants with a strong preference for the merit principle reduce their opposition to the preferential treatment program under conditions of high (vs. low) discrimination. Participants in the not-under-rated condition should not reduce their opposition in the high discrimination condition, compared with those in the low discrimination condition.

Limitations of the Current Research

I believe that there are three major criticisms that can be leveled at this dissertation research that limit the conclusions, which can be drawn. First, I 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 in order to combat discrimination. Indeed, the data, from both correlational and experimental studies, indicate that this is true. However, I gave participants in these studies only one means of combating discrimination. It is entirely possible that, if given the chance, participants would chose other

means of reducing discrimination (e.g., lobbying for affordable daycare) over supporting a preferential treatment program.

Second, I investigated attitudes toward only two types of affirmative action program (i.e., the tie and the 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. Thus, I cannot presume that the psychology of opposition to the tie program generalizes to other types of differential treatment programs. Indeed, as I mentioned above, I think that perceptions of discrimination might mitigate consistency-based opposition to a "stronger" consistency-violating program. Similarly, I cannot presume that the psychology of opposition to the preferential treatment program generalizes to other types of merit-violating programs. For instance, imagine that participants evaluated a quota program that involves hiring a set number of target-group members regardless of their qualification level (i.e., they might not meet minimum qualification standards). In this case, I believe that merit-based opposition to the program would persist even if participants' perceive high levels of workplace discrimination.

Third, all participants were University of Waterloo undergraduate students. Therefore, it is unclear as to whether results would generalize to other populations, such as employees of an organization. I suspect that other variables would become important determinants of opposition when people evaluate their own company's affirmative action policy. For example, issues such as self-interest, and trust in the organization and its leaders would likely be important determinants of attitudes. It is possible that these effects would weaken those found in the current research. In addition, I am unsure whether the experimental manipulation of perceptions of discrimination would be effective with a workforce population. The results of the dissertation indicate that the

biased questionnaires used in the manipulation effectively led students with limited work experience to infer their perceptions of workplace discrimination. However, it is likely that a self-inference technique would be less effective with people with strong attitudes about workplace discrimination. Therefore, the manipulation might not be effective with senior employees who are more certain about their beliefs concerning discrimination in the workplace.

Theoretical Implications of the Current Research

Despite the methodological weaknesses of the current research, I believe that some important theoretical implications can be drawn. First, because only participants who value meritocracy reduce their opposition to a preferential treatment program under conditions of high discrimination, it appears 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 discrimination is conceptualized by those with weak and strong justice values. On the one hand, it is possible that participants with a strong preference for the merit principle are more likely to conceptualize discrimination in selection and assessment as merit violation, compared with their low-scoring counterparts. On the other hand, it is also possible that the two groups are equally likely to conceptualize discrimination as merit violation but that those with a strong preference for the merit principle are then more offended by discrimination.

Second, the current research suggests a possible solution for one of the negative consequences of preferential treatment that beneficiaries face. A negative consequence of preferential treatment programs is that people (including beneficiaries) doubt the competence of

beneficiaries selected under the program (Heilman et al., 1996). In many studies, participants have been found to evaluate a female candidate as less competent if she is chosen under a preferential treatment program, compared with a program in which merit is the only selection criteria (Heilman et al., 1998; Heilman et al., 1996). Past research has found that this "stigma of incompetence" is applied to a female beneficiary of preferential treatment unless there is clear evidence that she is more competent than a male competitor. In one study (Heilman et al., 1996), the experimenters found that the stigma of incompetence was applied even when participants were told that there was a history of discrimination against women. However, based on the current research, I believe that the stigma of incompetence should be reduced among participants with a strong preference for the merit principle who perceive high levels of discrimination. In Study 2, participants with a strong preference for the merit principle in the high discrimination condition perceived the beneficiaries of affirmative action as under-rated in terms of their qualifications. Because of this perception, I believe that participants who value meritocracy should not presume that a beneficiary of a preferential treatment program is under qualified under conditions of high discrimination.

Finally, I believe that the current research sheds some light on the question of the motivations and concerns of people who strongly endorse meritocracy. According to social dominance theorists (Pratto, 1999; Pratto, Sidanius, Stallworth, & Malle, 1994; Sidanius et al., 1996), meritocracy is one of many hierarchy-legitimizing myths. According to these theorists, hierarchy-legitimizing myths are those widely known and widely endorsed ideologies that maintain group inequality and legitimize discrimination. Meritocracy is seen as an ideology that legitimizes group-based discrimination because the dominant group has the power to chose what is considered good and valued. Importantly, these are the characteristics that the dominant group

holds. Therefore, social dominance theorists predict, and find, that people high in social dominance orientation (i.e., people who want social inequality based on race, gender, sexual orientation, etc.) more strongly endorse meritocracy, compared with those low in social dominance orientation (Pratto et al., 1994).

Given the above finding, one might deduce that people who value meritocracy are high in social dominance orientation, that is, they desire group-based discrimination. However, our past research reveals that there is no relation between preference for the merit principle and social dominance orientation, $r(325) = -.06$, ns (Davey et al., 1999, p. 231). Why should we find no relation between meritocracy and social dominance orientation although Pratto and her colleagues do? I believe that the critical difference lies in how meritocracy has been operationalized. Davey et al. (1999) developed the Preference for the Merit Principle Scale to measure individual differences in the belief that meritocracy should be the distribution rule used in our society. Thus, we looked at the relation between preference for social dominance and preference for a merit-based system. In contrast, Pratto et al. (1994) operationalized meritocracy as endorsement of the Protestant work ethic and as belief in a just world (Pratto et al., 1994). As noted by Davey et al. (1999):

> A key difference between BJW [Belief in a Just World] and PMP [Preference for the Merit Principle] Scales has to do with the nature of the construct being assessed. Whereas the BJW [Belief in a Just World] Scale measures people's perceptions of *reality*—that is, that the world is currently just—the PMP [Preference for the Merit Principle] Scale measures people's *preference* for the merit principle—that is, that merit ought to be used to allocate outcomes. (p. 226)

Thus, it is quite possible that people high in social dominance orientation are more likely to believe that meritocracy is currently operating in our society, compared to people low in social dominance orientation. However, as we have found (Davey et al., 1999), this does not mean that people who value meritocracy, and would like to see it operating properly, are high in social dominance orientation. Rather, I believe the current set of studies clearly demonstrates that endorsement of meritocracy is not synonymous with a desire for discrimination and a hierarchical society. In trying to understand those who value meritocracy, it is important to realize, that they will support hierarchy-flattening social policies (i.e., preferential treatment) in order to reduce high levels of workplace discrimination.

