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Social dominance orientation and reactions to affirmative action policies and beneficiaries: A test of the mediating effects of perceptions of race-based inequities and attitudes toward diversity

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SOCIAL DOMINANCE ORIENTATION AND REACTIONS TO AFFIRMATIVE
ACTION POLICIES AND BENEFICIARIES: A TEST OF THE MEDIATING
EFFECTS OF PERCEPTIONS OF RACE-BASED INEQUITIES AND
ATTITUDES TOWARD DIVERSITY

A Dissertation
Presented to
the Graduate School of
Clemson University

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy
Industrial and Organizational Psychology

by
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ABSTRACT

In the present study, social dominance theory (SDT) was used as a framework for understanding reactions to affirmative action policies and beneficiaries. Specifically, this study examined how social dominance orientation, perceptions of inequities, and attitudes toward diversity impact these reactions. The results of the study provide support for several of the predictions derivable from SDT. Social dominance orientation (SDO) had a direct influence on participants' endorsement of two legitimizing myths: perceptions of race-based inequities and attitudes toward diversity. Moreover, endorsement of these legitimizing myths was directly related to support for affirmative action and reactions to beneficiaries of affirmative action.

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CHAPTER ONE

INTRODUCTION

Affirmative action refers to those voluntary and mandatory efforts that an organization undertakes in an attempt to prevent discrimination and ensure equal opportunity (Crosby et al., 2003). Enacted to redress the effects of years of intentional discrimination directed towards African-Americans, these policies began after the signing of Executive Order 11246. In 1965 President Johnson issued the executive order requiring all federal contractors to take “affirmative action” towards promoting the inclusion of minorities in all aspects of hiring and employment (Crosby et al., 2006).

Based on the requirements of EO 11246, employers in both the public and private sectors began developing various types of affirmative action policies. These policies vary along a continuum and differ in the degree to which particularistic traits, like race and gender, are taken into account when making hiring and employment decisions. For instance, in compensatory policies no weight is given to particularistic traits in employment decisions (Knight & Hebl, 2005). Instead, attempts are made to integrate protected group members into the process before decisions are made. These attempts typically involve practices such as targeted recruiting, training, mentoring, and career guidance for minority group members.

A stronger form of affirmative action involves proportional selection quotas. Using this type of policy, target group members are selected in direct proportion to the number of qualified target group members in the applicant pool (Knight & Hebl, 2005). As a result, protected group membership and individual qualifications are given equal

weight in the decision process. Therefore, while this type of policy does involve quotas, it does not result in the selection of unqualified minorities. In addition, these types of policies are only permissible under extreme conditions.

A weaker type of affirmative action policy, soft preferential treatment, only weights group membership as a “tiebreak” (Brown & Hirschman, 2006). In other words, group membership is taken into consideration only when a protected group member is as qualified as a majority group member. Thus, while particularistic traits are given a significant amount of weight in the decision process, individual qualifications are also taken into account.

While EO 11246 was specific to employment settings, it gave impetus to subsequent federal education regulations and government advisories which allowed institutions of higher education to take active steps in promoting the inclusion of racial minorities in the student body, faculty, and staff (Moran, 2000). In order to attain adequate representation in the student body many college and university leaders instituted voluntary affirmative action policies that closely resembled the practices used in employment settings.

Initially, many institutions implemented race-neutral procedures, like targeted recruiting, in order to increase the number of protected group members in the applicant pool (Crosby et al., 2003). At the same time, however, selective institutions also began requiring SAT or ACT test scores for admission (Lemann, 1999). Given race-based differences in scores on standardized tests, these early race-neutral efforts resulted in little more than token integration.

Subsequent college and university affirmative action policies focused on the selection process to increase inclusion of minorities. While these policies took many different forms, group membership was always considered in the decision process resulting in race-sensitive admissions practices (Crosby et al., 2003). For example, many colleges and universities have weak preferential treatment policies that treat race as a “tiebreak” when deciding between equally qualified students. Other institutions have adopted policies such as adding a constant number of points to the applications of minorities. However, the Civil Rights Act of 1990 severely limited the ability of universities to make such race-based score adjustments, increasing the challenges met by institutions who wished to increase diversity. Still other institutions implemented policies that included quotas or setting aside a specified number of slots for minorities in order to ensure adequate representation of minorities in keeping with legally defensible affirmative action programs.

The implementation of affirmative action in higher education was associated with marked increases in the number of African-American students admitted into colleges and universities. In 1965, African-Americans accounted for less than 5% of all undergraduate students, 2% of all medical students, and 1% of law students (www.ecs.org/clearinghouse/32/15/3215.doc). These numbers increased dramatically as many institutions began developing race-sensitive admissions policies. In fact, for a brief period of time during the seventies, African-Americans were slightly more likely to attend college than their white counterparts with similar socioeconomic and geographic characteristics (Jaynes & Williams, 1989).

As the number of African-American students admitted into colleges and universities grew, the constitutionality of voluntary affirmative action practices was legally challenged on numerous occasions. In *Defunis v. Odegaard* (1973), the University of Washington's affirmative action program was challenged by a white applicant denied admission to its law school. The white student claimed that the program was a form of reverse discrimination. The state trial court ruled in favor of the plaintiff and ordered that he be admitted into the law school. However, the school's affirmative action policy was ultimately upheld when the state Supreme Court overturned the lower court's ruling and the United States Supreme Court dismissed the case.

The first major setback to affirmative action in higher education came in the *Regents of the University of California v. Bakke* (1978) case. Allen Bakke challenged the medical school at the University of California at Davis' policy under the 14th Amendment and Title VI of the Civil Rights Act of 1964 after being denied admission in successive years. The medical school's policy, known as the Davis Plan, maintained separate applicant lists for whites and minorities and set-aside 16 of the 100 admissions slots for racial minorities and economically disadvantaged whites. The trial judge deemed that the policy violated the equal protection clause of the 14th Amendment, as well as, Title VI of the Civil Rights Act of 1964 and the California state constitution. After several appeals by the university, the United States Supreme Court ruled 5-4 that the Davis Plan was an unlawful quota system. However, while quotas and set-asides were banned without statistical evidence of racial imbalances, treatment of race as a "plus" in admissions when all other qualifications were equal was permitted. Another important by-product of the

Supreme Court's decision, written by Justice Powell, was that it established diversity as a basis for race-based preferences in college admissions.

Over the next twenty-five years, the Supreme Court would fail to render any decisions on the issue of affirmative action in higher education. In 2003, however, the Court would submit judgments in two affirmative action cases heard in tandem involving the University of Michigan. These judgments served to more clearly explicate the Court's position on race-sensitive admissions practices.

In *Gratz v. Bollinger*, two white students were denied admission to the undergraduate school while minority candidates with lesser qualifications were admitted, and subsequently challenged the university's practice of automatically adding points to minorities' admissions scores. The Supreme Court ruled that this practice did not meet the standards of strict scrutiny since the system weighted race in such a way which virtually ensured that every minimally qualified minority applicant would be admitted.

In *Grutter v. Bollinger* a white woman sued the University of Michigan Law School after being denied admission while minority students with lower grades and test scores were admitted. In the judgment, the Supreme Court upheld the 1978 *Bakke* decision citing diversity as a compelling state interest in state-sponsored schools. Taken together these decisions suggest that universities may implement race-sensitive admissions policies to promote diversity, but only as part of policies which assess each applicant individually. Consistent with the CRA of 1990, the discretion of educational institutions to use affirmative action in admissions is more limited than ever before.

Despite the Supreme Court rulings upholding certain forms of affirmative action, the policy remains a popular topic in public and political discourse. Moreover, the policy appears to have very polarizing effects on society. As a result, attitudes toward the policy receive a great deal of attention in the social science literature. The current study examines attitudes toward affirmative action in higher education. While there is little empirical research on attitudes toward affirmative action in higher education from which to draw conclusions, the policy follows essentially the same practices as in employment settings. Therefore, findings from employment settings should be relevant and generalizable to educational settings. In fact, past research suggests opposition to affirmative action may be more severe when applied to university admissions (Schuman et al., 1997).

In the current study, social dominance theory is used as a guiding framework for understanding the dynamics underlying reactions to affirmative action. Social dominance orientation, perceptions of racial imbalances and attitudes toward diversity will be used to predict reactions to an affirmative action policy. A soft preferential treatment policy was chosen for this investigation since this form of affirmative action has been able to withstand legal scrutiny and is often used in educational settings. We also examine perceptions of affirmative action beneficiaries as predicted by these attitudinal variables.

Attitudes Toward Affirmative Action Policies

Since the Supreme Court's decision in the *Bakke* case, affirmative action has become one of the most controversial social policies in the United States. Findings regarding predictors of attitudes toward affirmative action have been inconsistent, but

researchers have started to identify specific aspects of the policies, evaluators and the beneficiaries that predict resistance or acceptance of affirmative action and of beneficiaries.

As a first step in the current study, we review existing research in this area. Although this provides useful information for understanding the factors that predict resistance, much of this early work is atheoretical. It does, however, provide a basis for predicting which aspects of affirmative action policies, evaluator characteristics, and beneficiary characteristics are related to fairness perceptions. In a second step, we review early theoretical work suggesting that self-interest and racism may impact attitudes toward the policies. Finally, we turn to SDT as a means of understanding and extending these early findings and formulating hypotheses for the current study.

Characteristics of the policy

Levels of support for the policy vary as a function of several factors. One of these factors appears to be the amount of information provided about the affirmative action policy. Past research suggests that individuals tend to equate affirmative action with the use of quota systems when provided with little or no information regarding the specific practices used in implementing the policy (Kravitz et al., 1997). Reactions to this type of policy are the most severe and tend to be consistently negative. However, the actual use of such policies is very rare and, in all but the most restricted instances, the policies would be considered illegal.

Attitudes toward affirmative action tend to be more positive for policies containing more realistic practices. However, differences in attitudes are still found

depending on the strength of the policy. “Soft” forms of affirmative action are race-neutral and include practices like outreach programs, mentoring, and targeted recruiting. In other words, demographic characteristics are given no weight in selection decisions. Rather, these practices focus on increasing the number of qualified minorities in the applicant pool. In contrast, “hard” forms of affirmative action are race-conscious and involve preferential treatment for members of protected groups. For example, using race or gender as a tiebreaking factor when two individuals are equally qualified is a “hard” form of affirmative action. In general, race-neutral forms of affirmative action consistently receive much greater support than race-conscious forms of the policy (Kravitz & Platania, 1993; Kravitz & Klineberg, 2000). A likely explanation for this finding is that race-neutral policies take merit into account more so than race-conscious policies (Tougas, Crosby, Joly & Pelchat, 1995).

Knight and Hebl (2005) replicated these findings within the context of higher education. Specifically, they found that the degree to which admissions policies evaluated applicants on the basis of universalistic characteristics, like qualifications, rather than demographic characteristics influenced reactions toward the policies. Specifically, respondents regarded the policy involving targeted recruiting of minorities more positively than policies involving proportional selection quotas and preferential treatment. Moreover, participants indicated greater support for the proportional selection quota policy than the weak preferential selection policy.

Consistent with findings in employment settings, as the weight attached to particularistic characteristics is increased, perceptions of fairness tend to decrease. In

addition, perceptions of fairness and ratings of beneficial outcomes associated with the policy decreased as the amount of weight the policy placed on demographic factors increased. Taken together, these studies underscore the need to provide specific details about the affirmative action policy in order to provide evaluators with a deeper understanding of the nature of the policies and increase acceptance of more moderate policies (Doverspike, Taylor & Arthur, 2000). In this study, attitudes toward a weak form of preferential treatment, commonly called “soft” preferential treatment, will be assessed.

Other predictors of reactions to the policies include characteristics of the evaluator. An evaluator is any individual who reviews and makes a judgment regarding the fairness, benefit, or need for a particular affirmative action policy. However, studies typically target students or workers to make these judgments. While this work is also rather atheoretical in nature, a review of the existing data allows us to understand which aspects of an evaluator may prove to be relevant in a more theoretically based examination of the policy.

Demographic characteristics of evaluators

Affirmative action attitudes also appear to be influenced by demographic characteristics of the attitude-holder. With few exceptions, women tend to be more supportive of affirmative action than men (Konrad & Linnehan, 1995; Kravitz et al., 2000; Taylor-Carter, Doverspike & Alexander, 1995). This finding appears to be true for both “soft” and “hard” forms of the policy (Ozawa, Crosby & Crosby, 1996). However, the effect may be more pronounced for “hard” policies than for “soft” policies. For example,

women were found to have more positive attitudes than men toward an affirmative action policy that involved a quota system (Summers, 1995). However, women and men did not differ significantly in terms of their evaluations of policies composed of either a special training program or differential scoring of tests.

Similar findings for the effects of evaluator demographic characteristics on attitudes toward affirmative action have also been observed in student samples. Kravitz and Platania (1993) found that female undergraduates expressed more positive attitudes toward non-specific affirmative action policies than male undergraduates. In addition, the female undergraduates evaluated specific structural components of potential affirmative action policies more positively than their male counterparts. For instance, women provided greater support than men for both “soft” and “hard” forms of affirmative action policies consisting of recruitment, training and quotas. Moreover, women were more likely than men to endorse requiring all organizations to have affirmative action policies and providing workforce composition data in an affirmative action plan to the federal government. Finally, women had more positive attitudes than men toward using affirmative action to compensate for past discrimination.

Reactions to affirmative action also differ as a function of the ethnicity of the attitude-holder. However, the effect of evaluator ethnicity on attitudes toward the policy may often be more ambiguous than the effect of gender. For instance, Latinos have exhibited varying levels of support for affirmative action across several studies. Swain and colleagues (2001) found that, among Latinos, levels of support for the policy closely resemble those of African-Americans. Nonetheless, other studies suggest that support for

affirmative action among Latinos generally falls between that of African-Americans and whites, unless the policy specifically targets their ethnic group (Bell, McLaughlin, & Harrison 1996; Kravitz & Platania, 1993; Kravitz, Stinson & Mello, 1994). Similar findings have also been obtained in regards to support for specific structural components of a potential affirmative action policy (Kravitz & Platania, 1993). In contrast, Asian-Americans tend to exhibit reactions to affirmative action similar to those of whites (Swain et al., 2001) or they express ambivalence about the policy (Inkelas, 2003).

Racial differences in attitudes toward affirmative action are the most pronounced when comparing whites and African-Americans. By and large, African-Americans tend to be much more supportive of affirmative action than Whites. Kinder and Sanders (1990) found that affirmative action in employment was strongly favored by 64% of African-American respondents compared with only 6% of White respondents. In addition, White males tend to be the least supportive of the policy (Niemann & Dovidio, 1998). This appears to be the case for both global attitudes toward affirmative action and attitudes toward specific types of affirmative action policies, including equal opportunity, preferential treatment and quotas (Sigelman & Welch, 1991).

Differences between African-Americans and Whites in terms of attitudes toward affirmative action have also been observed in college samples. Kravitz and Platania (1993) found that African-American students had more positive attitudes toward affirmative action than White students. Differences were also found between the two groups in terms of evaluations of specific structural components of potential affirmative action policies. For example, African-Americans were more supportive of policies

consisting of recruitment, training, weighting of demographic status, and quotas. Moreover, African-Americans also exhibited greater endorsement of implementing affirmative action to redress past discrimination.

Several studies have tested this relationship in more realistic situations with similar findings. These studies examined managers' reactions to various types of affirmative action policies. Overall, endorsement of preferential treatment based on race in hiring and promotion decisions tends to be significantly higher among African-Americans than among Whites. While Konrad and Linnehan (1995) found no difference between African-American and White managers' evaluations of an affirmative action policy containing race-neutral procedures significant differences were observed between the two groups when evaluating a policy containing race-conscious procedures. Specifically, the African-American managers responded much more favorably to the policy which weighted demographic characteristics.

Similarly, Bell and colleagues (1996) found that attitudes toward affirmative action were most positive among African-Americans, but this effect was mediated by respondents' beliefs about affirmative action. Thus, the more negative reactions exhibited by Whites are likely due to them having more extreme beliefs regarding the specific components of the policy. Based on the samples used and the type of policies examined, these findings have real-world implications for the implementation of affirmative action in organizations. Since the policy may not receive complete support from the decision makers within the organization, it may be implemented less effectively.

The current study examines attitudes toward affirmative action in an educational setting involving college admissions. Past research suggests that racial differences may be exaggerated with respect to attitudes toward affirmative action in such admissions decisions (Schuman et al., 1997). A survey conducted by Kinder and Sanders (1990) found that while almost two-thirds of African-Americans strongly support the implementation of affirmative action to increase access to higher education for racial minorities less than 10% of whites share this view. It seems reasonable that African-Americans would be more supportive of affirmative action since they are likely to benefit from the policy, and they generally rate the policy as more fair than whites. However, there is evidence that the gap between African-Americans and whites in terms of support for affirmative action is widening (Kinder & Sanders, 1996).

In sum, the research reviewed suggests that the gender, ethnicity and race of the respondent are often significant influences on attitudes toward affirmative action policies. If one focuses only on demographics and not on the underlying variables that may be driving resistance to affirmative action, it does not allow us to understand opposition to the policy. From a methodological standpoint, it is important to ensure that these characteristics are measured and their impact on fairness perceptions evaluated. From a theoretical standpoint, it is important to examine whether these differences may be explained by differing underlying attitudes toward the policies. In the current study, demographic data will be gathered and the impact of these factors on the dependent variables will be assessed.

A second factor that predicts reactions to affirmative action involves characteristics of the beneficiary. As one would expect based on the discussion of evaluator characteristics, factors such as the race and gender of the beneficiary have a significant influence on evaluations, and may interact with evaluator characteristics in some instances to predict reactions to the policies. The next segment contains a discussion of these variables.

Demographic characteristics of the beneficiary

Another factor that influences reactions to affirmative action is the identity of the protected group targeted by the policy. Past research indicates that affirmative action is often perceived as more acceptable for some protected groups than for others. For example, affirmative action programs intended to benefit the disabled are viewed more favorably than those that benefit either women or African-Americans (Kravitz & Platania, 1993; Murrell, Dietz-Uhler, Dovidio, Gaertner & Drout, 1994).

While affirmative action for women may be viewed less positively than affirmative action for the disabled, policies that target women garner more support than those that target African-Americans (Sniderman & Piazza, 1993). This appears to be the case for many segments of the population. Both liberals and conservatives displayed higher levels of support for affirmative action when women, rather than African-Americans, were targeted by the policy (Sniderman, Piazza, Tetlock & Kendrick, 1991). Similar results were observed among both educated and uneducated Whites, as well. However, for those with at least some college education, government intervention

received greater support for women than for African-Americans only among conservatives.

Similarly, Clayton (1992) found that, when told two fictitious companies were attempting to recruit more employees overall, respondents reacted most positively to the targeted recruiting of women and most negatively to targeted recruiting of African-Americans. This finding is particularly interesting given that respondents were told the companies were composed of 40% women and 25% African-Americans, respectively. These results are not surprising since, in general, Whites tend to react most negatively to affirmative action policies that specifically target African-Americans (Bobo & Kluegel, 1993). However, ratings for affirmative action targeting African-Americans indicated that female respondents were more comfortable with minorities than male respondents. Therefore, Clayton's (1992) findings also demonstrate that rater characteristics often interact with beneficiary characteristics to influence attitudes toward affirmative action. These findings are particularly relevant since the present study examines reactions to a race based affirmative action policy that targets African-Americans. It is important to note that our results may or may not generalize to reactions to other racial groups, or to reactions to gender-based affirmative action.