Although the current set of studies were not designed to further address the issue of justice versus prejudice as a source of opposition to affirmative action, the results do suggest that justice-based opposition to affirmative action is not a reflection of prejudice. Rather, it appears that people who strongly value the merit principle are deeply concerned with justice—they oppose affirmative action when they perceive it to be unjust—and they support affirmative action when they perceive injustice, that is, workplace discrimination against women and visible minorities.

Appendix A

Preference for the Merit Principle Scale

The following items were rated on a 5-point Likert rating scale with anchors ranging from 1 "strongly disagree" to 5 "strongly agree" in Study 1 sample 1. Thereafter, they were rated on a 7-point Likert rating scale with anchors ranging from 1 "strongly disagree" to 7 "strongly agree." (There were some minor changes in the scale across the samples. The superscripts next to the item indicates the Study and sample in which the item was included. [a] Study 1 sample 1 [b] Study 1 sample 2 [c] Study 1 sample 3 [d] Study 2 [e] Study 3.)

1.[abcde] Each employee ought to be named employee of the month at least once, even if he or she is not deserving. (R)

2.[abcde] In almost any business, people who do their job well ought to be able to rise to the top.

3.[a] People ought to have to work to get welfare money.

4.[abcde] In employment situations, the best qualified person ought not necessarily get the job. (R)

5.[abcde] People ought to get what they deserve.

6.[abcde] The effort a worker puts into a job ought to be reflected in the size of a raise he or she is receiving.

7.[abcde] When students are working on a group projects, each member of the group ought to receive the same grade regardless of the amount of effort each team member puts in. (R)

8.[abcde] Promotion decisions ought to take into account the effort workers put into their job.

9.[abcde] Members of a work group ought to receive different pay depending on the amount each person contributed.

10.[abcde] Sometimes it is appropriate to give a raise to the worker who most needs it, even if he or she is not the most hard working. (R)

11.[abcde] Qualifications ought to be given more weight than seniority when making promotion decisions.

12.[abcde] Between two equally smart students applying for the same job, the one who is the harder worker ought to always get the job.

13.[abcde] It is never appropriate to choose which student to hire by how much the student needs the job.

14.[abcde] A better qualified person ought to always be given a promotion before a less qualified person.

15.[abcde] People ought to be able to get away with poor quality work under some circumstances. (R)

16.[abcde] If every person in an office has the same abilities, the promotion ought to always be given to the person who puts in the most effort.

Appendix B

Preference for the Consistency Principle Scale

The following items were rated on a 5-point Likert rating scale with anchors ranging from 1 "extremely unfair" to 5 "extremely fair." Reverse-keyed items are indicated with the letter "R." (There were some minor changes in the scale across the samples. The superscripts next to the item indicates the sample in which the item was included. [a] Study 1 sample 1 [b] Study1 sample 2 [c] Study 1 sample 3)

1.[abc] To ensure equal ease of access, people with physical disabilities ought to be guaranteed a close available parking spot wherever they go. (R)

2.[a] To treat all clients the same, haircuts at a salon ought to be priced the same for everyone even though differences exist in the complexity or time taken for the cut.

3.[bc] To provide equal access to legal council, free legal services ought to be available for people who otherwise could not afford it. (R)

4.[abc] To treat all customers the same, airlines ought to charge all people the same price per seat in economy class. This would mean that overweight people would be forced to either pay for two seats or for the larger first class seats.

5.[bc] To treat everyone the same, scholarships and bursaries ought not to be restricted to people of a specific gender, ethnic background or religion, even though certain groups may have to deal with barriers in the educational system.

6.[abc] To equalize the price each person pays per drink, people who host "all you can drink" keg parties ought to sell admission tickets at cheaper prices for women than for men because women drink less than men on average. (R)

7.[ab] To treat everyone the same, all tax payers ought to pay for highway maintenance even though some people use the roads more than others.

8.[abc] To give women an equal opportunity to achieve par in golf, women ought to play off a set of tees that are closer to the green than the tees off which men play. This is because size and weight affect driving distance, and women are smaller than men on average. (R)

9.[abc] To treat everyone the same, students for whom English is a second language ought not to be given extra time to write exams, even though mental translations would take extra time.

10.[bc] To treat everyone the same, elderly people ought not have to get tested for their drivers license more frequently than other drivers, even though elderly drivers may have poorer driving skills than other drivers.

11.[abc] To give all students an equal opportunity to do well academically, mature students who may not have been practising study skills or exam writing techniques ought to be offered special study skills programs. (R)

12.[bc] To create an equal opportunity for winning, when amateurs play golf they ought to use personal handicaps so that people of different skill can compete, even though a less skilled player having a "good day" could possibly beat a more accomplished golfer having an "off day". (R)

13.[ac] To treat everyone the same, insurance rates ought to be set at equal levels for all drivers regardless of age or gender, even though this would mean that drivers with good records would be supporting the insurance claims of drivers with bad records.

14.[abc] Treat all employees the same, seniority ought not to be taken into account when determining who is to be laid off, even though some people may have worked for a company for decades and other people for only months.

15.[ac] To create an equal opportunity for winning, when yachts of different design race against each other, the faster boats ought to be given a time handicap when finishes are calculated. (R)

16.[a] To treat everyone the same, jewellers ought to charge the same price for the same style ring regardless of size. Therefore, people with large fingers would get more gold or silver for the same price than small-fingered people.

17.[abc] To treat everyone the same, differences in cultural background ought not to be taken into account in the scoring of intelligence and other standardized tests (e.g. SAT's), even though performance is heavily contingent on proficiency in the English language and on familiarity with North American cultural norms.

18.[abc] To equalize the affordability of entrance, many places (e.g., movie theatres) ought to offer cheaper admission prices for groups with low-fixed incomes like seniors and students. (R)

19.[abc] To give all students an equal opportunity to write a complete exam, students with physical or learning disabilities ought to be given extra time to write exams. (R)

20.[a] To treat all customers the same, clothes ought to be priced the same regardless of size. Thus, small-size clothes would cost the same amount as large-size clothes even though there is more material needed for larger sizes, and material costs money.

21.[abc] To create an equal opportunity to win a rowing regatta, all crews ought to weigh a certain amount; therefore if a crew is underweight, they ought to carry extra weight in their boat. (R)

22.[abc] To treat all employees the same, corporations ought <u>not</u> to take number of dependents into consideration when determining salaries, even though some couples have dual incomes and no children to support, whereas some single parents may struggle to stay above the poverty line.

23.[a] To treat everyone the same, when friends go out for dinner, everyone ought to pay the same amount regardless of what was ordered, even though the price of a meal can vary considerably.

24.[a] To treat all employees the same, performance evaluations ought to be conducted by managers who are unfamiliar with employee's past evaluations, even though this system would benefit people with poor work histories and disadvantage people who have gone "beyond the call of duty" in the past.

25.[bc] To create an equal opportunity for self support, graduate students without external government fellowships ought to be offered University Teaching Assistantships before students with external government fellowships. (R)

Appendix C

Perceptions of Workplace Discrimination Scale

The following items were rated on a 5-point Likert rating scale with anchors ranging from 1 "strongly disagree" to 5 "strongly agree." Reverse-keyed items are indicated with the letter "R." (There were some minor changes in the scale across the samples. The superscripts next to the item indicate the study or sample in which the item was included. [a] Study 1 sample 1 [b] Study1 sample 2 [c] Study 1 sample 3 [d] Study 2 [e] Study 3.)

1.[abcde] Women are disadvantaged by negative gender stereotypes regarding their ability to perform work.

2.[abcde] Visible minorities are disadvantaged in their chances of finding a mentor or having social connections that can aid them in their career advancement.

3.[ab] In the past, women were disadvantaged because of barriers in the workplace that limited their advancement (e.g., lack of maternity leave, day care facilities, flex time).

4.[ab] Historically, visible minorities were not disadvantaged in their chances of being hired or promoted because of inherent barriers in the workplace. (R)

5.[abcde] Currently, there are no inherent barriers in the workplace that reduce women's chances of being hired or promoted. (R)

6.[ab] Historically, visible minorities were unfairly disadvantaged because coworkers and superiors held negative racial stereotypes.

7.[ab] In the past, women were not greatly discriminated against in the workplace because of their gender. (R)

8.[abc] Members of visible minorities do not receive negative evaluations from their superiors because of racial stereotypes. (R)

9.[cde] Visible minorities are unfairly disadvantaged because some coworkers and superiors hold negative racial stereotypes

10.[cde] Women are not greatly discriminated against because of their gender. (R)

11.[cde] Women are disadvantaged because of barriers in the workplace (e.g., lack of maternity leave, day care facilities, flex time) that limit their advancement.

12.[cde] Visible minorities are not disadvantaged in their chances of being hired or promoted because of inherent barriers in the workplace. (R)

13.[c] Women are disadvantaged by biases in selection instruments used for hiring because selection tools fail to take into account less traditional skills and abilities such as "emotional intelligence" and interpersonal skills.

14.[c] Generally, selection systems do not recognize the full potential of visible minority candidates because cultural diversity, language skills, and different perspectives are not appropriately valued by organizations.

15.[c] Subtle personal biases of job interviewers (e.g., beliefs that males are more competent) do not disadvantage female job applicants in the assessment of their qualifications. (R)

16.[c] Visible minorities are unfairly disadvantaged during the selection interview because white interviewers often, consciously and/or unconsciously, exhibit an ingroup favouritism in the assessment of candidates' qualifications.

17.[c] Barriers against visible minorities exist in some tests used for personnel selection (e.g., intelligence tests) because the tests are inherently biased in favour of groups who are familiar with North American cultural norms.

18.[c] As a result of ingroup favouritism, white interviewers, consciously and/or unconsciously, often use different criteria for different groups during the selection process.

19.[c] Typically, criteria used to measure employee performance reflect male dominated norms of professional behaviour (e.g., competitiveness) and, thus, criteria are biased against female employees.

20.[c] Women are not disadvantaged in performance evaluations because of managers' personal biases against female employees. (R)

21.[c] Regardless of personal intentions, personal prejudices against visible minority workers influence perceptions of their performance, unfairly disadvantaging them.

22.[c] 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. (R)

23.[de] Members of visible minorities do not receive negative treatment by superiors because of racial stereotypes.

Appendix D

Study 1 Cochrane Industries Survey



Joe Sanchez, Jessica Wong, and Sonya Jackson

In the current dynamic work environment, a company can no longer afford to have selection and promotion policies th discriminate against visible minorities, women, and the disablec Although Cochrane Industries feels that our employment practic have been fair in the past, we realize that we must go further to remove employment barriers that affect these groups. Toward th end, an affirmative action committee has been established. This committee has received support from employees at Cochrane wh could be future beneficiaries of an affirmative action program. Jessica Wong states, "I feel it's time that Cochrane develops a program that helps people like me. Discrimination in the workplace continues to plague certain groups and this cannot be tolerated."