Early theory: Self-interest and racism as attitudinal predictors

While policy characteristics and demographic factors are empirically related to reactions to affirmative action, studying these variables does not allow us to understand the underlying dynamics of support for the policies. In order to grasp the psychological

basis of reactions to affirmative action, researchers have turned to social-psychological perspectives.

One social-psychological perspective attempts to explain attitudes toward affirmative action in terms of judgments of deservingness. The extent to which an individual makes a judgment of deservingness for a particular group is influenced by the characteristics of both the evaluator and the target (Crosby et al., 1996). Judgments of deservingness for various groups may also be, at least partly, determined by self-interest since interactions often emerge as a function of the “fit” between evaluator characteristics and the characteristics of the intended beneficiary. Research in this area has examined the influence of self-interest in a number of ways. Economic self-interest is typically defined in terms of competition between groups for jobs, promotions, and other scarce economic resources (Kluegel & Smith, 1983). It seems reasonable that members of groups that do not benefit from affirmative action would not judge protected-group members as deserving of special help since it would potentially put them at a disadvantage when competing for these resources. As a result, opposition to the policy should be greater among members of non-protected groups.

A number of studies have provided support for this assumption. For example, a 1978 national survey of Whites found a significant relationship between attitudes toward affirmative action and self-interest. Significant correlations between attitudes toward affirmative action and self-interest were also obtained in a sample of 450 employees in a large Canadian firm (Tougas & Beaton, 1993). Moreover, attitudes toward affirmative action were also related to self-interest in a sample of Hispanic undergraduates (Kravitz

& Meyer, 1995). Finally, Kluegel and Smith (1983) found that economic self-interest was significantly related to attitudes toward programs that involved withholding a specified number of positions for African-Americans in colleges and in business. Altogether, these findings suggest that competition for economic resources may influence judgments of deservingness for various groups and, by extension, attitudes toward affirmative action policies.

A related construct extends the view of self-interest. Collective self-interest includes the anticipated effects on one's demographic group (Tougas, Beaton & Veilleux, 1991). It seems reasonable that the effects on one's own group would be taken into consideration when evaluating affirmative action since the policy is designed to redress discrimination based on group membership. While many factors may impact support or opposition to affirmative action, one variable that may impact support of policies is collective self-interest. Members of different demographic groups may be expected to support policies that will be advantageous to them and oppose policies that will be disadvantageous to them (Paterson, 1997). Tougas and colleagues (1995) reported findings consistent with this statement. Among several samples of male students and male employees, attitudes toward affirmative action in general and strong affirmative action policies targeting women were related to individuals' beliefs regarding the effect of the policies on one's social group.

An alternative explanation for the varying judgments of deservingness made for different groups, which results in opposition to affirmative action, is racism. Fernandez (1981) defined anti-Black racism as a basic belief system in which Whites are inherently

superior to African-Americans, solely on the basis of race. In addition, this belief system is hypothesized to be very pervasive because “Whites have the power over social institutions to develop, evolve, nurture, spread, impose, and enforce the very myths and stereotypes that are basic to the foundation of racism” (p. 303). This classical form of racism typically results in overtly discriminatory behaviors directed toward African-Americans that may even be displayed by well-intentioned Whites (Frazer & Wiersma, 2001; Jacobsen, 1985). This implies that direct measures of racism and opposition to affirmative action should be highly correlated with one another (Federico & Sidanius, 2002; Sidanius, Pratto & Bobo, 1996). In addition, contrary to previous assertions, there is growing evidence that this relationship may be stronger for more educated Whites since they are better able to link racial attitudes with abstract political ideologies (Federico & Sidanius, 2002a; 2002b; Sidanius et al., 1996).

Despite evidence demonstrating that direct measures of racism predict opposition to affirmative action, many argue that as political correctness becomes more important in American society many individuals are motivated to suppress overt expressions of racism (Maddux, Barden, Brewer & Petty, 2005). As a result, old-fashioned forms of racism have been replaced by more modern forms of racism. One type of modern racism, symbolic racism, is characterized by racial prejudice and a politically conservative ideology (McConahay, Hardee & Batts, 1981; Kinder & Sears, 1981). In other words, symbolic racism combines anti-Black affect with a belief in traditional American values. This belief system allows Whites to maintain racial exclusion while applying standards equally to Whites and African-Americans. Therefore, while old-fashioned racists may

openly commit discriminatory acts against Blacks or other minorities, contemporary racists privately hold prejudiced attitudes but avoid overt expressions of prejudice. Rather, modern racist beliefs manifest themselves in abstract values and principles (Kinder & Sears, 1981). Because of this, prejudiced and discriminatory acts committed by contemporary racists are likely to be attributed to African-Americans' violation of traditional American values.

Similar to measures of old-fashioned racism, self-report measures of modern forms of racism have also been found to predict opposition to affirmative action policies targeting racial minorities. For example, in a 1978 national opinion survey, symbolic racism predicted opposition to affirmative action policies such that individuals scoring higher on the measure of racism exhibited higher levels of opposition to the policy (Jacobsen, 1985). Kluegel and Smith (1983) obtained similar results for a two-item measure of symbolic racism in both educational and business settings. However, there is growing evidence suggesting that modern forms of racism have a stronger relationship with attitudes toward affirmative action (Sears, Van Laar, Carrillo & Kosterman, 1997; Williams et al., 1999). A recent meta-analysis of affirmative action research provided additional support for this assertion by demonstrating that contemporary forms of racism are better predictors of opposition to all forms of affirmative action across educational and employment settings (Harrison, Kravitz, Mayer, Leslie & Lev-Arey, 2006). Overall, studies examining old-fashioned and modern forms of racism suggest that, despite recent advancements in American society, attitudes toward affirmative action continue to be influenced by affective reactions to African-Americans (Ariola & Cole, 2001; Bobo,

1998; Bobo & Kluegel, 1993; Bobcel et al., 1998; Sidanius et al., 1996; Sniderman & Piazza, 1993).

Summary of reactions to policies

The research reviewed indicates that several types of variables are associated with negative attitudes toward affirmative action. Structural characteristics of the policy influence reactions such that, all else being equal, stronger forms of affirmative action are evaluated more negatively than softer forms of the policy. However, demographic characteristics of both the attitude-holder and the target group often have stronger effects on attitudes toward affirmative action than the structural characteristics of the policy. For example, White males tend to display higher levels of opposition to affirmative action than African-Americans, Latinos, or women. In addition, resistance to the affirmative action is greatest when the policy targets African-Americans.

Several explanations have been proposed to account for these effects. Kluegel and Smith (1983) suggest that opposition to affirmative action is based on self-interest, or the anticipated consequences of the policy for one's self and members of one's social group. Another explanation is that reactions to the policy are largely based on anti-Black affect. It is important to identify the underlying causes for negative reactions to the policy since these reactions may often have unintended and severe consequences for beneficiaries of the policy.

Attitudes toward affirmative action are typically measured in terms of evaluative reactions, such as approval or support for the policy. However, it is also important to understand the implications of these evaluative reactions for beneficiaries of the policy.

Research suggests that a consequence of negative attitudes toward affirmative action is that these attitudes may “spill-over” onto beneficiaries (Barnes-Nacoste, 1992).

Therefore, it appears that negative evaluations of the policy may lead to negative evaluations, of and emotional reactions to beneficiaries of the policy.

Spillover Effects: Attitudes Toward Beneficiaries

An interesting issue in affirmative action concerns the relationship between evaluations of the policy and affective reactions to beneficiaries of the policy. Since redistributive policies, like affirmative action, concern the allocation of economic and material resources, it seems reasonable that such policies would receive little support from those who do not benefit from them. In addition, it may be the case that competition over these resources may result in hostility and negative attitudes towards those who do benefit from the policies. Indeed, research suggests that perceptions of affirmative action influence reactions to beneficiaries of the policy (Barnes-Nacoste, 1992).

Breckler’s (1984) research on attitudes suggests that they consist of three distinct components, including affect, behaviors or behavioral intentions and cognitions. Based on this, in the present study three separate aspects of attitudes toward affirmative action beneficiaries that correspond with Breckler’s attitudinal components will be investigated. First, affective or emotional reactions to African-American beneficiaries will be assessed. In order to tap the behavioral component of attitudes, willingness to work and socialize with beneficiaries will also be examined. Finally, the cognitive element of attitudes will be assessed in terms of perceptions of beneficiaries’ abilities.

Evaluations of beneficiary qualifications

One way that negative attitudes toward affirmative action influence reactions to beneficiaries is in the devaluing of their qualifications. In an effort to expand recruiting efforts, many organizations may publicize their affirmative action policies. Yet, research indicates that when an organization is known to have an affirmative action policy individuals tend to assume that beneficiaries are less qualified (Heilman, Block & Lucas, 1992). For instance, Northcraft and Martin (1982) found that when respondents were informed that a company needed to hire an African-American to satisfy its affirmative action obligations, they were more likely to match the Black employee with the weakest resume. However, this was not the case when the company's affirmative action obligations were not mentioned.

A common criticism of this line of research is that attitudes have changed since the 1990's and it is, therefore, no longer as relevant. However, several recent studies demonstrate that beneficiaries' qualifications may be discounted when demographic characteristics are considered in selection decisions. For example, Heilman and Welle's (2006) results indicate that a stigma continues to exist for African-Americans when race is taken into account in employment decisions. Specifically, African-American employees were perceived as being less competent and influential than their White male counterparts when a diversity, rather than a merit, rationale was given as the basis for selection of individuals in a work group.

Similarly, Elkins and colleagues (2003) found that when competence was not explicitly stated as the basis for the promotion of a female employee, individuals

attributed the employment decision to the organizations' affirmative action program. While this study defined beneficiaries in terms of gender rather than race, the findings are informative. Since reactions to affirmative action tend to be most extreme for policies that target African-Americans it is reasonable to assume that the "spillover" effects associated with the policy would be more extreme for African-Americans, as well. Therefore, these studies illustrate that, despite recent advancements in intergroup relations, African-Americans continue to be perceived as incompetent when race provides a plausible explanation for employment decisions.

Negative evaluations of beneficiaries' qualifications may be even more pronounced when affirmative action is perceived to be an important factor in selection. Among a sample of white males and female undergraduates, a minority applicant was evaluated less favorably when commitment to affirmative action was emphasized than when it was not (Garcia, Erskine, Hawn & Casmay, 1981). However, these findings may be due to a lack of information being provided about the affirmative action policies. In the absence of an explicit definition of the affirmative action policy, individuals tend to assume that stronger forms are used (Heilman & Blader, 2001; Kravitz et al., 1997). Therefore, respondents may have believed that group membership was more heavily weighted than qualifications.

When demographic characteristics are heavily weighted in the selection process African-Americans are expected to be stigmatized to a greater extent. A recent study by Evans (2003) clearly illustrates this point. African-Americans' achievement-related traits were discounted only when selected under illegal hiring practices containing strong racial

preferences. When the hiring procedures involved a legal form of affirmative action which takes race into account only to select between two comparable applicants the qualifications of African-Americans were not rated lower than those of Whites.

Therefore, it may be the case that when more moderate forms of affirmative action are implemented, little or no stigmatization of African-Americans results.

In addition to the devaluing of beneficiaries' qualifications, the advertisement of an organizations' affirmative action policy can have other stigmatization effects, as well. For example, negative attitudes typically directed toward individual beneficiaries may generalize to the target group as a whole. Maio and Esses (1998) found that ratings of an immigrant group were less positive when it was stated that they would benefit from affirmative action. Similarly, individuals may assume that members of a particular group benefit from affirmative action when an organization is known to have an affirmative action policy. Therefore, even when African-Americans are not explicitly stated to be beneficiaries of affirmative action, their qualifications may be discounted if the organization has a publicized affirmative action program (Garcia et al., 1981). This may be especially likely when there are small numbers of African-Americans present in the organization (Heilman & Blader, 2001).

Emotional reactions to beneficiaries

Based on the preceding research, it is clear that negative attitudes toward affirmative action may lead to negative evaluations of beneficiaries' qualifications. Research in social psychology is very helpful in understanding why negative reactions to beneficiaries may follow the implementation of affirmative action. Levine and Campbell

(1972) suggest that when an out-group is perceived to threaten the economic power of an in-group, attitudes toward the out-group will be more negative. Since affirmative action often involves the allocation of jobs and, therefore, wealth, the policy may be viewed as a threat to the economic power of whites. In addition, beneficiaries of the policy would likely be viewed as members of an out-group since they are typically members of groups that are underrepresented within an organization. As such, affective reactions to beneficiaries of affirmative action are expected to be negative.

Similar to the research reviewed earlier regarding reactions to affirmative action policies, several studies provide evidence that attitudes toward beneficiaries may be influenced by the anticipated economic consequences of the policy. For example, perceived threats to the economic power of whites have been found to be highly correlated with ratings of African-Americans (Ashmore & Del Boca, 1975). The more African-Americans were thought to endanger the economic power of whites, the more negative whites' attitudes toward African-Americans became. Applied to affirmative action, since the policy may involve some form of preferential treatment, beneficiaries may be perceived as threatening the economic power of the dominant group by competing with them for jobs, promotions, or admission into colleges and universities. When this is the case the interpersonal relationships between beneficiaries and non-beneficiaries may suffer.

Research on labeling effects suggests that the negative interpersonal reactions experienced by beneficiaries of affirmative action are not solely based on non-beneficiaries' beliefs regarding the economic consequences associated with the policy.

Labeling effects are a phenomena whereby the social group to which an individual belongs, or appears to belong, influences perceivers' judgments and evaluations of that individual (Jussim, Nelson, Manis & Soffin, 1995). Applying a social label to a target may often be related to subsequent bias. This bias prompts perceivers to interpret ambiguous target behavior in ways that are consistent with their beliefs about the target group (Jussim et al., 1995). This is particularly troublesome for beneficiaries of affirmative action since the increased salience of social categories produced by the policy are likely to result in stereotypical thinking and prejudiced attitudes (Heilman, 1996). A study consistent with this view found that non-beneficiaries described African-Americans labeled as affirmative action hires less favorably as colleagues than individuals who were not hired under affirmative action (Heilman et al., 1992).

There is relatively little empirical research linking attitudes toward affirmative action with emotional reactions to beneficiaries. Of the research that is available, most examines willingness on the part of non-beneficiaries to interact with beneficiaries. Nacoste (1994) asserts that non-beneficiaries bring their beliefs regarding affirmative action into their interactions with non-beneficiaries. Therefore, when their beliefs regarding affirmative action are associated with negative evaluations of the policy non-beneficiaries are more likely to display behaviors consistent with a desire for social distance from members of the target group. Past research suggests that this may be especially true for informal social interactions between beneficiaries and non-beneficiaries (Nacoste, Holt, Fender & Lennon, 1992; Edwards, Taylor, Switzer & Britt, 2004).

Nacoste further speculates that beliefs regarding beneficiaries' qualifications, which stem from beliefs about the policy, may also influence interactions between non-beneficiaries and beneficiaries. Based on these beliefs, non-beneficiaries may exhibit behaviors like social neutrality, low-level hostility, or condescension when interacting with beneficiaries. Results from a study conducted by Heilman and colleagues (1996) support this assertion. Non-beneficiaries exposed to beneficiaries of preferential treatment exhibited greater reluctance to engage in organizational citizenship behaviors. In addition, non-beneficiaries' perceptions that they were as or more deserving than the preferentially selected beneficiary were associated with negative affect directed toward target group members. Similar to beliefs regarding affirmative action, beliefs regarding beneficiaries' qualifications may also result in social isolation on the part of beneficiaries since negative affect has been found to be related with an unwillingness to engage in intergroup contact (Esses & Dovidio, 2002).

The research reviewed suggests that the stigma associated with being selected under preferential treatment may have severe social consequences for beneficiaries. Attitudes toward beneficiaries may be negative as a result of the economic costs of the policy, in terms of jobs, promotions, and university admission, for non-beneficiaries. Moreover, simply labeling African-Americans as affirmative action beneficiaries may subject them to prejudice and negative stereotypes.

African-Americans may also experience social isolation when non-beneficiaries' evaluate the policy negatively. The stigma associated with non-beneficiaries' negative beliefs regarding beneficiaries' qualifications have been linked with greater disliking

(Crocker, Major & Steele, 1998), reluctance to engage in helping behaviors, and social isolation.

The previous review demonstrates that while most Americans endorse principles like equality of opportunity and non-discrimination, redistributive policies like affirmative action are often met with great opposition (Kinder & Sanders, 1996). Several states, including California and Florida, have passed initiatives to end affirmative action in all state-funded operations. In addition, the national debate over the need for, and fairness of the policy, as well as the quality of its beneficiaries has had balkanizing effects on society. The research reviewed thus far suggests that demographic characteristics of the evaluator and attitudinal factors such as self-interest and perceived threat from the policies are a significant influence on reactions to affirmative action policies and beneficiaries. While this early theoretical work is helpful in understanding the attitudinal predictors of reactions to both policies and beneficiaries, a more integrative approach is needed. Social dominance theory provides a solid theoretical foundation for understanding how the belief systems of the evaluator may lead to more positive or negative reactions to the policy and beneficiaries.

Social Dominance Theory

Social dominance theory (SDT) provides a valuable framework for understanding the dissimilarity between racial groups in terms of attitudes toward affirmative action. This theory is particularly relevant to race-based affirmative action since it allows one to make predictions regarding support or opposition to policies that benefit groups other than one's own. While SDT integrates a number of components of both classical and

contemporary theories of social attitudes and intergroup relations it overcomes the limitations of previous theories by recognizing the existence of social inequality as a key contributor to social attitudes and relationships between social groups.

Social dominance theory suggests that whites' opposition to affirmative action stems from a desire to maintain their dominant status which results in competition between blacks and whites for material and symbolic resources (Sidanius & Pratto, 1999). Since educational achievement tends to result in greater access to these resources (i.e., wealth), the findings that opposition to the policy is greatest when applied in educational settings (Schuman et al., 1997) and when it targets African-Americans (Kravitz & Platania, 1993) appear to be consistent with the theory.

Therefore, SDT is particularly useful in understanding how individuals decide whether policies intended to restore equality to groups other than one's own are justifiable or desirable. In addition, SDT extends these previous models by accounting not only for individual-level motivations, but also the structural and institutional dynamics that influence social policy attitudes and intergroup relations (Pratto, Sidanius, Stallworth & Malle, 1994). Thus, SDT provides a comprehensive framework in which to view attitudes toward affirmative action and reactions to beneficiaries of the policies as a function of relationships between beneficiaries and non-beneficiaries.

Social dominance theory is based on three major premises, and several predictions can be drawn from social dominance theory with regard to affirmative action. The first premise of the theory suggests that attitudes toward the policy are influenced by the relative position of one's social group in the social hierarchy. As such, members of

subordinate groups are expected to be more supportive of the policy while dominant group members are expected to express greater opposition to the policy. Based on reviews of statistics regarding socioeconomic indicators, access to education and health care, occupational status, and many others it is clear that in American society and, particularly in most educational settings, the majority group and the most powerful group is White males. Thus, meeting the conditions of the first premise requires a review of the relative status of African-Americans.