Cochrane's affirmative action committee has investigated a number of affirmative action programs implemen by other companies. This report focuses on two affirmative act options, which have been implemented at different corporations To ensure impartial opinions, we will refer to these corporations as Corporation A and Corporation B.

Although the two programs do not encompass all possible affirmative action solutions, based on the success of Corporations A and B, they definitely appear to be programs Cochrane Industries should consider.

Please circle the number that indicates how you feel about each of the following items.

1. What is your opinion of Cochrane's initiative to implement an affirmative action program?

1	2	3	4	5	6	7
extremely unfavorable			neutral			extremely favorable

2. What is your opinion of Cochrane's affirmative action goal of removing barriers in selection and promotion policies that discriminate against target groups?

1	2	3	4	5	6	7
extremely unfavorable			neutral			extremely favorable

3. How necessary do you think it is for Cochrane to implement an affirmative action program?

1	2	3	4	5	6	7
extremely unnecessary			neutral			extremely necessary

4. Like other corporations, Cochrane must abide by the Canadian Human Rights Act which prohibits discrimination against employees based on race, national or ethnic origin, colour, religion, age, gender, or disability. *Without* an affirmative action program, how likely is it that discrimination would occur in Cochrane's employment and selection practices?

1	2	3	4	5	6	7
extremely unlikely			neutral			extremely likely

5. How adequate is the explanation provided by Cochrane for implementing an affirmative action program?

1	2	3	4	5	6	7
extremely inadequate			neutral			extremely adequate

Please read the program description carefully, before answering the questions below.

Corporation A's affirmative action program is aimed to assist women, minority groups, and the physically challenged. This program has altered Corporation A's hiring and promotion policy. Specifically, if there is an instance in which there are equally qualified candidates competing for a position, preference is given to target-group members. This policy gives women, visible minorities, and the physically challenged an advantage; however, it does not mean that a target- group member with relatively weaker qualifications would ever be hired or promoted before a more qualified non-target group member. Rather, consideration is given to group membership only when candidates for a position are equally qualified.

Please circle the number that indicates how you feel about each of the following items.

1. **Under Corporation A's program, what is the likelihood that all employees will be evaluated by the same standards in hiring and promotion?**

1	2	3	4	5	6	7
extremely unlikely			neutral			extremely likely

2. **Under Corporation A's program, what is the likelihood that selection and promotion procedures will treat target and non-target group members identically?**

1	2	3	4	5	6	7
extremely unlikely			neutral			extremely likely

3. **Under Corporation A's program, what is the likelihood that a less qualified target-group member would be hired or promoted before a more qualified non-target group member?**

1	2	3	4	5	6	7
extremely unlikely			neutral			extremely likely

4. **Under Corporation A's program, what is the likelihood that a promotion or an employment opportunity would be granted to someone other than the best qualified individual?**

1	2	3	4	5	6	7
extremely unlikely			neutral			extremely likely

5. **How effective do you feel Corporation A's program would be at achieving Cochrane's affirmative action goals of removing barriers in selection and promotion policies that discriminate against target groups?**

1	2	3	4	5	6	7
extremely ineffective			neutral			extremely effective

6. **Overall, how fair do you believe Corporation A's program is?**

1	2	3	4	5	6	7
extremely unfair			both fair and unfair			extremely fair

7. **How fair do you feel Corporation A's program is toward employees who are not members of the target groups?**

1	2	3	4	5	6	7
extremely unfair			both fair and unfair			extremely fair

8. **To what extent will Corporation A's program alter job opportunities for employees like you?**

1	2	3	4	5	6	7
job opportunities will decrease			job opportunities will not change			job opportunities will increase

9. **What is your opinion of Corporation A's affirmative action program?**

1	2	3	4	5	6	7
extremely unfavorable			neutral			extremely favorable

10. **How likely is it that you would recommend to Cochrane's affirmative action committee that Cochrane implement Corporation A's program?**

1	2	3	4	5	6	7
extremely unlikely			neutral			extremely likely

Please read the program description carefully, before answering the questions below.

When considering employees for hirings and promotions a new procedure is used with Corporation B's affirmative action program. A minimum qualification level for each position has been set. The most qualified applicant above this level receives the available promotion unless there are any target-group members (women, visible minorities and 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.

Please circle the number that indicates how you feel about each of the following items.

1. Under Corporation B's program, what is the likelihood that all employees will be evaluated by the same standards in hiring and promotion?

1	2	3	4	5	6	7
extremely unlikely			neutral			extremely likely

2. Under Corporation B's program, what is the likelihood that selection and promotion procedures will treat target and non-target group members identically?

1	2	3	4	5	6	7
extremely unlikely			neutral			extremely likely

3. Under Corporation B's program, what is the likelihood that a less qualified target-group member would be hired or promoted before a more qualified non-target group member?

1	2	3	4	5	6	7
extremely unlikely			neutral			extremely likely

4. Under Corporation B's program, what is the likelihood that a promotion or employment opportunity would be granted to someone other than the best qualified individual?

1	2	3	4	5	6	7
extremely unlikely			neutral			extremely likely

5. How effective do you feel Corporation B's program would be at achieving Cochrane's affirmative action goals of removing barriers in selection and promotion policies that discriminate against target groups?