The second premise of the theory emphasizes competition for resources among dominant and subordinate groups. Dominant group members' opposition to affirmative action results from competition with subordinate groups over material resources. In this case, whites' resistance to the policy may be based on a desire to maintain the current social asymmetry. The theory also suggests that one may find substantial differences among majority group members' attitudes toward the policy as a function of the individual difference variable, social dominance orientation. This orientation represents the extent to which dominant group members are motivated to maintain social inequality and, consequently, their position of status and power.

The final premise of SDT is that socially acceptable legitimizing myths are used to justify policy positions that serve to maintain the status quo, or the superiority of one group over another. This premise would suggest that beliefs about the need for affirmative action policies and dispositional characteristics of dominant group members should influence resistance to the policy. In the present research, a variable related with beliefs about the need for affirmative action, perceptions of race-based inequities, are

examined with regard to attitudes toward a soft form of preferential treatment. The effect of the individual difference variable, openness to diversity, on attitudes toward beneficiaries of affirmative action will also be explored.

Premise One: Social Position of African-Americans and Whites

The research reviewed in this segment is important in meeting the first premise of SDT; that African Americans are often a less dominant and powerful group in society. While demographic predictors will not be a major focus of the current study, use of SDT requires the researcher to establish that the group under investigation is indeed disadvantaged. This segment is intended to provide support for the idea that African Americans are in a less powerful and high status position than Caucasians.

Again, the first premise suggests that human societies tend to be organized as systems of group-based social hierarchies. Group-based social hierarchies are social systems in which the social power, prestige, and privilege that individuals enjoy are obtained by virtue of their membership in a particular social group (Sidanius & Pratto, 1999). In contrast, individual-based social hierarchies are those in which individuals who enjoy great power, prestige, or wealth do so by virtue of their own highly-valued individual characteristics. Examples of such characteristics include high intelligence, leadership ability or athletic achievement. However, due to the complex nature of human social systems, individual- and group-based social hierarchies are not completely independent of one another. Therefore, access to the means of individual achievement, such as education, is often determined by membership in ascribed social groups.

Hierarchical social structures are made up of one or a small number of dominant groups at the top and one or a number of subordinate groups at the bottom. Due to predominant influence of the dominant group over subordinate groups, the dominant group is typically distinguished by its possession of a disproportionately large share of positive social value. Sidanius and Pratto (1999) define positive social value as “all those material and symbolic things for which people strive.” Examples of positive social value include high social status, power, political authority, and wealth. In contrast, subordinate groups possess a disproportionately large share of negative social value. As a result, they are characterized by a lack of wealth and power, high risk and low-status occupations, and low social status. It is this unequal distribution of social value to various groups within the social hierarchy that often directly produces group-based inequality.

In the United States the most salient social groups with the greatest power differential are based on race. Historically, whites have been the dominant group in America with all other groups being measured in terms of their standards and values (Wilson & Martin, 1982). African-Americans, on the other hand, have typically been a subordinate group occupying the lowest position on the social status continuum. Research indicates that there is a high level of agreement across ethnic groups on the relative social status of whites and blacks in America (Sidanius & Pratto, 1999). Thus, blacks as well as whites acknowledge a status differential between groups.

In addition to having relatively low social status, African-Americans also possess a disproportionately large share of many other indicators of negative social value. One indicator of negative social value is group overrepresentation in low-status occupations.

While African-Americans are employed at only 40% the rate of Whites in managerial, professional, and sales occupations they are employed at almost twice the rate of whites in private household, service and laborer occupations (Bigler, Averhart & Liben, 2003).

Social groups possessing a large share of negative social value are also characterized by lack of wealth. A recent report based on Census data indicates that there continues to be a considerable disparity between African-Americans and whites in terms of wealth (Muhammad, Davis, Liu & Leondar-Wright, 2004). For example, in 2001, African-Americans earned only \$0.57 for every \$1.00 of income earned by Whites. In addition, based on current income levels the average African-American college graduate will earn \$500,000 less in their lifetime than the average white college graduate. Finally, in 2001 the average net worth for black families was \$19,000 compared with \$121,000 for white families. These striking disparities along with African-Americans' relatively low social status reveal that blacks remain disadvantaged and, according to SDT's characterization, a subordinate group.

While the first premise provides the foundation for understanding potential differences as a function of demographic factors, the purpose of the present study is to develop predictors of resistance to affirmative action policies and beneficiaries based on the remaining two premises. Thus, these premises will be explored in more detail.

Premise Two: Dominant Groups and Competition for Resources

The second premise of SDT suggests that politics is based on competition between social groups over scarce material and symbolic resources, such as wealth and high social status, and core values and belief systems (Sidanius & Pratto, 1999). Based

on this premise, individuals who desire inequitable relationships between different social groups should attempt to use politics as a tool to gain or maintain a dominant position over others. As a result, group-based dominance motives should be reflected in attitudes toward various social policies.

Of particular interest are redistributive policies which involve the allocation of resources. While individuals vary in terms of the extent to which they desire hegemonic relationships between groups, overall, members of dominant groups are expected to possess higher levels of group-based dominance motives. This seems reasonable since, as members of the dominant group, maintaining the status quo yields favorable results. Therefore, as a general rule, members of dominant groups should be less supportive of social policies intended to redress group-based inequality. This is not meant to imply that substantial variability in levels of support for social policies does not exist among dominant group members, but that, overall, one could expect that dominant groups would be less supportive of such policies than subordinate groups.

Applied to the policy of affirmative action, SDT predicts that whites would be less supportive of the policy than African-Americans. Indeed, past research has consistently provided support for this prediction. Affirmative action policies of all types receive less support from Whites than African-Americans (Bobo & Smith, 1994; Kinder & Sanders, 1990; Kravitz & Platania, 1993; Sigelman & Welch, 1991). According to SDT, this is likely due to the policy being a means for encouraging upward mobility and, thus, social equality for African-Americans. In addition, numerous findings that among whites, attitudes toward affirmative action are most negative when the policy targets

African-Americans appear to underscore this point (Clayton, 1992; Kravitz & Platania, 1993; Murrell et al., 1994; Sniderman et al., 1991). Viewed within a SDT framework, whites' opposition to race-based affirmative action appears to reflect, at least in part, a desire to maintain their dominant social status.

The social dominance model also has implications for dominant group members' attitudes toward beneficiaries of affirmative action. Research indicates that negative attitudes toward affirmative action often "spill-over" onto beneficiaries of the policy (Nacoste, 1992). Therefore, affirmative action beneficiaries are often perceived by non-beneficiaries as less qualified and depicted less favorably as coworkers (Garcia et al., 1981; Heilman et al., 1992). However, there is very little information available on the forces driving these spill-over effects. Social dominance theory suggests that negative attitudes directed toward beneficiaries of affirmative action may result from dominant group members' perceptions that these individuals pose a threat to the current social hierarchy. Since whites are predicted to exhibit a greater preference for hierarchical social relationships and, therefore, more negative attitudes toward policies that promote social equality it seems logical that whites' attitudes toward those who benefit from these policies would be negative as well.

Again, this does not suggest that all dominant group members are unable to empathize with members of subordinate groups or to adopt a more egalitarian perspective when evaluating affirmative action. In fact, individuals within the dominant group are expected to vary in the extent to which they prefer hierarchical relationships between their particular social group and minority groups. Social dominance orientation (SDO) as

an individual difference variable allows one to more fully understand variability in attitudes toward social policies that exists among dominant group members. Given this, social dominance orientation may be a valuable predictor in understanding reaction to affirmative action policies and beneficiaries, and will be explored in more detail.

Social dominance orientation

Social dominance orientation is an individual difference variable reflecting a generalized tendency to desire the predominance of one social group over another (Pratto et al., 1994). Depending upon the particular society, these social groups may be defined in a number of ways including race, ethnicity, gender, religion, sexual orientation, or class. Regardless of how the social groups are constructed, individuals exhibiting lower levels of social dominance orientation are expected to be more supportive of social policies that promote social equality while those with high levels of social dominance orientation are expected to be more supportive of policies that maximize the power differential between groups. This is particularly true when policies target those social groups that are the most prominent and that characterize the most severe power disparity in the society at a given time (Sidanius & Pratto, 1999). Thus, social dominance orientation functions as the means by which group-based hierarchies reproduce and reinforce themselves.

Social dominance theorists posit that one of the primary ways individuals acquire various levels of social dominance orientation is through socialization experiences. In general, members of dominant social groups are typically treated better than members of subordinate groups. As a result, these individuals tend to be more comfortable with

social inequality. In addition, social value is allocated in ways that benefit individuals in dominant groups thereby creating the impression that these groups are better than others. This, in effect, legitimizes inequality in many dominants' minds. Therefore, members of dominant groups are expected to adopt higher levels of social dominance orientation than members of subordinate groups. Consistent findings that men and Whites tend to be higher in social dominance orientation than women and African-Americans, respectively, are consistent with this statement (Sidanius & Pratto, 1999; Sidanius, Pratto & Mitchell, 1994; Whitley, 1999).

Recent measures of social dominance orientation adopt a multidimensional conceptualization which consists of two related factors: opposition to equality and support for group-based dominance (Jost & Thompson, 2000). Again, the perspective of SDT is that one would expect to find group level differences in support of affirmative action since subordinate groups are expected to be more supportive than dominant groups, as demonstrated in the research reviewed earlier. However, it is also the case that one can find substantial within group variability as a function of social dominance orientation.

Perhaps the most important consequence of social dominance orientation is its influence on attitudes toward various social policies that influence intergroup relations. Pratto and colleagues (1994) found social dominance orientation to be associated with opposition to several policies intended to attenuate social inequality. For example, individuals exhibiting high levels of social dominance orientation had less positive attitudes toward various policies involving universal healthcare, low income housing, and

employment as indicated by correlations ranging from $-.29$ to $-.70$ across six samples. Similarly, correlations between $-.39$ and $-.72$ across seven samples demonstrate that those scoring high on a measure of social dominance orientation were less likely to endorse statements promoting the equal distribution of wealth between the rich and the poor. Negative relationships between social dominance orientation and support for policies promoting women's rights were also obtained across six samples. These findings suggest that the higher an individual's social dominance orientation, the more likely that individual is to oppose policies designed to benefit members of disadvantaged groups. Since whites are presumed to define their group's social position relative to the position of the subordinate group (Bobo, 2000), it is expected that those who perceive gains made by African-Americans as undermining their economic opportunities would be significantly more opposed to government interventions designed to help African-Americans.

Social dominance orientation has also been found to influence attitudes toward affirmative action. Higher levels of social dominance orientation tend to be associated with more negative attitudes toward affirmative action policies involving racial quotas, higher education, and explicit government intervention (Pratto et al., 1994). Since an important aspect of social dominance orientation is general opposition to equality it seems reasonable that those high in social dominance orientation would most oppose social policies which favor low-status groups and, effectively, attenuate social inequality. Jost and Thompson's (2000) finding that opposition to equality is associated with resistance to affirmative action lends support to this assertion. It is important to note that

a preference for social inequality is based on a desire to maintain one's dominant position in the social hierarchy. Given that the social dominance of one group over another results from disproportionate allocation of positive social value within the social hierarchy opposition to affirmative action should also be associated with perceived threats to the dominant group's material and symbolic resources. In support of this claim, there is evidence that individuals who perceive affirmative action as threatening to the in-group's economic and political power or their beliefs and values were most likely to oppose the policy (Renfro et al., 2006).

Social dominance orientation should also be associated with an individual's attitudes toward various social groups. Individuals who are high in social dominance orientation are expected to prefer members of high-status groups and discriminate against members of stigmatized out-groups. These effects may be exacerbated when out-group members are perceived to threaten the economic welfare or political power of the in-group (Stephan & Stephan, 2000). Since affirmative action policies are often viewed as a form of reverse discrimination, it is reasonable to assume that many also perceive the policy as threatening majority group members' capacity to obtain jobs, promotions, and access to higher education (Renfro et al., 2006). Therefore, those who perceive that their economic power and, consequently, their dominant social position are threatened by the policy may hold negative attitudes toward the beneficiaries of the policy.

Premise Three: Legitimizing Myths

The third premise of SDT suggests that group-based social inequality is sustained by legitimizing myths. Sidanius and Pratto (1999) define legitimizing myths as

ideological instruments, including attitudes, values, beliefs, and stereotypes that provide moral or intellectual justification for the social practices that distribute social value within the social system. These instruments are used to convince both dominants and subordinates of the fairness of hierarchically organized social relations. Moreover, they provide rationales for differences between groups with regard to value and deservingness. As a result, legitimizing myths can function to either increase, maintain, or decrease the level of social inequality that exists between social groups. As such, these ideologies mediate the relationship between social dominance orientation and the relevant practices and policies that distribute social value within the hierarchy.

Given this premise, SDT suggests that legitimizing myths serve as a means by which dominance motives help influence attitudes toward affirmative action. In the present study, we examine the possibility that belief systems regarding the existence of race-based inequities and the value of diversity mediate the effects of social dominance orientation. Specifically, when these belief systems involve denying the existence of racial inequities or the value of diversity, attitudes toward the policy and beneficiaries are anticipated to be more negative (Stephan, Renfro, Esses, Stephan & Martin, 2005).

Those ideologies that justify and support hierarchical social structures and, thereby, social inequality are referred to as hierarchy-enhancing legitimizing myths. Hierarchy-enhancing ideologies serve to reinforce and exacerbate group-based differences. Individuals who endorse this type of ideology tend to support hierarchical social relationships. For example, many of the views that constitute political conservatism are hierarchy-enhancing ideologies that reinforce social inequality through

the belief that each individual has earned and, therefore, deserves the position along the social status continuum that they occupy.

A hierarchy-enhancing legitimizing myth often used to justify opposition to affirmative action is the belief that group-based discrimination is no longer prevalent and, therefore, equal opportunity exists (Edwards, Taylor, Switzer & Britt, 2004). This type of ideology is problematic for two reasons. First, the belief that equal opportunity exists for everyone minimizes the many long-standing group-based disparities that continue to exist. In addition, acceptance of this ideology ignores the source of the disparities between social groups, effectively making them impossible to rectify. Endorsement of this myth is likely to be more prevalent among Whites since, as members of the dominant social group, they are unlikely to have experienced discrimination. Moreover, despite the various laws and statutes that have sought to integrate society, most Whites still have relatively little contact with African-Americans (Smith et al., 1997). Therefore, they would also be expected to have little understanding or knowledge of the discrimination committed against members of this group.

In the context of affirmative action, beliefs regarding the existing opportunity structure for African-Americans are an important legitimizing myth. If one adopts the hierarchy-attenuating belief that there are unfair discrepancies in existing opportunities for African-Americans, then policies would be justified. However, if one adopts the hierarchy-enhancing view that opportunities are equal or that any discrepancies are justifiable, then affirmative action would not be justified. Thus, SDT suggests that

beliefs regarding existing opportunity structures may be an important predictor of reactions to these policies and beneficiaries.

A second belief system that is relevant to affirmative action concerns perceived detrimental or beneficial effects of diversity. If one holds the hierarchy-attenuating belief that diversity is positive, support of affirmative action may follow. In contrast, those who believe diversity has little or no value would not be expected to support the policy. In the next segments, we explore these two factors stemming from the third premise of SDT that may predict support or opposition to affirmative action.

In summary, social dominance orientation is expected to predict reactions to affirmative action policies and beneficiaries in educational settings. However, this relationship is believed to be mediated by two legitimizing beliefs: that race-based inequities do not exist, and that diversity is not valuable in education.

Perceptions of race-based inequities: A core legitimizing belief

Affirmative action policies were initially adopted by institutions of higher education to redress many of the group-based disparities resulting from years of discrimination against African-Americans and other minorities. Despite recent Supreme Court rulings upholding some forms of affirmative action in higher education, the policy has not received widespread public support. In fact, societal reactions to the policy appear to have become more negative in recent years. This may be, at least in part, due to many non-beneficiaries' belief that affirmative action amounts to reverse discrimination. If this is the case, then it seems logical to expect that certain group-level trends in college and university enrollment rates would be evident. Mainly, these trends

should show that African-Americans have made greater gains in access to higher education than whites over the period of affirmative action. Moreover, as a result of greater gains relative to those of whites, one would also expect the disparity between the two groups to be greatly diminished.

Unfortunately, it has not been the case that the disparity between African-Americans and Whites in terms of access to higher education has diminished. To the contrary, many of the statistics used as indicators of equal access to higher education show that the disparities between the two groups have actually increased since 1974. For instance, in 2005 the National Center for Education Statistics (NCES) reported that the participation rate in 1974 for whites and African-Americans were 38% and 26%, respectively. This indicates a disparity between the two groups, in terms of participation in higher education, of 12 percentage points. The NCES defines participation rate as the proportion of 18 to 24 year olds who are enrolled in or have completed postsecondary education. While both groups experienced large gains in participation rates between 1974 and 2003, gains in participation rates for African-Americans relative to those for whites actually decreased during this time. Therefore, by 2003 whites continued to have higher participation rates in higher education than African-Americans. In addition, the increase in participation for whites outpaced that of African-Americans by 15 percentage points. Thus, the disparity between whites and African-Americans combined postsecondary enrollment and completion rates increased from 12% to 15% between 1974 and 2003.

It is important to note that the disparity between whites and African-Americans' participation rates is not based on failure to graduate from high school. The gap between the two groups was largely erased between 1970 and 2000 (Renner & Moore, 2004). In 1970, slightly over 50% of whites over the age of twenty-five had completed high school compared with about 30% of African-Americans. By 2000, 85% of whites over twenty-five and about 80% of African-Americans over twenty-five had completed high school. Therefore, it seems logical that the improvement in high school graduation rates for African-Americans should have led to relatively greater gains in college participation rates when compared with their white counterparts. However, despite the presumed advantages provided to minorities by affirmative action, African-Americans have not taken part in the huge growth in access to higher education at the same rate as whites.

The preceding statistics demonstrate that even with affirmative action in place, substantial disparities still exist between whites and African-Americans in terms of access to higher education. Despite having almost equivalent graduation rates, African-Americans' postsecondary participation rates continue to lag behind those of whites by a significant margin. This being the case, it is difficult to explain why many whites oppose affirmative action in higher education. Several studies show that affirmative action receives greater support from those who believe the policy enhances opportunities to achieve equal treatment of groups (Bobo & Kluegel, 1993; Bobo & Smith, 1994; Harrison et al., 2006; Sniderman & Carmines, 1997). Therefore, it seems reasonable that acknowledgement of the enduring disparities that exist in higher education should lead to more positive attitudes toward affirmative action.

However, simple acknowledgement of these disparities may not be enough to increase support for affirmative action. In order to influence reactions to the policy, it may be necessary for the racial differences to first be perceived as inequities. The term inequity implies that the racial differences in access to higher education are unjust or unfairly biased. Thus, perceptions of race-based inequities are likely to be influenced by the degree to which African-Americans are believed to have equal opportunity in terms of access to higher education. Although perceptions of race-based inequities have not been empirically examined, there is a substantial amount of literature linking beliefs regarding the existence of equal opportunity for African-Americans and attitudes toward affirmative action.

While studies utilizing social dominance theory are limited, research on relevant components of the theory lend support to the idea that beliefs about racial equity are critical in determining endorsement of affirmative action. Findings from numerous studies indicate that beliefs regarding the existence of equal opportunity predict these reactions. A variety of theoretical perspectives directly related these beliefs to support of the policies. For example, several researchers have analyzed perceptions of inequitable opportunities in terms of relative deprivation theory (Beaton & Deveau, 2005; Tougas & Veilleux, 1990; Veilleux & Tougas, 1989). Relative deprivation on behalf of others is a specific form of collective relative deprivation involving perceived social inequalities between one's more fortunate in-group and members of an underprivileged out-group. This form of collective relative deprivation takes into account the level of dissatisfaction generated by the discrepancy between the two groups. Overall, these studies suggest that

perceptions of inequitable opportunities with regard to a disadvantaged group, and the resulting feelings of discontent, were associated with increased endorsement of affirmative action. Thus, relative deprivation theory provides evidence suggesting that perceptions of group-based inequities should predict reactions to affirmative action.

Kluegel and Smith (1983) examined beliefs regarding equal opportunity for African-Americans in terms of stratification beliefs. Stratification beliefs are ideas about how one achieves high status. The authors speculated that beliefs that the stratification system does not provide equal opportunity for everyone would lead to endorsement of affirmative action as a way to equalize opportunities for African-Americans. Their results indicated that perceived equality of opportunity predicted attitudes toward several types of affirmative action policies. Specifically, whites who perceived that African-Americans have inequitable opportunities had more favorable attitudes toward programs intended to help African-Americans get ahead. These individuals were also more supportive of set-asides in college and university admissions to admit qualified African-Americans. These individuals also had more favorable attitudes toward set-asides in employment for qualified candidates.

Research examining another closely related belief system, belief in the existence of White privilege, may also be relevant to attitudes toward affirmative action. According to Neville, Worthington and Spanierman (2001), White privilege is a system of unearned social advantages afforded to Whites that is based primarily on race rather than merit. Findings from several studies suggest that individuals who display stronger beliefs in the existence of White privilege tend to be more supportive of affirmative action policies,

particularly those that aim to compensate African-Americans for past discrimination (Iyer, Leach & Crosby, 2003; Swim & Miller, 1999). Moreover, Powell and colleagues (2005) posit that, for Whites, acknowledgement of the illegitimate privileges they receive is often associated with negative psychological consequences, or White guilt.

Differences in levels of White guilt have been found to influence policy attitudes. For instance, in a study conducted by Bardis (1972), higher White guilt scores were associated with greater willingness to admit African-Americans to colleges. Similarly, relationships have also been found between feelings of White guilt and attitudes toward both affirmative action, in general, and compensatory affirmative action (Iyer et al., 2003; Swim & Miller, 1999). In addition, White guilt was also found to mediate the relationship between belief in the existence of White privilege and reactions to affirmative action. In other words, acknowledgement of unfair advantages afforded to Whites based solely on race is associated with greater feelings of guilt and, as a result, greater support for affirmative action policies.

Taken together, findings from studies of relative deprivation theory, white privilege and guilt, and stratification beliefs appear to have strong implications for the relationship between perceptions of race-based inequities and attitudes toward affirmative action. These findings suggest that perceptions of race-based inequities should reliably predict attitudes toward affirmative action. Specifically, those who perceive greater illegitimate inequities between African-Americans and Whites in terms of access to higher education are expected to express greater support for the policy (Klugel & Smith, 1983).

Attitudes toward diversity: A second legitimizing belief

A second factor related to the notion of legitimizing myths deals with beliefs regarding diversity. Diversity has a long-standing history as a rationale for affirmative action in higher education. The policy was initially adopted by institutions of higher education in order to increase the numbers of African-Americans and other underrepresented minorities on college and university campuses. In addition, the Supreme Court decision in the 1978 *Bakke* case established diversity as a compelling reason for affirmative action in college admissions. Moreover, the diversity argument was recently reinforced by the Supreme Court's 2003 decision in *Grutter v. Bollinger*. Thus, affirmative action continues to be a legal means to the end of achieving racial and ethnic diversity in higher education.

Much of the argument for diversity as a rationale for affirmative action is based on the premise that diversity is beneficial to the academic development of students. While the results are not unequivocal, a growing body of literature provides support for this assertion. Diversity has been found to be related to several positive outcomes like greater retention for minority students (Bowen & Bok, 1998; Chang, 1999), and enhanced complex thinking (Antonio et al., 2004), and greater growth in intellectual motivation and academic skills among majority students (Gurin, Dey, Hurtado & Gurin, 2002). Moreover, students in diverse classroom environments have also been found to display increased gains in problem-solving and group skills (Terenzini, Cabrera, Colbeck, Bjorklund & Parente, 2001). Specifically, students in ethnically diverse workgroups over an extended period of time have been found to integrate multiple perspectives (Watson,

Kumar & Michaelsen, 1993) and produce a higher quality (McLeod, Lobel & Cox, 1996) of ideas compared with students in ethnically homogeneous groups. These findings suggest that both majority and minority students reap significant benefits by matriculating at racially and ethnically diverse institutions.

Despite empirical work suggesting that diversity can be beneficial, there is evidence that increased diversity on college campuses may have detrimental effects, as well. For example, minority students often experience racially motivated harassment and hostility at much greater rates than their white peers (Ehrlich, 1992; Rankin & Reason, 2005). According to Ehrlich, such incidents may occur because white college students often view classmates from different backgrounds as competitors rather than partners (Levin & McDevitt, 1995).

Some individuals may react in negative ways to diversity by fearing those who are different or expressing prejudicial attitudes (De Meuse & Hostager, 2001). Fear of minority students may have adverse consequences for classroom interactions. For example, Barak and Cherin (1998) suggest that minority students are more likely to experience lower work group involvement due to being excluded from important informational networks. Similarly, greater demographic heterogeneity has also been found to result in lower cooperation within group contexts (Chatman & Flynn, 2001). Finally, increased group relationship conflict may result when visible differences between group members are prominent (Randel, 2002). Therefore, it is important to identify factors that influence individuals' attitudes toward those who are different.

Clearly, some individuals may be more threatened by differences associated with diversity while others embrace them. When individuals react positively to diversity, beneficial outcomes, like better problem-solving skills and increased collaboration, are likely to result. In contrast, negative outcomes, like increased conflict and lower cooperation, may result when diversity is not accepted and appreciated. Therefore, understanding individual differences in attitudes toward those who are different may be useful for predicting various outcomes associated with diversity.

The openness to diversity construct integrates aspects of both early and recent definitions of diversity (Pascarella et al., 1994; Pascarella, Edison, Nora, Hagedorn & Terenzini, 1996). Pascarella and colleagues' notion of diversity includes value differences, in addition to differences in surface and deeper level demographic characteristics. Their approach to defining diversity is particularly relevant to the present study since it was developed for use in the context of higher education. In addition, this variable specifically addresses individuals' willingness to interact with those who are different which, as the previously reviewed research demonstrates, can be a major issue for beneficiaries of affirmative action (Flynn, 2005; Thompson et al., 2002).

Overview of the Current Study and Hypotheses

In the present study, social dominance theory will be used as a framework for selecting and developing predictors of reactions to affirmative action policies and beneficiaries. Based on the premises of SDT, we test predictions regarding the effect of social dominance orientation on attitudes toward a "soft" preferential treatment policy in the context of higher education. With this type of admissions policy, an African-

American applicant is granted admission over a White applicant when they are equally qualified. The mediating effects of two legitimizing ideologies, perceptions of race-based inequities and attitudes toward diversity, are also examined. (See Appendix A).

We also test predictions regarding the influence of social dominance on attitudes toward affirmative action beneficiaries. Consistent with prior research on attitudes, we include three dimensions of reactions to beneficiaries in the current study: emotional reactions to beneficiaries, willingness to work and socialize with beneficiaries, and perceptions of beneficiaries' abilities. (See Appendix A).

Based on research regarding the demographic characteristics of evaluators, we propose that:

H1: Women's attitudes toward affirmative action will be significantly more positive than those of Caucasian males. In addition, SDO, perceptions of inequities and attitudes toward diversity will serve as partial mediators of this relationship.

Since it is unlikely that there will be a sufficient number of African-Americans present in the sample, we did not analyze data as a function of respondent race. As a result, race-based differences in reactions to affirmative action were not examined in the present study.

Based on research regarding the effects of social dominance orientation, beliefs regarding racial inequities and the value of diversity (cf: Sidanius & Pratto, 1999; Aberson & Haag, 2003), we propose that:

Hypothesis 2: The relationship between social dominance orientation and “soft” preferential treatment will be significant and negative. Those higher in SDO will have more negative views of the policies.

Hypothesis H2a: This relationship will be partially mediated by perceptions of race-based inequities.

Hypothesis 2b: This relationship will be partially mediated by beliefs regarding the value of diversity.

Based on the findings regarding spillover effects, we expected that:

Hypothesis 3: The relationship between social dominance orientation and attitudes toward beneficiaries will be significant and negative. Those higher in SDO will have more negative views of the beneficiaries.

Hypothesis 3a: The relationship between social dominance orientation and affective reactions to African-American affirmative action beneficiaries, willingness to socialize with beneficiaries, and beliefs about beneficiary abilities will be partially mediated by attitudes toward diversity and perceptions of race-based inequities.

CHAPTER TWO

METHODS

Participants

Two hundred fifty-two students (224 Whites, 21 African-Americans, and 7 unknown) enrolled in introductory psychology courses at Clemson University participated in the study. Forty-one percent, or 103, of the participants were female and fifty-nine percent, or 148, were male. The participants were informed that they were participating in a dissertation study conducted by a graduate student and that they would receive course credit for their participation after attending a debriefing session. In addition, the participants were informed that their participation was voluntary and their responses would be kept confidential.

Measures

Predictors

Demographic Variables. Gender was assessed since findings from several streams of research indicated that sex characteristics have strong relationships with social dominance orientation, attitudes toward diversity and attitudes toward affirmative action. Participant gender was coded as a dummy variable where 0 = male and 1 = female.

Social Dominance Orientation. (see Appendix B) The social dominance scale, developed by Pratto and colleagues (1994) assesses the degree to which individuals prefer group-based social inequality. The measure consists of 16 items scored on a 7-point likert-type scale. Higher scores on the measure reflect lower levels of the

orientation. Over several studies, the measure has been found to have acceptable reliability with a test-retest reliability of .86 and an equivalent forms reliability of .75. A sample item is, “We should strive for increased social equality between groups”.

Perceptions of Race-Based Inequities. (see Appendix B) The perceived inequities scale is a modified version of the perceived workforce inequities scale that assesses the degree to which respondents perceive disparities in access to higher education between African-Americans and Whites. The items were chosen to be consistent with previous measures of the racial inequalities construct. The scale consists of nine items scored on a 7-point likert-type scale. Higher scores indicate greater endorsement of the items with response categories ranging from strongly disagree to strongly agree. Example items include, “Fewer African-Americans than Whites have college degrees” and “Few African-Americans attend prestigious colleges and universities.”

Attitudes Toward Diversity. (see Appendix B) This scale measures the degree to which individuals appreciate and value racial and ethnic diversity. The measure consists of eight items scored on a 7-point likert-type scale. Two of the items are taken from the Openness to Diversity scale developed by Pascarella and colleagues (1994; 1996). These items include, “Learning about people from different cultures is a very important part of my college education” and “Contact with individuals whose background is different from my own is an essential part of my education.” One item is from a modified version of the Openness to Diversity used by Ervin (2001). This item states, “Cross-racial friendships are difficult because of peer pressure.” The remaining five items were developed by the

author based on prior studies conducted by De Meuse and Hostager (2001) and Hobman et al. (2004).

Dependent Measures

Attitudes Toward “Soft” Preferential Treatment. (see Appendix B) Attitudes toward affirmative action measures the degree to which students support affirmative action in college and university admissions. This scale consists of eight items rated on a 7-point likert-type scale with higher scores indicating greater support for the policy. Seven of the items were taken from a scale used in a study by Richardson (2005) and have been modified to increase their relevance to the particular context. An example of the items in the scale includes, “I support the use of affirmative action in college and university admissions”. The remaining item was developed by Sidanius et al. (2004). This item states, “Affirmative action admits too many students who have a low chance of academic success”. Higher scores indicate greater support for “soft” preferential treatment policies.

Perceptions of Beneficiary Abilities. (see Appendix B) Perceptions of beneficiary abilities measures respondent beliefs regarding the academic competency of affirmative action beneficiaries. The scale consists of 12 items scored on a 7-point likert-type scale. Three of the items are taken from studies conducted by Heilman and colleagues (1992, 1998) that have been modified to be applicable in an educational setting. One item asks, “How competently do you expect this individual to perform in class?” Responses to this item range from 1, for not at all competently, to 7, for very competently. The remaining six items were developed by the author and have been

modified to be relevant in an educational setting. An example of these items is, “How likely would you be to seek help on an assignment from this individual?” Responses range from 1, for not at all likely, to 7, for very likely.

Affective Reactions to Beneficiaries. (see Appendix B) The affective reactions to beneficiaries scale is intended to measure attitudes toward members of outgroups. The items, which reflect both positive and negative affect associated with beneficiaries of affirmative action, are taken from a study conducted by Stephan and colleagues (1999). Participants will be asked to indicate the degree to which they feel 12 different emotional reactions when asked to interact with African-American students admitted to college through affirmative action. Responses are on a 7-point scale ranging from 1, for none at all, to 7, for extreme. The emotional reactions include hostility, disliking, superiority, disdain, hatred, rejection, admiration, acceptance, affection, approval, sympathy, and warmth. Higher scores on the measure reflect more positive attitudes toward beneficiaries of affirmative action.

Willingness to Work and Socialize with Beneficiaries. (see Appendix B) Participants’ willingness to work and socialize with beneficiaries of affirmative action is assessed using a seven item scale used in a previous study (Edwards et al., 2004) and developed by the author that has been modified to be applicable in the context of higher education. A sample item is, “I would be interested in socializing with an individual outside of class if I knew that they were admitted through affirmative action.” Responses range from 1, for not at all, to 7, for very much. Items were developed with a range of behaviors involving contact with and willingness to help African Americans.

Procedure

Participants accessed the measures via the departmental subject pool website. In the first stage of the online survey, participants read a brief informed consent statement describing the intentions of the study. This statement also informed participants that their participation in the study was voluntary and their responses would be kept confidential. Respondents were then provided with the instructions for the study and asked to indicate their level of agreement with the items on the surveys. Following the instructions, participants read a definition and description of a “soft” preferential treatment (see Appendix A). After reading the description, respondents were asked to answer several demographic questions before completing the measures. The presentation of the three predictor measures, social dominance orientation, perceptions of race-based inequities, and attitudes toward diversity were counterbalanced. Later, the participants attended group debriefing sessions.

CHAPTER THREE

RESULTS

Data Screening

Two hundred fifty-four participant responses were downloaded from the subject pool website. The data was screened to ensure its appropriateness for structural equation modeling. First, a missing data analysis was conducted using EQS 6.1. Less than one percent, or 68 of the 19,908 cells were missing data. Cases with responses to fewer than 50% of the items were deleted. Based on this criteria one case, case #121, was deleted.

Descriptive statistics were computed for each indicator to ensure that there was an adequate degree of variability in the responses. Means and standard deviations for the indicators are presented in Appendix C. The data was not assessed for univariate outliers. Instead, multivariate outliers were identified. The most widely used estimation methods in structural equation modeling assume multivariate normality (Kline, 2005). Therefore, the Mahalanobis distance was computed for each case. Cases with a Mahalanobis distance greater than the established critical value are multivariate outliers. Based on the Chi-square table, the critical value for seventy-nine degrees of freedom with a probability value of .001 is 123.60. Nine cases had a Mahalanobis distance greater than the established critical value. However, inspection of a histogram of the Mahalanobis distance revealed only one case to be a multivariate outlier, case #133. Therefore, this case was deleted. Finally, the missing data was imputed using expectation-maximization (EM) imputation.

Validation of the Measurement Model

The measurement model was validated using EQS for structural equation modeling. Structural equation modeling is a statistical approach which incorporates both path analysis and factor analysis. While it serves purposes similar to those of multiple regression use of structural equation modeling has several advantages. For example, use of structural equation modeling reduces measurement error by allowing multiple indicators per latent variable whereas regression allows only one indicator per variable. Moreover, structural equation modeling has the ability to model error terms, specifically correlated error terms, while uncorrelated error terms are assumed in regression. Thus, structural equation modeling represents a more powerful alternative to multiple regression.

Another advantage of structural equation modeling is that it tests overall models in addition to individual coefficients. Tests of the overall model are based on how accurately the predicted model reproduces the pattern of variances and covariances present in the data. To the extent that the model implied variances and covariances reproduce the observed variances and covariances the model is accepted or rejected.

Although SEM has advantages over regression, it has important limitations as well. It may be the case that models that provide a better fit to the data are inconsistent with existing theory and driven by characteristics of a given dataset. Using a purely empirical approach to determining the relationship of psychological variables to one another may lead a researcher to be overconfident in the extent to which patterns of data in a given dataset generalize to other datasets. In other words, decisions based on

empirical estimates of model fit and adequacy of measures in a given dataset should be balanced with a reference to theory and knowledge based on the existing literature.

Determination of whether to accept or reject the model is typically based on interpretation of goodness of fit measures. However, examination of the literature demonstrates that there is wide disagreement on which fit measures to report. For instance, Jaccard and Wan (1996) recommend reporting fit indices from each of the following categories: fit tests based on predicted versus observed covariances; fit tests based on predicted versus observed covariances, but which penalize for lack of parsimony; and, fit tests comparing the researcher's model with plausible alternative models. In contrast, Kline (2005) recommends use of at least four fit indices, such as chi-square; CFI; RMSEA; and SRMR.

In the present study the goodness of fit of the measurement model was assessed using the Chi-square statistic, the Comparative Fit Index (CFI; Bentler, 1990) and the Root Mean Square Error of Approximation (RMSEA; Steiger & Lind, 1980). The chi-square statistic was selected because it is the most commonly reported fit index. Good model fit is indicated by a non-significant chi-square value. However, results based on this fit index may often be misleading. For example, because large sample sizes are more likely to lead to rejection of the model, the chi-square statistic is associated with a greater likelihood of Type II errors (finding an effect where none exists). Therefore, it is often the case that with sample sizes in excess of 200 participants and good approximate fit as indicated by other fit measures, the significance of the chi-square test is discounted.

The comparative fit index, or CFI, compares the existing model with the independence model which assumes the latent variables in the model are uncorrelated. Based on this comparison the CFI gauges the percent of misfit which is accounted for by going from the independence model to the predicted model. CFI values should be equal to or greater than .90 to accept the model, indicating that the predicted model is 90% better than the independence model (Bentler, 1992). Like the model chi-square, the Root Mean Square Error of Approximation, or RMSEA, is based on the discrepancy between the covariances in the predicted and observed models. However, the RMSEA penalizes goodness of fit for a lack of parsimony. This is beneficial since, in general, a model with fewer indicators per factor will have better fit than a model with more indicators per factor. The RMSEA is reported in the present study because it adjusts for this tendency. In addition, like the CFI, the RMSEA is less sensitive to sample size than other fit measures (Fan, Thompson & Wang, 1999). According to Hu and Bentler (1999) good model fit is indicated by RMSEA values of .06 or less.