1	2	3	4	5	6	7
extremely ineffective			neutral			extremely effective

6. Overall, how fair do you believe Corporation B's program is?

1	2	3	4	5	6	7
extremely unfair			both fair and unfair			extremely fair

7. How fair do you feel Corporation B's program is toward employees who are not members of the target groups?

1	2	3	4	5	6	7
extremely unfair			both fair and unfair			extremely fair

8. To what extent will Corporation B's program alter job opportunities for employees like you?

1	2	3	4	5	6	7
job opportunities will decrease			job opportunities will not change			job opportunities will increase

9. What is your opinion of Corporation B's affirmative action program?

1	2	3	4	5	6	7
extremely unfavorable			neutral			extremely favorable

10. How likely is it that you would recommend to Cochrane's affirmative action committee that Cochrane implement Corporation B's program?

1	2	3	4	5	6	7
extremely unlikely			neutral			extremely likely

Appendix E

Regression Equation

Below is the computational formula for generating the simple regression lines to plot an interaction such that the regression of Y on X can be displayed for each level of Z (Aiken & West, 1991).

$$Y = (b_1 + b_3Z)\,X + (b_2Z + b_0)$$

In which:

b_1 = the unstandardized regression coefficient for preference for the merit principle

b_2 = the unstandardized regression coefficient for the perception of discrimination

b_3 = the unstandardized regression coefficient for the preference for the merit principle x the perception of discrimination interaction term

b_0 = the intercept

Z = the standard deviation for the perception of discrimination ($\pm$)

X = the standard deviation for the preference for the merit principle ($\pm$)

Appendix F

The Goodman Formula

Below is the significance test for an indirect effect in mediation (Goodman, 1960). The ratio should be treated as a Z test.

$$= \frac{ab}{\sqrt{b^2 s_a^2 + a^2 s_b^2 - s_a^2 s_b^2}}$$

In which:

a = the relation of the predictor with the mediator

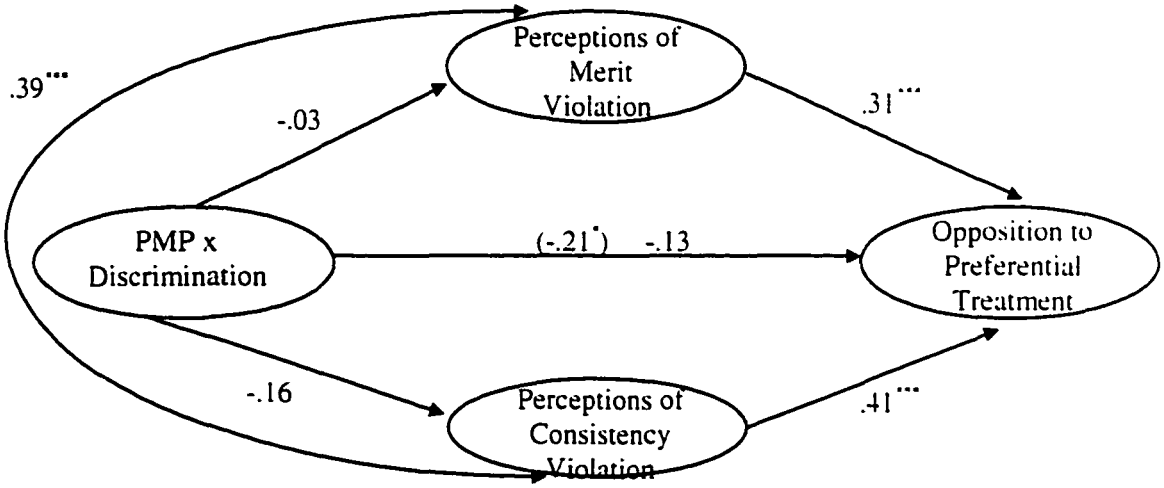
b = the relation of the mediator with the outcome when controlling for the predictor

s_a = the standard error of a

s_b = the standard error of b

Appendix G

Study 1: Mediation of the Preference for the Merit Principle x Perceptions of Discrimination Interaction.

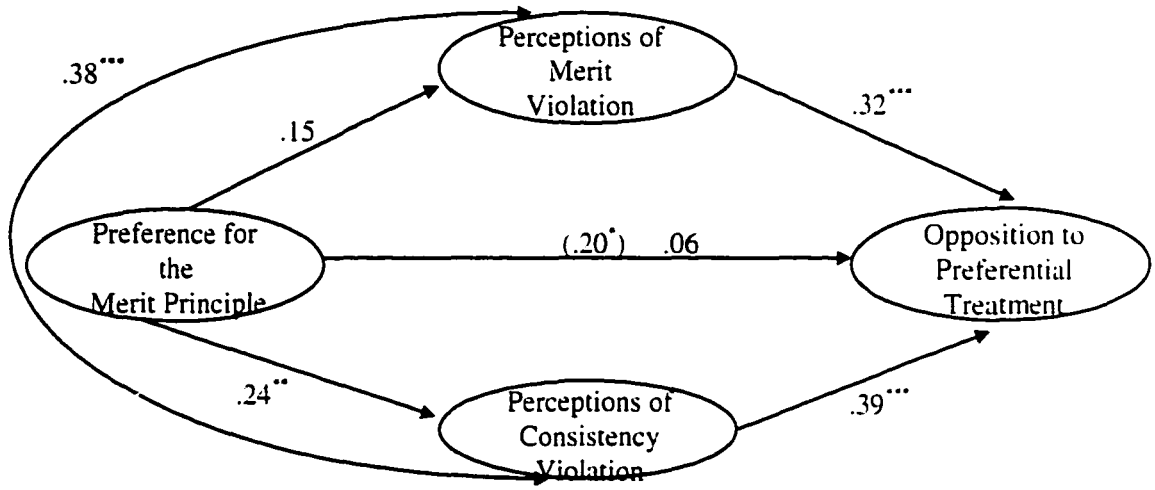


Path analyses depicting the mediating role of justice construal in the relation between preference for the merit principle x perceptions of discrimination and opposition to the preferential treatment program. Numbers on paths are betas. The total effect between predictor and criterion (i.e., before controlling construal) is given inside parentheses; the direct effect between predictor and criterion (i.e., after controlling construal) is given outside parentheses. N = 107.
* $p < .05$. *** $p < .001$.