Confirmatory factor analysis was conducted to assess the adequacy of the measurement model. Based on research suggesting individuals' reactions to affirmative action policies often "spillover" onto beneficiaries three models were tested in order to determine the factor structure of the scales assessing reactions to affirmative action policies and beneficiaries. Each model was evaluated based on several criteria. The first criterion is the dimensionality of the constructs. If the factor structure of the constructs has been properly specified the model should exhibit good fit. The model is accepted or rejected based on the extent to which it displays good fit. Chi-square difference tests

were also conducted to assess the relative improvement in fit between the models. If the one-factor model does not result in significant harm to the model then the four constructs, reactions to an affirmative action policy and the three measures of reactions to beneficiaries, would be combined.

The adequacy of the model was also determined based on its validity. When specifying a latent variable, it is assumed that each observed variable, or indicator, that composes the factor actually measures the construct. When this is the case, the indicators will each contribute to the latent factor by yielding a significant “loading” on the factor. A standardized loading reflects the degree to which the corresponding indicator contributes to the common variability captured by the latent variable (Hecht, 2001). Therefore, convergent validity is exhibited to the extent that the indicators converge, or have high loadings, on the factors. Poor convergent validity within sets of indicators suggests that the model may have too few factors (Kline, 2005).

In contrast, discriminant validity is indicated if the covariances between all of the variables are less than 1.0. If the model has poor discriminant validity, as evidenced by perfect correlations or correlations that are close to perfection, this is an indication that the model has too many factors (Kline, 2005). According to Hecht (2001) poor discriminant validity is problematic for several reasons. First, poor discriminant validity as demonstrated by highly correlated variables represents a source of model misspecification. When the highly correlated variables are predictors or explanatory variables the fit of the model to the data may be reduced. Moreover, this situation tends to result in an increase of the standard errors thereby reducing the precision of statistical

tests of relations among predictors variables and dependent variables. Finally, poor discriminant validity can also lead to suppression when two or more predictor or predictors variables are highly correlated (Maassen & Bakker, 2001).

In order for a model to be deemed adequate the factors must also demonstrate high reliability. The established cutoff for acceptable reliability is .70. Since coefficient alpha is a function of the factor loadings, high convergent validity of items on a given construct results in high reliability. In addition, the variance extracted by the factor(s) should be at least .50. The final criterion upon which the models will be evaluated is the dimensionality of the items. If the factor structure for the scales is properly specified the indicators will load on only one factor and there will be no crossloadings. In other words, items should be related to one construct such as affective reactions to affirmative action policies, and unrelated to affective reactions to beneficiaries.

The models being compared are nested, or hierarchical in nature, therefore they share several similarities. For instance, in each of the models tested the factors were assigned a measurement range by fixing the variance to a value of 1.0. In addition, all of the factors were specified to be correlated with one another. Moreover, based on previous research (i.e., Jost & Thompson, 2000) social dominance orientation was specified to be a multi-dimensional construct with a two-factor structure: one factor representing generalized opposition to equality and the second factor reflecting group-based dominance. Finally, each of the tested models exhibited Mardia's Normalized Estimate values greater than 15, indicating the presence of multivariate non-normality. When the data are multivariately non-normally distributed robust parameter estimates

must be interpreted. For example, the chi-square fit statistic is sensitive to violations of the assumption of multivariate normality (Kline, 2005). As a result, the Satorra-Bentler scaled chi-square is preferred when this assumption is known to be violated. The Satorra-Bentler chi-square is an adjusted chi-square which penalizes the fit statistic for the amount of kurtosis in the data. This statistic is reported for each of the models that were evaluated.

In the first model tested all items assessing reactions to both affirmative action policies and affirmative action beneficiaries were forced to load on one factor. Thus, the single measure of reactions to the policies and the three measures of reactions to beneficiaries were treated as a single construct. This was accomplished by fixing the covariances between the factors representing these variables to a value of 1.0. This, in essence, makes the factors identical, which is the same as replacing the four factors representing each of the four separate constructs with just one (Kline, 2005). The one factor model of reactions to affirmative action policies and beneficiaries was fitted to the data with the ML method in EQS, and a converged, admissible solution was obtained. Mardia's Normalized Estimate for the model is 37.955 indicating the presence of multivariate non-normality. Values of the selected fit indexes are as follows: $\chi^2(2665) = 7468.637$, $p = .000$, $CFI = .573$, $RMSEA = .085$, with a 90% confidence interval .082-.087. If the scales representing Attitudes Toward Soft Preferential Treatment, Affective Reactions to Beneficiaries, Willingness to Work and Socialize with Beneficiaries and Perceptions of Beneficiaries' Abilities reflect one factor only then this model should exhibit good fit. However, the one factor model exhibits extremely poor fit

based on both the CFI and the RMSEA. This provides evidence that the four measures do not capture a single, unidimensional construct. Therefore, the one-factor model of reactions to policies and beneficiaries is rejected.

A two-factor model of reactions to affirmative action policies and beneficiaries was also tested. The first factor consists of the Attitudes Toward Soft Preferential Treatment Scale. The second factor consists of the three scales assessing reactions to affirmative action beneficiaries: the Affective Reactions to Beneficiaries Scale, Willingness to Work and Socialize with Beneficiaries Scale, and the Perceptions of Beneficiaries' Abilities Scale. Thus, this two factor model of the dependent measures was consistent with the way the constructs were originally conceived; reactions toward the policy were viewed as distinct from reactions to the beneficiary. Testing of this model was accomplished by releasing the constraints on the covariances between factor one and the factors representing the three scales measuring reactions to beneficiaries, thus allowing the covariances to be freely estimated. However, the covariances between the three reactions to beneficiaries scales were still constrained to a value of 1.0.

The two-factor model of reactions to affirmative action policies and beneficiaries was fitted to the data with the ML method in EQS, and a converged, admissible solution was obtained. Values of the selected fit indexes are as follows: $\chi^2(2661) = 6355.014$, $p = .000$, CFI = .672, RMSEA = .074, with a 90% confidence interval .072-.077. Both the CFI and RMSEA demonstrate that the two-factor model of reactions to affirmative action policies and beneficiaries is inadequate. Typically, a chi-square difference test would be conducted to determine the relative improvement in model fit of the two-factor model

over the one-factor model. This test is appropriate because the one-factor model is actually a restricted version of the two-factor model. Therefore, the models are nested (Kline, 2005). However, since both the one-factor model and the two-factor model failed to provide adequate fit to the data the chi-square difference test was not conducted.

Finally, a multifactor model was tested in which each of the four factors representing reactions to affirmative action policies and beneficiaries (3 factors representing reactions to beneficiaries and one factor representing reactions to the policy) were specified to load on a separate factor. In addition, the positively and negatively worded items on the Affective Reactions to Beneficiaries were specified to load on separate factors. It is not unusual for positively and negatively worded items on the same scale to load on separate factors (Miller & Cleary, 1993; Pilotte & Gable, 1990). Both the positively and negatively worded items on the scale were taken from a study conducted by Stephan and colleagues (1999).

The five-factor model of reactions to affirmative action policies and beneficiaries was fitted to the data with the ML method in EQS, and a converged, admissible solution was obtained. Values of the selected fit indexes are as follows: $\chi^2(2655) = 4239.366$, $p = .000$, CFI = .859, RMSEA = .049, with a 90% confidence interval .046-.051. These results are generally favorable except for the CFI. While the results suggest that the dimensionality of the constructs representing reactions to affirmative action policies and beneficiaries is properly specified, the value of the CFI indicates that there is still some degree of misfit in the model. This suggests that some post hoc model fitting is needed to improve the CFI to an acceptable level.

The validity of the five-factor model was evaluated to determine the adequacy of the measurement model. The specification of a multifactor CFA model in which each indicator loads on only one factor provides a precise test of convergent and discriminant validity (Kline, 2005). When specifying a latent variable, it is assumed that each observed variable that composes the factor actually measures the construct. When this is the case, the observed variables will each contribute to the latent factor by yielding a significant “loading” on the factor. A standardized loading reflects the degree to which the corresponding indicator contribute to the common variability captured by the latent variable, or the convergent validity of the construct. Convergent validity is indicated by standardized factor loadings above .4.

Examination of the standardized loadings for the five factors indicates that the five-factor model exhibits high convergent validity. Only one indicator, item 10 of the Affective Reactions to Beneficiaries Scale, failed to load on its corresponding factor. Excluding this item, the standardized loadings for the five factors range from .421 to .950. This indicates a high degree of convergent validity for these factors. The standardized loadings and communalities for the factors are presented in Table 1.1. In addition, each of the factors exhibits high construct reliability and the variance extracted from the indicators by each of the five factors is greater than .50. The variance extracted by the factor is based on the formula:

$$[(\text{SUM}(sl_i^2))]/[(\text{SUM}(sl_i^2) + (\text{SUM}(e_i)))]$$

where sl_i is the standardized loadings for the factor indicators and e_i are the corresponding error terms, which is 1 minus the squared loading, or communality, for the

indicator. The reliability of the factor is also a function of the standardized factor loadings. The reliability of the factor is based on the formula:

$$[(\text{SUM}(s_{1i}))^2]/[(\text{SUM}(s_{1i}))^2 + (\text{SUM}(e_i))]$$

However, reliability may be influenced by the number of indicators such that the greater the number of indicators the higher the reliability. The reliability and variance extracted for each of the five factors is presented in Table 1.2.

Finally, review of the covariances between the factors provides a test of discriminant validity. Since the factors were assigned a measurement range by fixing the variance of the factors to a value of 1.0 the covariances between the factors are standardized and may be interpreted as correlations. The correlations between the five factors range from .174 to .625 which indicates that the factors are measuring distinct constructs. The correlation matrix for the model is presented in Table 1.3. Based on the information obtained from the fit indexes, the standardized factor loadings and the correlations between the factors the five-factor model of reactions to affirmative action policies and beneficiaries is retained.

Post Hoc Model Fitting

While the selected five factor model of the dependent variables was a marked improvement over the other models tested the Comparative Fit Index is still below the accepted cutoff value indicating good model fit. This suggests that there are misspecified parameters in the model. This led to examination of the individual measures and items as a means to refine the scales. Several parameters within the model were respecified. Model respecification was based on several factors: feasibility of the parameter estimates,

statistical significance of the parameter estimates, identification of those parameters with the largest standardized residuals and the factor loadings. In addition, a specification search was conducted for the indicator error terms. In EQS malfitting parameters (e.g., error terms) are identified via the multivariate Lagrange Multipliers test (Byrne, 1994).

Examination of the measurement equations and variances for the indicators indicates that the estimated values for all of the individual parameters are reasonable and statistically significant. For example, the standard error for each indicator's measurement equation and variance are neither abnormally large nor do they approach zero. If either condition existed it would be an indication that the model is incorrect. A standard error approaching zero would indicate the linear dependence of the related parameter upon some other parameter in the model (Byrne, 1994). Similarly, a negative error variance suggests one of the following problems: high levels of multicollinearity between the variables or the presence of outliers. In addition, each of these parameter estimates is statistically different from zero. However, this may be due to the large sample size. Based on the information obtained from the standardized residuals the average off-diagonal value is .0597, which reflects fairly good fit to the data. The frequency distribution of the standardized residuals reveals that 82.66% of the residual values fall between -.10 and .10; 9.15% of the residual values fall between -.10 and -.3 while 7.9% fall between .10 and .30. Only .14% of the values fall between -.30 and -.40 and .14% fall between .30 and .40. Standardized residuals of this magnitude (.3-.4) are indicative of significant model misfit associated with the parameters, so an examination of the individual items that were contributing to error in measurement followed.

Table 1.1. Standardized Factor Loadings and Communalities for a Five-Factor Model of Reactions to Affirmative Action Policies and Beneficiaries.

Indicator	Factor 1		Factor 2		Factor 3		Factor 4		Factor 5	
	Loading	Comm	Loading	Comm	Loading	Comm	Loading	Comm	Loading	Comm
Soft 1	0.532	0.284								
Soft 2	0.859	0.737								
Soft 3	0.596	0.355								
Soft 4	0.783	0.613								
Soft 5	0.870	0.757								
Soft 6	0.919	0.845								
Soft 7	0.950	0.902								
WWS 1			0.874	0.763						
WWS 2			0.922	0.850						
WWS 3			0.948	0.898						
WWS 4			0.932	0.869						
WWS 5			0.898	0.806						
WWS 6			0.808	0.653						
WWS 7			0.829	0.688						
POBA 1					0.796	0.634				
POBA 2					0.797	0.635				
POBA 3					0.832	0.692				
POBA 4					0.733	0.537				
POBA 5					0.797	0.635				
POBA 6					0.717	0.515				
POBA 7					0.426	0.227				
POBA 8					0.651	0.424				
POBA 9					0.799	0.639				
POBA 10					0.817	0.668				
POBA 11					0.828	0.686				
POBA 12					0.852	0.724				
Affect 1							0.830	0.688		
Affect 3							0.880	0.774		
Affect 5							0.426	0.181		
Affect 7							0.759	0.576		
Affect 9							0.787	0.619		
Affect 11							0.844	0.712		
Affect 2									0.421	0.178
Affect 4									0.792	0.628
Affect 6									0.573	0.328
Affect 8									0.844	0.711
Affect 10									0.235	0.055
Affect 12									0.652	0.426

Soft = Attitudes toward “soft” preferential treatment
WWS = Willingness to work/socialize with beneficiaries
POBA = Perceptions of beneficiaries’ abilities
Affect = Affective reactions to beneficiaries

Table 1.2: Factor Reliability and Variance Extracted

<u>Factor</u>	<u>Reliability</u>	<u>Variance Extracted</u>
OEQ	.90	.52
GBD	.89	.52
POI	.82	.35
ATD	.84	.46
Soft	.98	.64
WWS	.96	.79
POBA	.94	.58
Aff_N	.89	.59
Aff_P	.77	.39

OEQ = Opposition to equality (SDO)
 GBD = Group based dominance (SDO)
 POI = Perceptions of race-based inequities
 ATD = Attitudes toward diversity
 Aff_N = Negative affective reactions to beneficiaries
 Aff_P = Positive affective reactions to beneficiaries

Table 1.3. Correlation Matrix for Five-Factor Model of Reactions to Affirmative Action Policies and Beneficiaries

<u>Factor</u>	<u>OEQ</u>	<u>GBD</u>	<u>POI</u>	<u>ATD</u>	<u>Belong</u>	<u>Soft</u>	<u>WWS</u>	<u>POB</u> <u>A</u>	<u>Aff</u> <u>N</u>	<u>Aff P</u>
OEQ	—									
GBD	-.739*	—								
POI	-.051*	.131*	—							
ATD	-.482*	.620*	.241*	—						
Belong	.117*	.062*	.189*	.166*	—					
Soft	-.229*	.329*	.327*	.503*	.100*	—				
WWS	-.413*	.476*	.149*	.461*	.032*	.277*	—			
POBA	-.474*	.474*	.138*	.536*	.045*	.506*	.521*	—		
Aff_N	-.372*	.363*	.182*	.371*	.031*	.174*	.625*	.402*	—	
Aff_P	-.346*	.400*	.195*	.484*	-.015*	.437*	.525*	.564*	.455*	—

Note: * = significant at the .05 level

Aff_N = Negative Affective Reactions to Beneficiaries

Aff_P = Positive Affective Reactions to Beneficiaries

Information on residuals for individual items serves as an indicator of the items that contribute the most error to measurement.

The largest off-diagonal value is -.383 and reflects model misfit associated with variables V77, item 9 of the Affective Reactions to Beneficiaries Scale, and V70, item 2

of the Affective Reactions to Beneficiaries Scale. In fact, variable V70 is listed five times among the parameters with the largest standardized residuals indicating that a substantial amount of the misfit in the model is associated with this variable. Variables V8 and V20, items 3 and 15 respectively of the Social Dominance Orientation, were each listed five times among the parameters with the largest standardized residuals. Similarly, variable V23, item 2 of the Perceptions of Inequities Scale, is listed six times among the parameters with the largest standardized residuals. Again, this indicates that a substantial amount of the model misfit is associated with the variable.

The factor loadings were reviewed to determine the indicators that failed to load on their respective factor. Loadings less than the established cutoff value of .40 are an indication of problematic items. Overall, the factor loadings appear to be in good shape. However, there were several items that failed to load on their corresponding factor. For example, variable V22, item 1 of the Perceptions of Inequities Scale, has a factor loading of .295 which is well below the established cutoff value of .40. The factor loading for item 2 of the Perceptions of Inequities Scale (V23), .378, is also below the established cutoff value. This is particularly noteworthy since this item was also indicated to be problematic based on examination of the parameters with the largest standardized residuals. Item 4 of the Perceptions of Inequities Scale (V60) also failed to load on the factor with a factor loading of .355. Finally, item 8 of the Attitudes Toward Diversity Scale (V38) and item 10 of the Affective Reactions to Beneficiaries Scale (V78) failed to load on their factors with loadings of .256 and .235, respectively. In addition, the loading for item 15 of the Social Dominance Orientation Scale, .408, is only slightly above the

established cutoff value of .40. Furthermore, the magnitudes of the communality, .166, and the error term, .834, for this indicator suggest that error rather than the factor explains most of the variance in the indicator.

As an additional source of information on the adequacy of the measures the error terms were evaluated based on the results of the multivariate Lagrange Multiplier statistic. Unlike the univariate LM test, the multivariate statistic does not test restrictions in the model independently. Thus, the multivariate statistic typically results in fewer statistically significant LM chi-squares than the univariate test. Therefore, model respecifications are based on the cumulative multivariate statistic. Evaluation of the cumulative multivariate statistic along with its univariate increment indicates that there are several malfitting error terms that stand distinctly apart from the rest: E15, E14; E29,E27; E34,E32; E36,E35; E58,E57; E61,E60; E67,E66; E68,E66; E68;E67; and E80,E74.

Based on the accumulated information on the adequacy of the measures they were revised. The model was rerun with several model respecifications. First, the following items were omitted from the model: items 3 and 15 of the Social Dominance Orientation Scale; items 1, 2, and 4 of the Perceptions of Inequities Scale; item 8 of the Attitudes Toward Diversity Scale; and items 2 and 10 of the Affective Reactions to Beneficiaries Scale. In addition, the error terms for the following items were correlated: items 9 and 10 of the Social Dominance Orientation Scale (E15,E14); items 6 and 8 (E29,E27) of the Perceptions of Inequities Scale; items 2 and 4 (E34,E32) and items 5 and 6 (E36,E35) of the Attitudes Toward Diversity Scale; items 1 and 2 (E58,E57), 4 and 5 (E61,E60), and

items 10 and 11 (E67,E66), items 10 and 12 (E68,E66) and items 11 and 12 (E68,E67) of the Perceptions of Beneficiaries' Abilities Scale; and items 6 and 12 of the Affective Reactions to Beneficiaries Scale (E80,E74). Correlated error terms represent situations in which knowing the residual of one indicator helps in knowing the residual associated with another indicator. While correlated error terms in a model are less than ideal it is a common occurrence with attitudinal scales (Byrne, 1994). Correlated error terms may reflect any of the following conditions: similarly written items, common method bias, or socially acceptable responding (Kline, 2005).

The respecified model was tested. Mardia's Normalized Estimate for the respecified model, 41.88, indicates multivariate non-normality. Therefore, robust estimates were interpreted for the model. Values of the selected fit indexes for the respecified model are: $X^2(1960) = 2597.752$, $p = .000$, $CFI = .94$, $RMSEA = .036$, with a 90% confidence interval .032-.040. The respecified model provides good fit to the data based on the selected fit indexes. Therefore, the chi-square difference test can be computed to assess the relative improvement in model fit between the one-, two-, and five-factor models of reactions to affirmative action policies and beneficiaries. When models are nested, the difference in X^2 between the two models is itself chi-square distributed with degrees of freedom equal to the difference in degrees of freedom between the two models. However, when the Satorra-Bentler scaled chi-square statistic is interpreted due to violations of the multivariate normality assumption, the difference between these scaled statistics is not chi-square distributed. Therefore, use of a corrected chi-square difference test is necessary. The results of the chi-square difference test for the

one- and five-factor models are: $X^2_D(705) = 5975.430, p = .000$. Similarly, the results of the chi-square difference test for the two- and five-factor models are: $X^2_D(701) = 4427.278, p = .000$. These results demonstrate that the five-factor model of reactions to affirmative action policies and beneficiaries is superior to both the one- and two-factor models. The final model consisting of the indicators and their loadings on their respective factors is presented in Appendix E.

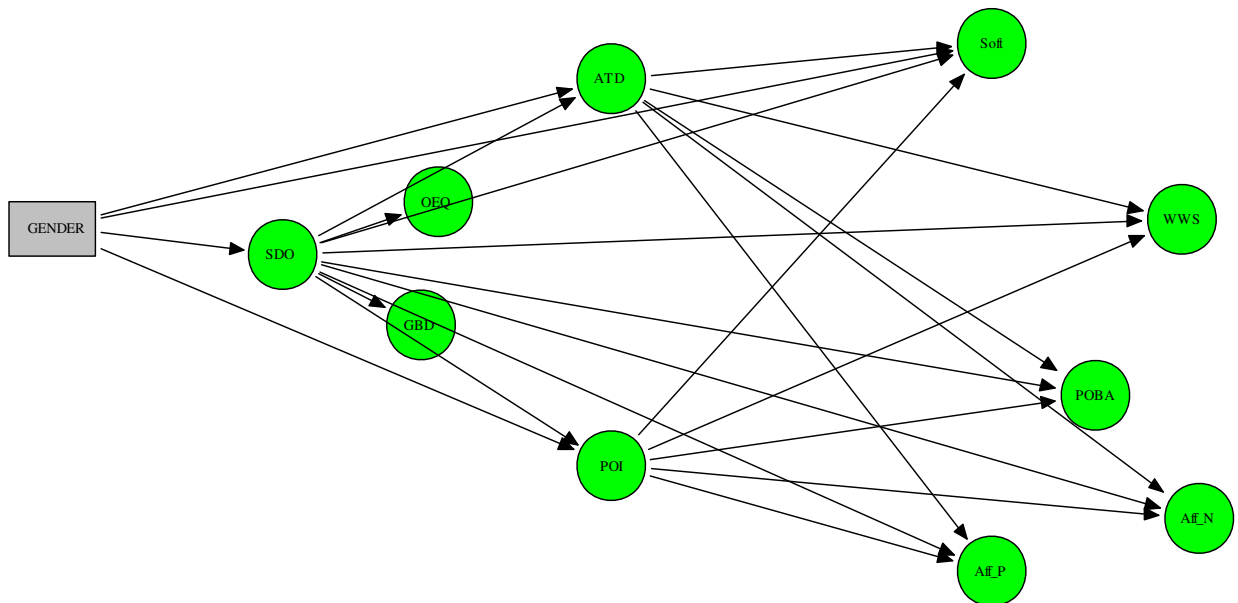
Evaluation of the Structural Model

Once an appropriate measurement model was obtained using confirmatory factor analysis, structural equation modeling was used to examine the causal relations among the latent variables. A diagram of the structural model is presented in Figure 1. The five-factor CFA model of reactions to affirmative action policies and beneficiaries was respecified as a structural model in which (1) the observed variable gender was added to the model as an exogenous variable, (2) the two factors representing social dominance orientation are endogenous explanatory variables, (3) the perceptions of inequities factor and the attitudes toward diversity factor are both mediators, and (4) the five factors representing reactions to affirmative action policies and beneficiaries are all outcome variables. Examination of the correlation between the two factors representing social dominance orientation (group based dominance and opposition to equality) reveals that they are highly, but negatively correlated (See table 5). Since the two factors will act as predictor variables in the structural model multicollinearity among them is likely to be problematic (Hecht, 2001). One way that these problems may be mitigated, however, is by combining the two highly correlated factors into one factor. In the present situation

this is not plausible since the factors are also negatively correlated. Therefore, a higher-order latent variable was created to capture the common variance between the two SDO factors (Bentler, 1995).

However, adding the higher-order factor results in an identification problem because the higher-order factor has only two indicators. With only two indicators unique estimates of the free parameters cannot be obtained because there are more parameters to be estimated than there are observations. Therefore, several steps were taken to resolve the identification issue. First, the higher-order factor was scaled by fixing the path to the factor representing group based dominance to 1.0. In addition, the disturbance terms for the two factors representing SDO were constrained to be equal (Byrne, 1994).

Figure 1.1 Diagram of Structural Model.



It is inappropriate to scale endogenous variables in a structural model by fixing the factor variance to 1.0, therefore, each factor was scaled by fixing the path to the indicator with the highest loading to 1.0. In addition, the LM test was set to identify misspecified paths that flow from independent to dependent factors and from one dependent factor to another, as well as misspecified covariances among the disturbance terms.

The structural model was fitted to the data using the ML method in EQS, and a converged, admissible solution was obtained. Values of selected fit indexes are as follows: $\chi^2(2046) = 2791.904$, $p = .000$, CFI = .89, RMSEA = .038, with a 90% confidence interval .034-.042. With the exception of the CFI, the fit statistics are within the acceptable range to indicate adequate fit to the data. However, the value of the CFI indicates that there is some degree of model misspecification.

Based on the information obtained from the standardized residuals the average off-diagonal value is .0582, which reflects fairly good fit to the data. The frequency distribution of the standardized residuals reveals that 82.63% of the residual values fall between -.10 and .10; 8.32% of the residual values fall between -.10 and -.3 while 8.87% fall between .10 and .30. Only .18% of the values fall between -.30 and -.40 and none fall between .30 and .40. Standardized residuals of this magnitude (.3-.4) are indicative of significant model misfit associated with the parameters. The largest off-diagonal value is -.359 and reflects model misfit associated with variables V11 and V15, items 6 and 10, respectively, of the Social Dominance Orientation Scale. In fact, variable V11 is listed

seven times among the parameters with the largest standardized residuals indicating that a substantial amount of the misfit in the model is associated with this variable.

Another source of model misspecification may result from paths that should be specified, but were omitted from the model. Examination of the LM test reveals that only two suggested paths stand apart from the others. The F3,F2 parameter stands distinctly apart from the other parameters. This represents a structural path from the opposition to equality factor to the group based dominance factor of the social dominance orientation construct. After this path the univariate increment decreases sharply from $X^2_{(1)} = 56.78$ to $X^2_{(2)} = 18.04$. These results suggest that if this path were to be specified in the model, opposition to equality would have a substantial impact on group based dominance. While the addition of this path may improve the model fit it is based only on statistical criteria and, in this instance, is not substantively meaningful. In fact, this relationship makes no sense because both factors comprise the construct of social dominance orientation. In addition, a higher-order factor has been added to the model to account for the common variance between the two factors. As a result, the F3,F2 parameter is ignored with respect to model respecification.

Incorporation of the next parameter (F6,F8) suggests that Perceptions of Beneficiaries' Abilities has a substantial impact on Attitudes Toward "Soft" Preferential Treatment. The addition of this path is also theoretically problematic since attitudes toward the policy are thought to "spillover" onto beneficiaries, but attitudes toward beneficiaries are not expected to "spillover" onto reactions to policies. Still, it is reasonable to expect some degree of relationship between the two factors, particularly

between the disturbance terms for the factors. After this path the univariate increment decreases from $X^2_{(2)} = 18.04$ to $X^2_{(3)} = 10.91$. While there are only slight changes in the univariate increment for the remaining parameters listed in the LM test one path suggested by the test is notable F10,F6. This path suggests that Attitudes Toward “Soft” Preferential Treatment have a substantial impact on positive Affective Reactions to Beneficiaries. Again, while it does not make sense to add this path to the model it is reasonable to expect a relationship between the disturbance terms of the factors. Disturbance terms represent all omitted causes of the corresponding endogenous variable (Kline, 2005). Since individuals’ attitudes toward affirmative action policies have been found to “spillover” onto attitudes toward beneficiaries (Barnes-Nacoste, 1992), it is reasonable to assume that there may be a common cause of both attitudes toward policies and beneficiaries that is not accounted for in the model.

Given the information gathered from the initial analyses, the model was rerun with several respecifications. First, V11, item 6 of the Social Dominance Orientation Scale, was dropped from the model. In addition, the disturbance terms for the Attitudes Toward “Soft” Preferential Treatment and Perceptions of Beneficiaries’ Abilities factors and for the Attitudes Toward “Soft” Preferential Treatment and positive Affective Reactions to Beneficiaries factors were specified to covary. Disturbance covariances reflect the assumption that the corresponding endogenous variables share at least one common cause that is not accounted for in the model (Kline, 2005). The respecified model was fitted to the data using the ML method in EQS, and a converged, admissible solution was obtained. Values of selected fit indexes are as follows: $X^2(1980) =$

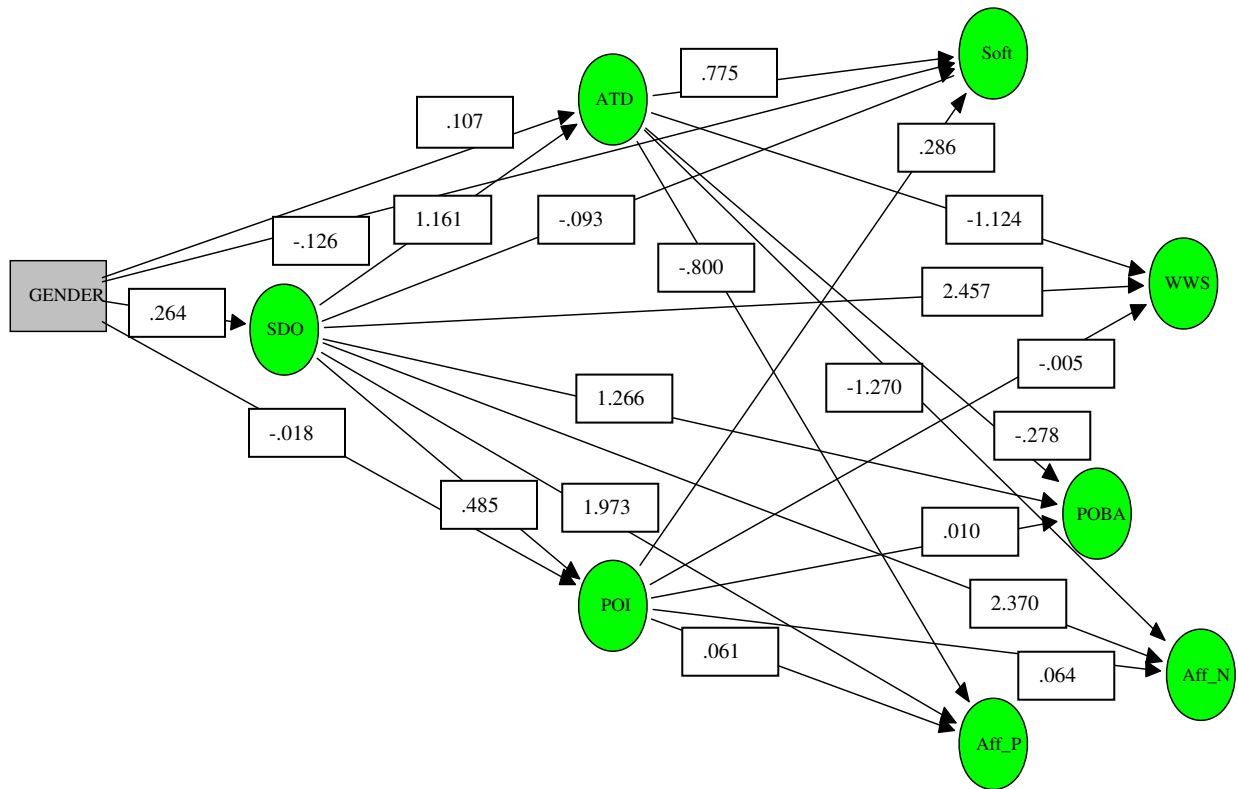
2659.679, $p = .000$, CFI = .90, RMSEA = .037, with a 90% confidence interval .033-.041. These results indicate that the specified model adequately reproduces the observed covariances among the variables.

Since the predicted model adequately reproduces the relations among the observed variables no further respecification was needed. The following items were omitted from the final scales: items 3, 6, and 15 of the Social Dominance Orientation Scale; items 7 and 8 of the Attitudes Toward Diversity Scale; items 1, 2, and 4 of the Perceptions of Inequities Scale; item 6 of the Willingness to Work and Socialize with Beneficiaries; items 2 and 10 of the Affective Reactions to Beneficiaries Scale; no items were omitted from the Attitudes Toward “Soft” Preferential Treatment and Perceptions of Beneficiaries Scales. The scale means for each of the constructs are presented in Table 1.4. In addition the final structural model with parameter estimates are found in Figure 2.1.

Table 1.4: Factor Means for Final Scales.

<u>Factor</u>	<u>Mean</u>
SDO	5.54
POI	3.83
ATD	5.22
Soft	3.60
WWS	5.78
POBA	4.29
Aff_N	5.34
Aff_P	4.58

Figure 2.1: Final Structural Model with Unstandardized Parameter Estimates.



Suppression

Examination of the standardized regression coefficients for the proposed model shows that many of them fall outside of the normal range of -1 to 1. This finding suggests the presence of a suppression effect (Kline, 2005). According to Conger (1974), a suppressor variable increases the predictive validity of another variable or set of variables when added to a regression equation. This increase in predictive validity is manifested by an increase in the regression weight for the suppressed variable. In practice, suppression is indicated when the path coefficient for a predictor is greater in

absolute value than that predictor's bivariate correlation with the dependent variable (Kline, 2005). A suppression effect may also be indicated by beta weights that fall outside of the range of -1 to 1, or by path coefficients that differ in sign from the bivariate correlation between the predictor and dependent variable.

While the phenomenon of statistical suppression is typically discussed in terms of regression it is also applicable to structural equation modeling since regression analysis is simply a specialized case of structural equation modeling (Maassen & Bakker, 2001). In fact, suppression may be more of an issue in structural equation models because the intercorrelations among the latent variables are estimated higher than in models with only observed variables in order to correct for attenuation due to measurement errors. Therefore, the probability that a suppressor effect will appear increases to the extent that the structural model entails correction for measurement error in the suppressed variable.

There are three types of suppression effects: classical suppression, net or negative suppression, and reciprocal or cooperative suppression. In the present study, a net suppression effect was identified. Net suppression is characterized by the addition of a second predictor whose correlation with the dependent variable is nonzero, but smaller in magnitude than that of the first predictor. In addition, the correlation between the two predictors is substantially large. When such a situation occurs the semipartial correlation between the predictor with the larger correlation with the dependent variable is inflated. Moreover, the semipartial correlation between the predictor with the smaller correlation with the dependent variable reverses its sign. Therefore, while the bivariate correlation between the suppressed variable and the dependent variable may be positive in direction

the semipartial correlation between the suppressed variable and the dependent variable is negative.

As previously stated, several of the standardized regression coefficients for the proposed model are inflated and fall outside of the normal range of -1 to 1. This is indicative of a suppression effect. The regression coefficients found in the standardized solution are equivalent to the correlation between a given predictor and the dependent variable controlling for the effects of all other predictors. Under normal circumstances the standardized regression coefficients should be smaller in magnitude than the bivariate correlations between the predictors and the dependent variables. The standardized solution and correlation matrix for the structural model are presented below. Review of the standardized solution and correlation matrix reveals inflated semipartial correlations between the higher-order factor of social dominance orientation (F11) and willingness to work and socialize with beneficiaries (F7), perceptions of beneficiaries' abilities (F8), and both factors representing affective reactions to beneficiaries (F9 & F10). Therefore, social dominance orientation is obviously involved in the suppression effect. Moreover, it is important to note that the coefficients associated with this factor are all positive in direction which indicates that the higher-order factor of social dominance orientation is the suppressed variable.

Table 1.5: Correlation Matrix for Final Structural Model

Factor	Gender	SDO	POI	ATD	Soft	WWS	POBA	Aff_N	Aff_P
Gender	—								
SDO	.176	—							
POI	.048	.312	—						
ATD	.208	.906	.282	—					
Soft	.071	.485	.358	.531	—				
WWS	.081	.713	.219	.482	.262	—			
POBA	.108	.685	.224	.574	.509	.532	—		
Aff_N	.052	.598	.246	.347	.205	.604	.461	—	
Aff_P	.087	.681	.268	.497	.379	.594	.498	.539	—

Attitudes toward diversity (F5) is also involved in the suppression effect as demonstrated by the inflated regression coefficient between this variable and negative affective reactions to beneficiaries (F9). The regression coefficient representing the semipartial correlation between attitudes toward diversity and willingness to work and socialize with beneficiaries is inflated, as well. Again, it is important to note the direction of the correlations between attitudes toward diversity (F5) and the dependent variables (F7, F8, F9, & F10). Each of the semipartial correlations is negative, but the bivariate correlations between these variables are positive (See Table 1.5). Finally, examination of the correlation between the higher-order factor of social dominance orientation (F11) and attitudes toward diversity (F5) indicates a substantial relationship between the two predictors. As a result, attitudes toward diversity acts as the suppressor of variance in social dominance orientation that is irrelevant to each of the dependent variables. Removal of this irrelevant variance increases the regression weights for social dominance orientation.

In summary, based on the information gathered from the standardized solution and correlation matrix, it is possible to conclude that a net suppression effect has occurred. The net suppression effect is demonstrated by the following: (1) The correlations between attitudes toward diversity and each of the dependent variables is nonzero, but smaller in magnitude than the correlations between social dominance orientation and each of the dependent variables; (2) The correlation between social dominance orientation and attitudes toward diversity is substantially large; (3) The semipartial correlations between social dominance orientation and each of the dependent variables are inflated; and (4) the semipartial correlations between attitudes toward diversity and each of the dependent variables are negative in sign while the bivariate correlations between these variables are positive in direction. Because of the nature of these relationships attitudes toward diversity suppresses the variance in social dominance orientation that is irrelevant to each of the dependent variables (i.e., willingness to work and socialize, perceptions of beneficiaries' abilities, and affective reactions to beneficiaries).

Tests of Hypotheses

Once an appropriate structural model was obtained the hypotheses were evaluated based on the results of the unstandardized solution. Typically, the results of the standardized solution are reported. The standardized regression coefficients, or beta weights, presented in the standardized solution indicate the expected difference in the dependent variable based on a given explanatory variable while controlling for all other explanatory variables. Standardized estimates are preferred because they can be directly

compared across predictors. In addition, beta weights are adjusted for intercorrelations among the explanatory variables (Kline, 2005). However, standardized regression coefficients can be more difficult to interpret since they are expressed in standard deviations while unstandardized coefficients are expressed in terms of raw score differences in the dependent variable. Moreover, examination of the beta weights for the proposed model shows that many of them fall outside of the normal range of -1 to 1. This finding suggests the presence of a suppression situation (Kline, 2005).