A test of the indirect effect of preference for the merit principle x perceptions of discrimination on opposition through consistency violation was significant. $z = 1.93$, $p = .05$. However, mediation cannot be inferred because the relation between the predictor and the mediator does not reach statistical significance.

Appendix H

Study 1: Mediation of the Preference for the Merit Principle to Opposition Relation.



Path analyses depicting the mediating role of justice construal in the relation between preference for the merit principle and opposition to the preferential treatment program. Numbers on paths are betas. The total effect between predictor and criterion (i.e., before controlling construal) is given inside parentheses; the direct effect between predictor and criterion (i.e.. after controlling construal) is given outside parentheses. N = 108.
* p < .05. ** p < .01. *** p < .001.

A test of the indirect effect of preference for the merit principle on opposition through consistency violation was significant, z = 2.24, p = .03.

Appendix I

Study 2 Discrimination Manipulation

Low Discrimination Condition

Cochrane Industries Workplace Policies Survey

At Cochrane Industries we are interested in your evaluations of specific affirmative action policies. In order for us to best understand our respondents' attitudes toward affirmative action we need to know your beliefs more generally about issues related to the affirmative action issue: beliefs about government intervention; beliefs about discrimination; and beliefs about corporate responsibility. Your attitudes toward these issues will help to inform us regarding your evaluations of affirmative action policies.

The current session will explore respondents' beliefs about discrimination in the workplace. Discrimination against women and visible minorities is an important issue for many organizations. We are interested in the extent to which people perceive specific types of discrimination against women and visible minorities to exist in the workplace. There are no correct or incorrect answers. Please respond to the following items honestly and accurately using the following scale:

0	1	2	3	4	5	6	7	8	9	10
very strongly disagree					neither disagree nor agree					very strongly agree

1. In almost all organizations, visible minorities are unfairly disadvantaged because most co-workers and superiors hold negative racial stereotypes.

2. In many workplaces, barriers exist such as a lack of maternity leave, day care facilities, or flex time that impede nearly all women's advancement in organizations.

3. Visible minorities are unfairly disadvantaged during the selection interview because white interviewers nearly always exhibit an in-group favouritism in the assessment of candidates' qualifications.

4. 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.

5. It is impossible for organizational selection tests to fairly assess the skills and abilities of visible minorities because nearly all tests are culturally biased.

6. Typically, criteria used to measure employee performance reflect male dominated norms of professional behaviour (e.g., competitiveness) and, thus, criteria are nearly always biased against female employees.

High Discrimination Condition

Cochrane Industries Workplace Policies Survey

At Cochrane Industries we are interested in your evaluations of specific affirmative action policies. In order for us to best understand our respondents' attitudes toward affirmative action we need to know your beliefs more generally about issues related to the affirmative action issue: beliefs about government intervention; beliefs about discrimination; and beliefs about corporate responsibility. Your attitudes toward these issues will help to inform us regarding your evaluations of affirmative action policies.

The current session will explore respondents' beliefs about discrimination in the workplace. Discrimination against women and visible minorities is an important issue for many organizations. We are interested in the extent to which people perceive specific types of discrimination against women and visible minorities to exist in the workplace. There are no correct or incorrect answers. Please respond to the following items honestly and accurately using the following scale:

0	1	2	3	4	5	6	7	8	9	10
very strongly disagree					neither disagree nor agree					very strongly agree

1. Visible minorities are unfairly disadvantaged at times because some co-workers and superiors may hold negative racial stereotypes.

2. Sometimes, women can be potentially disadvantaged because of barriers in certain workplaces (e.g., lack of maternity leave, day care facilities, flex time) that may limit their advancement.

3. Occasionally, visible minorities can be unfairly disadvantaged during the selection interview because white interviewers may, consciously and/or unconsciously, exhibit an in-group favouritism in the assessment of candidates' qualifications.

4. 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.

5. Occasionally, barriers against visible minorities exist in tests used for personnel selection (e.g., intelligence tests) because tests are sometimes biased in favour of groups who are familiar with North American cultural norms.

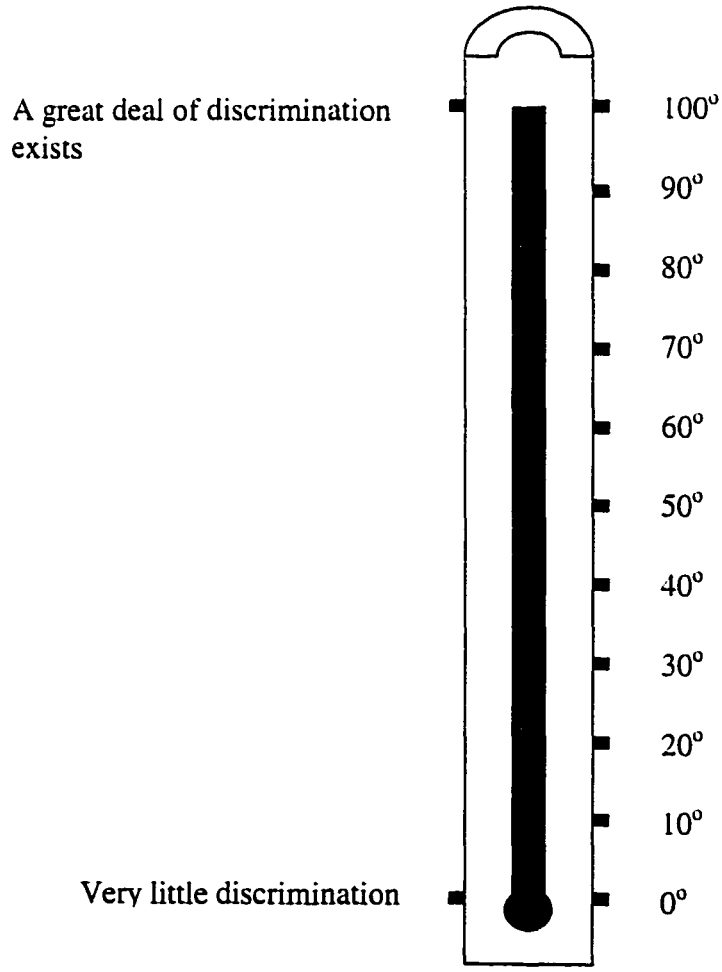
6. Sometimes, criteria used to measure employee performance reflect male dominated norms of professional behaviour (e.g., competitiveness) and, thus, criteria may be biased against female employees.