Hypothesis 1 predicted that gender would have a substantial impact on attitudes toward affirmative action. Specifically, women would have significantly more positive attitudes toward affirmative action than White males. However, this relationship would be mediated by SDO, perceptions of inequities and attitudes toward diversity. Review of the unstandardized solution reveals that gender does not have a significant direct effect on attitudes toward “soft” preferential treatment ($B = -.126$, $z = -.720$, $p > .05$). According to Kline (2005), statistically significant indirect effects but not direct effects represent the strongest demonstration of a mediator effect. Such a situation is especially likely when suppression occurs because the mediated and direct effects have different signs. For example, MacKinnon and colleagues (2002) found that the direct relationship between a predictor and an outcome variable may be near zero even when the mediated effect is significantly nonzero if the mediated and direct effects have opposite signs. In the present study, a product-of-coefficients test was used to test for mediation (MacKinnon et al., 2002). In addition, the multivariate delta method was used to estimate

the standard error for the indirect effects in order to test their significance (Taylor, MacKinnon & Tein, 2007).

Again, because of suppression the indirect effect of gender on attitudes toward “soft” preferential treatment may be significantly nonzero although the direct effect is nonsignificant. Therefore, the indirect effect of gender on attitudes toward “soft” preferential treatment was tested even though there was no significant direct effect of gender on attitudes toward the policy. The unstandardized regression coefficient for the indirect effect indicates that gender does have a significant indirect effect on attitudes toward “soft” preferential treatment ($B = .327$, $z = 2.402$, $p < .05$) which is transmitted via SDO, perceptions of race-based inequities and attitudes toward diversity. In other words, in comparison to their male counterparts, female participants’ support for the “soft” preferential treatment policy was .327 higher via all presumed causal pathways between these variables.

EQS combines the effects transmitted by each of the mediators into a pooled test of the indirect effects. Several Sobel tests were conducted in order to test the significance of the indirect effect of gender transmitted by each of the mediators. First, the indirect effect of gender on attitudes toward “soft” preferential treatment via SDO was tested. The Sobel tests indicates that the impact of gender on attitudes toward “soft” preferential treatment is not transmitted via SDO ($B = .012$, $z = -.29$, $p = .77$). Neither was the impact of gender on attitudes toward “soft” preferential treatment transmitted via perceptions of race-based inequities ($B = .005$, $z = -.11$, $p = .92$) nor attitudes toward diversity ($B = .083$, $z = 1.22$, $p = .22$). Next, a product-of-coefficients test was conducted using the

multivariate delta method to estimate the standard error in order to test the significance of the three-path mediated effects. The results indicate that the indirect effect of gender on attitudes toward “soft” preferential treatment transmitted via SDO and perceptions of race-based inequities was significant ($B = -.037, z = 2.15, p < .05$). However, the indirect effect of gender on attitudes toward “soft” preferential treatment transmitted by SDO and attitudes toward diversity was not significant ($B = .238, z = 1.84, p > .05$). Thus, hypothesis 1 was partially supported.

Hypothesis 2 predicted that individuals with higher levels of social dominance orientation will have more negative views of affirmative action. Moreover, this relationship would be partially mediated by perceptions of inequities and attitudes toward diversity. Based on the unstandardized solution, social dominance orientation social dominance orientation failed to have a direct influence on attitudes toward “soft” preferential treatment ($B = -.093, z = -.292, p > .05$). However, SDO did have a significant indirect effect on attitudes toward “soft” preferential treatment via perceptions of inequities and attitudes toward diversity ($B = 1.039, z = 3.546, p < .05$). Thus, for every 1-point decrease in SDO we expect about a 1-point increase in attitudes toward “soft” preferential treatment via both perceptions of inequities and attitudes toward diversity. A product-of-coefficients test using the multivariate delta method of estimating the standard error was used to test the mediating effects of perceptions of inequities and attitudes toward diversity separately. The results of the Sobel test indicate that the indirect effect of SDO on attitudes toward “soft” preferential treatment was transmitted by perceptions of race-based inequities is significant ($B = .139, z = 2.55, p = .01$). The

indirect effect of SDO on attitudes toward “soft” preferential treatment via attitudes toward diversity is also significant ($B = .900, z = 2.88, p = .00$). These findings indicate that the relationship between social dominance orientation and attitudes toward “soft” preferential treatment is completely mediated by both perceptions of inequities and attitudes toward diversity. Therefore, hypothesis 2 was supported by the results.

Hypothesis 3 focused on reactions to beneficiaries and predicted that individuals exhibiting higher levels of social dominance orientation have more negative attitudes toward beneficiaries of affirmative action. In the present study, attitudes toward beneficiaries of affirmative action are composed of three constructs: willingness to work and socialize with beneficiaries, perceptions of beneficiaries’ abilities and affective reactions to beneficiaries. The relationships between SDO and each of the three aspects of reactions to beneficiaries were expected to be partially mediated by perceptions of inequities and attitudes toward diversity.

Hypothesis 3a predicted a negative relationship between social dominance orientation and willingness to work and socialize with beneficiaries. Specifically, individuals with higher levels of SDO are expected to be less willing to work and socialize with beneficiaries of affirmative action. In addition, we expected that this relationship would be partially mediated by both perceptions of race-based inequities and attitudes toward diversity. Based on the unstandardized regression coefficient, SDO does have a significant direct effect on willingness to work and socialize with beneficiaries ($B = 2.457, z = 4.479, p < .05$). This means that a 1-point decrease in SDO is associated with about a 2.5-point increase in willingness to work and socialize with beneficiaries. It

is important to note, however, that because of suppression this estimate is inflated. Moreover, SDO also has a significant indirect effect on willingness to work and socialize with beneficiaries ($B = -1.307$, $z = -2.421$, $p < .05$) via perceptions of inequities and attitudes toward diversity. It is important to note that the coefficient for the mediating effect is negative because of a suppression effect. The Sobel test indicates that the indirect effect of SDO on willingness to interact with beneficiaries transmitted by attitudes toward diversity is significant ($B = -1.304$, $z = -2.54$, $p = .01$) while the indirect effect transmitted by perceptions of inequities is not significant ($B = -.002$, $z = -.05$, $p = .96$). Therefore, hypothesis 3a received partial support.

Hypothesis 3b predicted that individuals exhibiting higher levels of social dominance orientation would have more negative perceptions of beneficiaries' abilities. Moreover, the relationship was hypothesized to be partially mediated by perceptions of inequities and attitudes toward diversity. Examination of the unstandardized solution reveals that social dominance orientation does have a direct impact on perceptions of beneficiaries' abilities ($B = 1.266$, $z = 4.153$, $p < .05$). Thus, a 1-point decrease in SDO is associated with about a 1.25-point increase in perceptions of beneficiaries' abilities. Put another way, higher levels of social dominance orientation were associated with less positive perceptions of beneficiaries' abilities. However, SDO did not have a significant indirect effect on perceptions of beneficiaries' abilities via perceptions of race-based inequities or attitudes toward diversity ($B = -.318$, $z = -1.133$, $p > .05$). Therefore, hypothesis 3b was partially supported.

Hypothesis 3c posited that individuals displaying higher levels of social dominance orientation would have more negative affective reactions and, by extension, fewer positive affective reactions to beneficiaries of affirmative action. In addition, this relationship was expected to be partially mediated by perceptions of inequities and attitudes toward diversity. Both SDO and negative affective reactions to beneficiaries were scored such that higher scores reflect lower levels of the construct. The unstandardized solution indicates that SDO does have a significant direct effect on both negative affective reactions to beneficiaries ($B = 2.370, z = 4.388, p < .05$) and positive affective reactions to beneficiaries ($B = 1.973, z = 4.419, p < .05$). Thus, a 1-point increase in SDO is associated with a 2.37-point decrease in negative affective reactions to beneficiaries and a 1.97-point increase in positive affective reactions to beneficiaries. This means that individuals with higher levels of social dominance orientation also displayed more negative affective reactions to beneficiaries and fewer positive affective reactions to beneficiaries.

Social dominance orientation also had a significant indirect effect on both negative affective reactions ($B = -1.444, z = -2.646, p < .05$) and positive affective reactions to beneficiaries ($B = -.899, z = -2.160, p < .05$) transmitted via perceptions of inequities and attitudes toward diversity. The Sobel test indicates that the indirect effect of SDO on negative affective reactions to beneficiaries was transmitted via attitudes toward diversity ($B = -1.474, z = -2.78, p = .01$), but not perceptions of inequities ($B = .031, z = .71, p = .48$). Similarly, the indirect effect of SDO on positive affective reactions to beneficiaries was also transmitted via attitudes toward diversity ($B = -.929, z$

= -2.26, $p = .02$), but not perceptions of inequities ($B = .030$, $z = .695$, $p = .49$).

Therefore, hypothesis 3c received only partial support.

CHAPTER FOUR

DISCUSSION

In the present study, social dominance theory (SDT) was used as a framework for understanding reactions to affirmative action policies and beneficiaries. Specifically, this study examined how social dominance orientation, perceptions of inequities, and attitudes toward diversity impact these reactions. Three hypotheses derivable from social dominance theory were examined in the study: (1) Gender should have a significant impact on SDO, endorsement of hierarchy-attenuating legitimizing myths, and support for affirmative action. (2) High levels of SDO should be associated with endorsement of hierarchy-enhancing legitimizing myths, and consequently, more negative attitudes toward affirmative action. (3) High levels of SDO should be associated with endorsement of hierarchy-enhancing legitimizing myths, which should lead to more negative attitudes toward beneficiaries of affirmative action.

Gender Effects

While several of the predictions derivable from SDT were supported by the results, the overall pattern of findings suggests that SDT may not explain all of the underlying mechanisms driving reactions to policies and beneficiaries. This was demonstrated by the fact that the fit of the proposed model was only marginally adequate. This is also demonstrated by several counterintuitive findings based on SDT. Social dominance theory predicts that, in general, members of dominant social groups display higher levels of social dominance orientation than members of subordinate social groups. This finding has been replicated in dominant and subordinate groups based on race,

ethnicity and a number of other socially constructed categories (Sidanius, Levin & Pratto, 1996; Levin & Sidanius, 1999; Sidanius & Pratto, 1999). However, differences between dominant and subordinate social groups, in terms of SDO, have been documented most consistently among males and females (Pratto et al., 1994; Pratto, Stallworth & Sidanius, 1997; Sidanius, Pratto & Bobo, 1994). Moreover, these gender differences have been shown to hold across various cultural and situational conditions like age, political ideology, religious beliefs, income, and education (Sidanius, Pratto & Bobo, 1994; Sidanius & Pratto, 1999).

Contrary to expectations, although gender did have a significant impact on SDO only small differences were found between males and females. Nevertheless, the relationship was in the hypothesized direction. The dominant social group, males, exhibited higher levels of social dominance orientation than the subordinate social group, females. Therefore, males displayed a greater preference than females for statements that maximized the power disparity between dominant and subordinate social groups. However, the effect of gender on social dominance orientation was not robust. Gender accounted for less than 4% of the variability in social dominance orientation. Nonetheless, the effect of gender on SDO is statistically significant, consistent with previous theory and findings, and consistent with the predictions derived from SDT.

A plausible explanation for the weak effect of gender on social dominance orientation may stem from the sample used in the study. The sample consisted only of students studying psychology. Previous research suggests that students' choice of academic major may influence their attitudes (Guimond, 1992). Moreover, there is a

substantial amount of evidence indicating that students differ greatly in their social and political views as a function of their academic major (Altemeyer, 1988; Guimond, 1998; Sidanius, Pratto, Martin & Stallworth, 1991). Overall, students studying the social sciences have been found to be relatively liberal and hold progressive views when compared with students studying subjects like commerce and law. Moreover, social dominance theory posits that many occupations may be categorized as either hierarchy-enhancing or hierarchy-attenuating. For example, occupations like police officer reinforce group inequality and are, therefore, considered hierarchy-enhancing. In contrast, hierarchy-enhancing occupations such as social worker function to mitigate group inequality. Since some form of educational training is required for entry into many occupations, by extension, various academic majors may also be classified as either hierarchy-enhancing or hierarchy-attenuating.

As a social science, psychology could be classified as a hierarchy-attenuating academic major. Based solely on this fact, it is reasonable to assume that both male and female psychology students would exhibit low levels of SDO. Supporting this assumption, Dambrun and colleagues (2002) found that students majoring in psychology displayed lower levels of social dominance orientation than students majoring in law, a hierarchy-enhancing academic major. In addition, no gender differences were observed in SDO for psychology students, but gender differences were observed for law students. Male law students were more social dominance oriented than female law students. These findings provide evidence that choice of academic major may impact levels of social dominance orientation.

Social dominance theory also suggests that the adoption of certain types of belief systems, called legitimizing myths, should differ as a function of gender. Legitimizing myths act to either promote or undermine hierarchical social structures. While there is little empirical evidence linking gender with endorsement of either hierarchy-enhancing or hierarchy-attenuating ideologies it seems reasonable to assume that women would have a preference for hierarchy-attenuating legitimizing myths. Typically, individuals high in SDO tend to endorse ideologies that strengthen the social hierarchy while those low in SDO tend to endorse ideologies that function to weaken the social hierarchy (Sidanius & Pratto, 1999). Since women have consistently been found to exhibit lower levels of SDO a logical extension of this finding suggests that women would also endorse hierarchy-attenuating legitimizing myths to a greater degree, as well.

In the present study, two legitimizing myths were examined: perceptions of race-based inequities in educational opportunities and attitudes toward diversity. These myths may be either hierarchy-enhancing or hierarchy-attenuating. For instance, denying the existence of race-based inequities or denying the value of diversity serves to maintain the current social hierarchy and, as a result, these myths are hierarchy-enhancing. On the other hand, perceiving the disparities between African-Americans and White Americans in educational opportunities as inequitable or holding positive attitudes toward diversity promotes social equality and, as a result, these myths would be hierarchy-attenuating. No significant differences were found between male and female participants in terms of the extent to which each of the legitimizing myths were endorsed.

Based on their status as a subordinate social group, we expected women to endorse both hierarchy-attenuating legitimizing myths to a greater degree than men. However, no gender differences were found. Drawing upon a sample consisting only of psychology students may also account for the absence of gender effects in endorsement of the legitimizing ideologies examined in the study. A study by Guimond (2000) found that students in a hierarchy-enhancing course of study were more likely than students in a hierarchy-attenuating major to internalize beliefs that legitimize the economic disparities between social groups. If it is the case that the absence of gender effects is due to the sampling only psychology students, then overall levels of both perceptions of inequities and attitudes toward diversity should be fairly high and consistent across male and female participants.

Examination of the factor means shows that the expected pattern of results was observed for attitudes toward diversity, but not for perceptions of race-based inequities. The mean level of attitudes toward diversity indicates that the sample as a whole exhibited positive attitudes toward diversity. In addition, mean levels of attitudes toward diversity for male and female participants were essentially equivalent. Therefore, while there is empirical evidence demonstrating that, in general, women have more positive attitudes toward diversity (Holladay, Knight, Paige & Quinones, 2003; Pascarella et al., 1996) both male and female participants displayed positive attitudes toward diversity. This finding supports the idea that the lack of a gender effect for attitudes toward diversity may be due to the sampling of students in a hierarchy-attenuating course of study.

It is important to note that the overall mean for perceptions of inequities was slightly lower than the midpoint of the scale indicating that educational disparities between African-Americans and White Americans were perceived to be neither equitable nor inequitable. While levels of perceived inequities were consistent across men and women the overall level of perceived inequities suggests that it may be the case that attitudes toward diversity are more strongly related to choosing a hierarchy attenuating major than are perceptions of inequities. Perceptions of inequities may be less logically tied to hierarchy-attenuating majors and determined by factors that are external like simple perceptions about representation of African Americans in higher education.

Another unexpected finding is the lack of gender effects in attitudes toward affirmative action. There is a substantial body of literature demonstrating that, overall women display more positive attitudes toward affirmative action policies of all types. For example, Ozawa and colleagues (1996) found that women had more positive attitudes toward both “soft” and “hard” forms of affirmative action policies. This finding has been replicated in student samples, as well (Kravitz & Platania, 1993). In addition, SDT predicts that women would have more favorable attitudes toward affirmative action because of their status as a subordinate social group. However, no such differences were found in the present study. Moreover, the mean level of support for “soft” preferential treatment was fairly low and consistent across both genders. Therefore, the finding is unlikely to result from the sampling of students in a hierarchy-attenuating major.

Blumer’s (1958) group position theory may provide an explanation for the lack of gender effects in reactions to “soft” preferential treatment. According to the theory,

white females would display policy preferences similar to those of white males because of their sense of shared group position. Similarly, several social dominance theorists have suggested that because white females and white males share the same position in the racial hierarchy, it is in their collective interest to protect and even legitimize their greater resources and privileges (Bob & Fox, 2003; Sears, Sidanius & Bobo, 2000). Intuitively, one would think that, because of their disadvantaged status relative to white males, white females would be more sympathetic to other disadvantaged groups. However, it may be the case that because of their subordinate status, it is in white females' self-interest to maintain, legitimate, and even maximize race-based inequalities and, therefore, the privileges of whiteness (Alcoff, 1999). In this study, race was made particularly salient and may have evoked more negative responses from females than research on sex-based affirmative action. Thus, promoting racial equality in the form of preferences for African-Americans may be perceived as threatening by white females. If this is the case, then it makes sense that white females' level of support for "soft" preferential treatment would be low and equivalent to that of white males.

SDO and Policy Reactions

Another counterintuitive finding of the study was the lack of a direct relationship between SDO and reactions to affirmative action. The number of studies demonstrating a relationship between SDO and reactions to affirmative action and similar policies suggests that this relationship is robust (Pratto et al., 1994; Sidanius & Pratto, 1999). However, in the current study the effect of SDO on reactions to affirmative action was completely mediated by perceptions of race-based inequities and attitudes toward

diversity. This finding appears to have a statistical, rather than theoretical explanation. Review of the bivariate factor correlation between SDO and reactions to affirmative action ($r = .49$) indicates that a moderate relationship does exist. Therefore, it appears that the lack of a direct relationship between the factors in the full structural model is the result of highly correlated predictors.

In the present study, the predictors, SDO and attitudes toward diversity, were so highly correlated ($r = .91$) that they essentially measured the same construct. While this does not affect the goodness of fit for the proposed model it does create a problem when trying to isolate the effects of individual predictors. For example, the variance of the parameter estimates may be inflated which may lead to lack of statistical significance of individual predictors. In the present study, SDO and attitudes toward diversity had a bivariate factor correlation of .91 indicating very little unique variance between the factors. In addition, the bivariate factor correlation between attitudes toward diversity and reactions to affirmative action policies ($r = .48$) was virtually identical to that for SDO and reactions to the policy ($r = .49$). Therefore, the relationship between SDO and policy reactions is redundant with the relationship between attitudes toward diversity and policy reactions. The relationship between SDO and attitudes toward diversity was extremely high ($r=.91$) and so these two measures were redundant. When SDO and attitudes toward diversity were simultaneously included in a full model, only attitudes toward diversity was significant.

SDO and Reactions to Beneficiaries

As expected, the results of the study indicate that social dominance orientation predicts reactions to beneficiaries of affirmative action. Low-SDO participants displayed greater willingness to work and socialize with African-American beneficiaries than high-SDO participants. In addition, participants who were less social dominance oriented also expressed more positive perceptions of beneficiaries' abilities. Finally, lower levels of SDO were also associated with more positive emotional reactions to beneficiaries.