Appendix J

Thermometer Summary Ratings of Discrimination

Taking into consideration your responses to the questions on the previous page about specific forms of discrimination, we would like you to provide a *summary rating* of your perceptions of discrimination against women and visible minorities in the workplace. Below, you will see something that looks like a thermometer. You will use this to indicate your summary rating of how much discrimination exists in the workplace. If you believe that there is little discrimination in the workplace, you should give a score somewhere between 0° and 30°. If you believe that there is a moderate amount of discrimination in the workplace, you should give a score somewhere between 31° and 70°. If you believe that there is a lot of discrimination in the workplace, you should give a score somewhere between 71° and 100°. The degree labels on the thermometer will help you locate your summary rating. To indicate your summary rating, please use **any** number between 0° and 100°. You are **not** restricted to using 10° intervals.

Using the scale below, please provide a number between 0° and 100° to indicate your summary rating of how much discrimination exists in the workplace _____.



Appendix K

Cochrane Industries

Study 2 Cochrane Industries Survey



Joe Vilech, Jessica Wong, and Sonya Jackson

Decisions Ahead of Us

In the current dynamic work environment, a company can no longer afford to have selection and promotion policies that discriminate against target-group members (women & visible minorities). Although we at Cochrane Industries feel that our employment practices have been fair in the past, we realize that we must work hard to remove any employment barriers that may affect these groups. Toward this end, an affirmative action committee has been established. This committee has received support from employees at Cochrane, including future beneficiaries of an affirmative action program. Jessica Wong states, "Cochrane Industries is dedicated to creating a program that assists target-group members like me."

Cochrane's affirmative action committee has investigated a number of affirmative action programs implemented by other companies. This report focuses on one affirmative action option, which has been implemented at another corporation. To ensure impartial opinions, we will refer to this corporation as Corporation A.

Although this program does not encompass all possible affirmative action solutions, based on the success of Corporation A, it definitely appears to be a program Cochrane Industries should consider.

Please circle the number that indicates how you feel about each of the following items.

1. What is your opinion of Cochrane's initiative to implement an affirmative action program?

1	2	3	4	5	6	7
extremely unfavorable			neutral			extremely favorable

2. How necessary do you think it is for Cochrane to implement an affirmative action program?

1	2	3	4	5	6	7
extremely unnecessary			neutral			extremely necessary

3. How adequate is the explanation provided by Cochrane for implementing an affirmative action program?

1	2	3	4	5	6	7
extremely inadequate			neutral			extremely adequate

4. What is your opinion of Cochrane conducting an affirmative action attitude survey?

1	2	3	4	5	6	7
extremely unfavorable			neutral			extremely favorable

Cochrane Industries

Read the program description carefully, before answering the questions below.

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

Please circle the number that indicates how you feel about each of the following items.

1. Under Corporation A's program, what is the likelihood that hiring and promotion procedures would be implemented differently for target-group members (women & visible minorities) than for white males?

1	2	3	4	5	6	7
extremely unlikely			neutral			extremely likely

2. Under Corporation A's program, what is the likelihood that all employees will be evaluated by the same standards in hiring and promotion?

1	2	3	4	5	6	7
extremely unlikely			neutral			extremely likely

3. Under Corporation A's program, what is the likelihood that a less qualified target-group member (woman or visible minority) would be hired or promoted before a more qualified white male?

1	2	3	4	5	6	7
extremely unlikely			neutral			extremely likely

4. Under Corporation A's program, what is the likelihood that the most deserving (or meritorious) candidate would be hired or promoted?

1	2	3	4	5	6	7
extremely unlikely			neutral			extremely likely

5. I feel that white men are granted benefits and privileges in our society due to their race and gender.

1	2	3	4	5	6	7
strongly disagree			neutral			strongly agree

6. I feel guilty about any current discrimination that exists against women and visible minorities.

1	2	3	4	5	6	7
strongly disagree			neutral			strongly agree

7. Corporation A's program is fair toward white male employees.

1	2	3	4	5	6	7
strongly disagree			neutral			strongly agree

8. Corporation A's program is necessary to eliminate any current discrimination that exists against women and visible minorities at Cochrane Industries.

1	2	3	4	5	6	7
strongly disagree			neutral			strongly agree

Cochrane Industries

Please circle the number that indicates how you feel about each of the following items.

9. Corporation A's program would be effective at removing any discrimination that exists against women and visible minorities at Cochrane Industries.

1	2	3	4	5	6	7
strongly disagree			neutral			strongly agree

10. 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.

1	2	3	4	5	6	7
strongly disagree			neutral			strongly agree

11. Corporation A's program is a ***short-term*** solution that will ensure equal representation of all groups in workplaces of the future.

1	2	3	4	5	6	7
strongly disagree			neutral			strongly agree

12. Although Corporation A's program may be unfair to some individuals, it is more fair to more individuals because it will help create a more just society overall.

1	2	3	4	5	6	7
strongly disagree			neutral			strongly agree

13. Which of the following is a greater injustice?

    a) Affirmative action programs like Corporation A's, which may prevent the most qualified individual (if it is a white male) from being hired or promoted.

    OR

    b) Discrimination in the workplace, which may prevent the most qualified individual (if it is a woman or visible minority) from being hired or promoted.

1	2	3	4	5	6	7
A is much more unjust than B			A and B are equally unjust			B is much more unjust than A

14. What is your opinion of Corporation A's affirmative action program?

1	2	3	4	5	6	7
extremely unfavorable			neutral			extremely favorable

15. How likely is it that you would recommend to Cochrane's affirmative action committee that Cochrane implement Corporation A's program?

1	2	3	4	5	6	7
extremely unlikely			neutral			extremely likely

Appendix L

Study 3 Manipulation Check

Perceptions of Bias in Merit Assessment

Organizations are increasingly paying attention to the issue of how merit is assessed in the workplace. One issue under discussion is whether criteria such as an individual's skills, abilities, and knowledge are accurately assessed in both personnel selection and performance evaluation. To what extent do biases against women and visible minorities currently exist (a) in the criteria chosen for selection and performance evaluation and (b) in the measurement of those criteria in organizations?

Please circle the number from 1 to 7 indicating the extent to which you agree or disagree with each of the following statements. Please note: We are referring to both intentional and unintentional biases that currently exist *in general* within organizations.

1	2	3	4	5	6	7
strongly disagree	moderately disagree	slightly disagree	neither disagree nor agree	slightly agree	moderately agree	strongly agree

1. The criteria chosen to measure merit may favour men because less traditional skills and abilities such as "emotional intelligence" and interpersonal skills often are not taken into account.

2. The criteria chosen to measure merit recognize the full potential of visible minority candidates because cultural diversity, language skills, and different perspectives are appropriately valued by organizations.

3. During the job interview, managers' gender stereotypes may affect perceptions of female candidates' skills and abilities, regardless of personal intentions.

4. During the job interview, managers' racial prejudices may affect perceptions of visible minorities' skills and abilities, regardless of personal intentions.

5. Managers do not hold personal biases that influence their perceptions of women's work performance.

6. Some managers hold personal prejudices that influence their perceptions of visible minorities' work performance.

7. 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.

Note: Item 1 was dropped due to a low item-total correlation.

Appendix M

Study 3 Preferential Treatment Materials

We are interested in how people evaluate affirmative action programs. Affirmative action programs in organizations are designed to assist target-group members such as women and minority groups.
Read carefully the following description of a program used by "Corporation A" and answer the questions below.

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

Please circle the number that indicates how you feel about each of the following items.

1. Under Corporation A's program, what is the likelihood that all employees will be evaluated by the same standards in hiring and promotion?

1	2	3	4	5	6	7
extremely unlikely			neutral			extremely likely

2. Under Corporation A's program, what is the likelihood that the most deserving (or meritorious) candidate would be hired or promoted?

1	2	3	4	5	6	7
extremely unlikely			neutral			extremely likely

3. What is your opinion of Corporation A's affirmative action program?

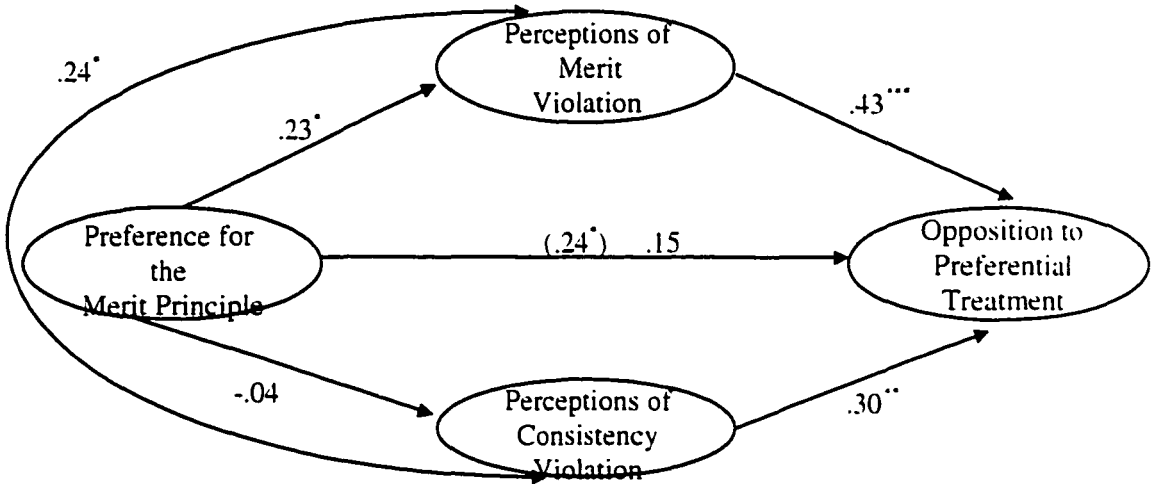
1	2	3	4	5	6	7
extremely unfavorable			neutral			extremely favorable

4. How likely is it that you would recommend to an organization that it implement Corporation A's program?

1	2	3	4	5	6	7
extremely unlikely			neutral			extremely likely

Appendix N

Study 3: Mediation of the Preference for the Merit Principle to Opposition Relation.



Path analyses depicting the mediating role of justice construal in the relation between preference for the merit principle and opposition to the preferential treatment program. Numbers on paths are betas. The total effect between predictor and criterion (i.e., before controlling construal) is given inside parentheses; the direct effect between predictor and criterion (i.e., after controlling construal) is given outside parentheses. $N = 78$.
$^{*}p < .05$. $^{**}p < .01$. $^{***}p < .001$.

A test of the indirect effect of preference for the merit principle on opposition through merit violation was significant, $z = 1.88$, $p = .06$.

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