These findings are basically consistent with SDT, which predicts that social dominance orientation should be associated with attitudes toward various social groups. Specifically, SDT suggests that individuals who are high in social dominance orientation prefer members of high-status groups and discriminate against members of stigmatized out-groups. Moreover, the results reinforce previous research demonstrating that highly social dominance oriented individuals were more negative toward stigmatized outgroups, including African-Americans (Crocker & Luhtanen, 1990; Sidanius & Pratto, 1999). They are also in line with a study showing that individuals displaying higher levels of SDO were less likely to perceive outgroup members as intelligent as those displaying lower levels of SDO.

The hypothesized relationships between SDO and the three aspects of reactions to beneficiaries were in the anticipated direction, however, the factor means indicate that for both high- and low-SDO participants reactions were either neutral or slightly negative. The most positive reaction was found for willingness to work and socialize with beneficiaries. However, the mean of the factor was only slightly above the scale

midpoint indicating that participants were willing to interact with African-American beneficiaries only to a moderate degree. The mean for perceptions of beneficiaries' abilities was also only slightly above the scale midpoint indicating that, overall, participants perceived beneficiaries to be neither qualified nor unqualified to enter college. In contrast, the mean of emotional reactions to beneficiaries indicates that participants' affect toward beneficiaries was slightly negative.

Relatively little empirical evidence exists which specifically links SDO and affective, behavioral, or cognitive reactions to beneficiaries of affirmative action. Nevertheless, social dominance theory posits that out-group denigration may be used by members of dominant groups to maintain their superior position in the social hierarchy. This suggests that dominant group members may view advancements made by subordinate groups as zero-sum gains: gains made by the subordinate group result in losses for the dominant group. Indeed, SDO has been found to have a significant correlation with zero-sum beliefs regarding job competition (Esses, Dovidio, Jackson & Armstrong, 2001). Therefore, dominant group members' reactions to members of subordinate groups may be influenced by the degree to which subordinates are perceived to threaten the dominant groups' resources. Consistent with this statement, group dominance concerns have been found to motivate greater discrimination against outgroups (Sidanius & Pratto, 1999).

Dominant group members' reactions to subordinates may be even more pronounced when they are also beneficiaries of affirmative action. Because affirmative action is often believed to involve preferential treatment members of dominant social

groups may perceive beneficiaries as a threat to their dominant social position (Blanchard & Crosby, 1989). If this is the case, then it makes sense that participants would devalue beneficiaries' qualifications and abilities. Empirical evidence exists supporting this statement. Aquino and colleagues (2005) found that, for individuals high in SDO, African-Americans were negatively evaluated in terms of both their job performance and career progression. Moreover, performance expectations became even more negative when African-Americans were perceived to have benefitted from affirmative action. The results of the current study reinforce Aquino et al.'s findings. Participants displaying higher levels of SDO also had lower perceptions of beneficiaries' competence.

Legitimizing Myths

According to SDT, individual differences in social dominance orientation influence whether people adopt hierarchy-enhancing or hierarchy-attenuating legitimizing myths. The type of legitimizing myth people adopt influences their support for the social policies and practices that distribute positive social value within the social hierarchy. In practical terms, in order for a particular belief system to function as a legitimizing myth it must mediate the relationship between SDO and policy attitudes. The present study looked at two legitimizing myths: perceptions of race-based inequities and attitudes toward diversity. Both legitimizing myths can function as either hierarchy-enhancing or hierarchy-attenuating. We predicted that endorsement of these ideologies, in either form, would mediate the relationship between SDO and attitudes toward "soft" preferential treatment and beneficiaries of affirmative action. Specifically, we predicted that for those high in SDO perceptions of race-based inequities and attitudes toward

diversity would be adopted in their hierarchy-enhancing form. In contrast, for those low in SDO both ideologies would function as hierarchy-attenuating legitimizing myths. Moreover, whether individuals adopted the legitimizing ideologies in their hierarchy-enhancing or hierarchy-attenuating forms was expected to predict support for affirmative action and attitudes toward beneficiaries of affirmative action.

For the most part, the findings regarding legitimizing myths were consistent with the social dominance theory perspective. The legitimizing myths functioned as anticipated for both high- and low-SDO participants. In other words, based on whether the participants were high or low in SDO the legitimizing myths were adopted in their hierarchy-enhancing or hierarchy-attenuating form in order to justify participants' policy reactions. In terms of support for affirmative action, lower levels of social dominance orientation were associated with greater perceptions of race-based inequities and more positive attitudes toward diversity which, in turn, were associated with more positive attitudes toward affirmative action policies. Thus, low-SDO participants perceived greater inequities in educational opportunities and had more positive attitudes toward diversity in order to justify their support for the "soft" preferential treatment policy. The reverse was true for individuals who were more social dominance oriented. Higher levels of SDO were associated with fewer perceptions of race-based inequities and less positive attitudes toward diversity which was associated with more negative attitudes toward affirmative action policies. Therefore, high-SDO participants perceived fewer inequities in educational opportunities and had less positive attitudes toward diversity in order to rationalize their opposition to the "soft" preferential treatment policy.

Particularly noteworthy is the fact that endorsement of these legitimizing myths completely mediated the relationship between SDO and attitudes toward “soft” preferential treatment. However, this is likely due, at least in part, to the high degree of multicollinearity between SDO and attitudes toward diversity. Nonetheless, this finding supports SDT’s contention that individuals high in SDO are likely to adopt belief systems that rationalize their preference for social policies and practices that promote group inequality while those who are low in SDO tend to adopt attitudes that legitimize their preference for policies and practices that mitigate social inequality. In fact, in the current study, SDO almost completely overlapped with attitudes toward diversity. This suggests that measurement of SDO may need to incorporate attitudes toward diversity and that the two measures actually represented a single construct.

Interestingly, while perceptions of race-based inequities mediated the relationship between SDO and policy reactions it did not mediate the relationship between SDO and reactions to beneficiaries. Previous research suggests that reactions to policies may be based on relatively impersonal factors, like beliefs regarding the representation of African-Americans in higher education, while reactions to beneficiaries may be based on factors like personal characteristics of beneficiaries (Edwards et al., 2004). Therefore, it may be the case that somewhat different cognitive processes influence reactions to policies and beneficiaries. It appears that perceptions of inequitable opportunities may trigger one to make a determination regarding the need for affirmative action. However, it is unlikely that such a cognitive process would be necessary to determine one’s own willingness to interact with members of an outgroup or to make evaluations of others’

qualifications and abilities. Nevertheless, it does seem appropriate that generalized attitudes toward those who are different would have implications for reactions to beneficiaries of affirmative action. So while perceptions of inequities were used to justify either support or opposition to the “soft” preferential treatment policy beliefs regarding the representation of African-Americans in higher education were not relevant to participant reactions to beneficiaries of affirmative action.

Attitudes toward diversity mediated the relationships between SDO and two of the three dimensions of reactions to beneficiaries: willingness to work and socialize with beneficiaries and emotional reactions to beneficiaries. Thus, participants’ attitudes toward diversity functioned to justify both their willingness to work and socialize with beneficiaries and their emotional reactions to beneficiaries. Specifically, low-SDO participants had more positive attitudes toward diversity which led to greater willingness to interact with beneficiaries and more positive feelings toward beneficiaries. In contrast, high-SDO participants displayed less positive attitudes toward diversity, which led to them also having less positive reactions to beneficiaries.

Contrary to expectations, attitudes toward diversity did not mediate the relationship between social dominance orientation and perceptions of beneficiaries’ abilities. While attitudes toward diversity were influenced by SDO the proposed mediator did not have a significant impact on perceptions of beneficiaries’ abilities. SDO had only a direct effect on perceptions of beneficiaries’ abilities. This finding suggests that, unlike willingness to work and socialize with beneficiaries and affective reactions to beneficiaries, perceptions of beneficiaries’ abilities are not based on internal

characteristics of the individual. Instead, the lack of a mediating effect may indicate that separate cognitive processes drive the cognitive and affective and behavioral components of reactions to beneficiaries.

With the exception of perceptions of beneficiaries' abilities, the findings are consistent with a number of other studies that provide support for social dominance theory. Several studies have demonstrated that individuals who are more social dominance oriented tend to endorse hierarchy-enhancing legitimizing ideologies. For example, Pratto and colleagues (1994) found that individuals with a preference for group dominance were more likely to endorse ideologies like political-economic conservatism, cultural elitism and nationalism. A greater preference for group dominance was also found to be associated with endorsement of anti-female sexism. In contrast, Foels and Pappas (2004) found that lower levels of SDO were associated with endorsement of feminist ideology. High levels of SDO have been found to be associated with greater prejudice and stronger beliefs in stereotypes targeting African-Americans (Quist & Resendez, 2002). Two of the stereotypic beliefs examined in the study are especially relevant: beliefs regarding the intelligence of African-Americans and beliefs regarding whether African-Americans are hardworking or lazy. Greater endorsement of these beliefs among individuals who are more social dominance oriented is especially telling since such beliefs have previously and, to some extent, are currently maintained to justify the exclusion of African-Americans from higher education.

Previous research has also demonstrated the relationship between endorsement of legitimizing ideologies and social policy attitudes, specifically in reference to affirmative

action. While little, if any, empirical research specifically examines perceptions of race-based inequities the findings reinforce the results of previous studies investigating the impact of beliefs regarding equal opportunity on attitudes toward affirmative action. For example, Bobo and Kluegel (1993) found that perceived discrimination was a strong predictor of support for policies aimed at enhancing opportunities and incomes for African-Americans. Similarly, Kluegel and Smith (1983) found that a general belief that group-based disparities in opportunities exists was related to more favorable attitudes toward an affirmative action policy involving preferential treatment. However, for those who displayed a preference for inequality (high SDO) attitudes toward the policy were more negative, even when these individuals acknowledged that race-based disparities in opportunity do exist. While greater perceptions of inequities were associated with more positive attitudes toward the affirmative action policy, examination of the scale mean indicates that, overall, reactions to the policy were negative. According to Kravitz and colleagues (1997), this may be due to a belief among many White Americans that discrimination is a problem of the past and, therefore, there is no need for affirmative action. Alternatively, one may believe that race based disparities exist but oppose the policies for reasons irrelevant to Social Dominance, such as opposition to government intervention in business or rejection of the use of any criterion other than perceived competence as a factor in employment decisions.

Research suggests that a number of beliefs regarding affirmative action are adopted to justify either support for or opposition to the policy. Among these beliefs is a belief in the value of diversity. Valuing diversity has been found to be associated with

generalized support for affirmative action (Aberson & Haag, 2003). In addition, placing a greater value on diversity was also found to predict support for a preferential treatment policy similar to that examined in the present study.

While there is little research examining the impact of legitimizing myths on reactions to beneficiaries SDT suggests that, based on their level of SDO, individuals may adopt certain beliefs regarding group-based dominance to cognitively justify the subordinate status of subordinate groups, like African-Americans. This, in turn, may affect their evaluations of an African-American affirmative action beneficiary. As stated previously, individuals displaying higher levels of SDO are expected to adopt hierarchy-enhancing beliefs which should result in negative evaluations of beneficiaries. However, to the extent that individuals exhibit low levels of SDO and adopt hierarchy-attenuating beliefs evaluations of beneficiaries are expected to be more positive. The results supported this contention. Participants who were more social dominance oriented displayed more negative reactions to diversity which were associated with less willingness to interact with beneficiaries and negative affective reactions to beneficiaries. The reverse was true for participants who were less social dominance oriented. These individuals exhibited more positive reactions to diversity, as well as greater willingness to interact with beneficiaries and more positive affect.

Social dominance theory also posits that SDO predicts individuals' preference for members of various social groups. Specifically, high levels of SDO are associated with a preference for high status groups (Sidanius & Pratto, 1999). Therefore, it seems reasonable that individuals exhibiting lower levels of SDO would be more open to

diversity and, therefore, members of disadvantaged groups. Valuing diversity has been demonstrated to have an effect on social interactions between dominant and subordinate group members. Tropp and Bianchi (2006) found that, among Whites, valuing diversity had a significant positive relationship with interest in intergroup contact. Results of the present study also indicate that the degree to which individuals value diversity predicts willingness to interact with members of disadvantaged groups. Dominant group members who placed greater value on diversity were more willing to work and socialize with African-American beneficiaries of affirmative action. These findings underscore the importance of recognizing the value of diversity for reactions to both affirmative action policies and beneficiaries.

Limitations

An obvious limitation of this study is its sole reliance on survey measures. Use of surveys as the sole method of data collection may raise several concerns. First, the use of self-report measures of attitudes and behaviors may often be associated with a tendency for participants to give socially desirable responses. Rather than responding to the survey items in a truthful manner, participants may respond in such a way as to represent themselves favorably. To the extent that this occurs, the validity of the study is compromised. Due to the potentially controversial nature of the topics addressed, the present study would seem to be particularly susceptible to socially desirable responding. However, these effects should be mitigated, to some degree, by the anonymity of participants' responses, as well as the fact that there is no audience since the surveys were completed via the internet. Furthermore, the relatively modest levels of support for

affirmative action policies suggest that respondents did not feel compelled to provide overly positive evaluations of this controversial policy.

Use of survey measures may also limit the external validity of the study. This is because the surveys used in the present study artificially limited information on beneficiaries and organizations to just data regarding affirmative action. In real-world situations individuals would likely have additional information about beneficiaries and the organization which may impact attitudes toward affirmative action policies and/or beneficiaries.

Another possible limitation of the study is that reactions to “soft” preferential treatment may not generalize to other forms of affirmative action. It is possible that reactions to other forms of affirmative action may be quite different than the reactions found in the present study. For instance, reactions to hard preferential treatment or quota systems are often significantly more negative, and reactions to recruiting minorities are often more positive (Kravitz et al., 1997). This is not a major concern, however, since a similar form of affirmative action has been upheld by the Supreme Court. Therefore, stronger forms of affirmative action are unlikely to be adopted by institutions on a voluntary basis. In addition, reactions to weaker forms of affirmative action tend to be more positive (Kravitz & Platania, 1993; Kravitz & Klineberg, 2000). Thus, reactions to the affirmative action policy used in the study should be fairly realistic.

A limitation of the study associated with SDT is that social dominance orientation is a one-dimensional construct. Basically, SDO assumes that social hierarchies are based on only one characteristic, such as race or gender. In reality, social hierarchies may be

determined by an interaction between various characteristics. For example, young black females are likely to occupy a much different position in the social hierarchy than old white males. In addition, it may be possible to have high SDO based on a characteristic such as race and low SDO based on a characteristic such as income or intelligence. It may be the case that a more comprehensive understanding of SDO would stem from examining individual differences in SDO as a function of these different characteristics. Clearly, more research is needed to fully understand the combined effects of these different demographic characteristics on social dominance and subsequent attitudes.

A final limitation of the study concerns the use of structural equation modeling. While there are several advantages associated with this statistical technique a major limitation is its inability to prove the soundness of one model over another. Because the “fit” of the model is determined by the degree to which the model implied relationships reproduce the relationships observed in the data it is possible to have several different models that fit the data equally well. Furthermore, the fit is determined based on characteristics of one existing dataset, and the model that works with one dataset may not generalize to a new dataset.

Suggestions for Future Research

The results and limitations of the study suggest a number of avenues for future research. First, an investigation using a more heterogeneous sample would benefit the examination of the effect of type of academic major (hierarchy-attenuating v. hierarchy-enhancing) on SDO and, subsequently, attitudes toward affirmative action in higher education. Many affirmative action programs in higher education are specific to

particular academic majors (i.e., recruiting minorities and women into engineering). Therefore, more research is needed to provide a better understanding of how such policies may be evaluated by non-beneficiaries, as well as, the implications of these evaluations for attitudes toward beneficiaries.

Finally, further empirical research is needed to fully understand gender differences in racial and policy attitudes. The findings from the present study indicated that female participants were no more likely than male participants to endorse the idea of affirmative action. This result is incongruent with social dominance theory which suggests that, because of their disadvantaged status, white females should display more positive attitudes toward policies intended to promote social equality (Pratto et al., 1994). However, social identity theory (Tajfel & Turner, 1986) posits that people have several “selves” that correspond to their membership in any number of social groups. Different social contexts may trigger the salience of one “self” over another. Since responses were more negative for measures that explicitly referenced African-Americans it may be the case that these measures triggered participants’ “white” identity rather than their “female” identity.

Conclusion

In conclusion, while several of the predictions derived from SDT were supported by the results some unexpected findings seem to suggest that SDT does not explain all of the underlying mechanisms driving reactions to affirmative action policies and beneficiaries. For example, inconsistent with previous research few differences were observed between male and female participants (Kravitz & Platania; Pratto et al., 1994).

All of the participants study psychology, a hierarchy-attenuating academic major, which may account for the lack of gender differences found for SDO and attitudes toward diversity (Dambrun et al., 2002). However, this does not seem to be a plausible explanation for the lack of gender differences in attitudes toward a “soft” preferential treatment policy.

In addition, despite the fact that the sample as a whole exhibited low levels of SDO and positive attitudes toward diversity, reactions to both policies and beneficiaries were fairly negative. Curiously, reactions were most negative on those measures which explicitly reference African-Americans: perceptions of inequities, affective reactions to beneficiaries, and attitudes toward “soft” preferential treatment. These findings suggest that self-interest, racism, or both may have influenced participants’ reactions. Furthermore, it may be the case that perceptions of inequities and attitudes toward affirmative action are impacted by race neutral beliefs such as resistance to government enforced regulation of admission decisions or race neutral erroneous beliefs about the representation of African Americans in higher education.

APPENDICES

Appendix A

Description of “Soft” Preferential Treatment

Description of Soft Preferential Treatment

Preferential treatment is a form of affirmative action. In preferential treatment, college applicants are evaluated in terms of their qualifications. The most qualified applicant is admitted. However, in a situation where an African-American and a White applicant are equally qualified, the African-American applicant will be selected.

Preferential treatment may be voluntarily adopted if a college or university has evidence that African-Americans are underrepresented in the student body. In addition, institutions may adopt preferential treatment to encourage the entry of African-Americans into a given discipline or course of study.

The scales given below indicate possible ways to describe preferential treatment. Please indicate your attitude toward preferential treatment coding in the appropriate number.

Appendix B

Measures

Social Dominance Orientation

1. Some groups of people are simply inferior to other groups.
2. In getting what you want, it is sometimes necessary to use force against other groups.
3. It is okay if some groups have more of a chance in life than others.
4. To get ahead in life, it is sometimes necessary to step on other groups.
5. If certain groups stayed in their place, we would have fewer problems.
6. It is probably a good thing that certain groups are at the top and other groups are at the bottom.
7. Inferior groups should stay in their place.
8. Sometimes other groups must be kept in their place.
9. It would be good if groups could be equal.
10. Group equality should be our ideal.
11. All groups should be given an equal chance in life.
12. We should do what we can to equalize conditions for different groups.
13. Increased social equality is something we should strive for.
14. We would have fewer problems if we treated people more equally.
15. We should strive to make incomes as equal as possible.
16. No one group should dominate in society.

Perceptions of Race-Based Inequities

1. Race plays an important role in determining who has the opportunity to attend college.
2. The high cost of higher education prevents many qualified African-American students from attending college.
3. White high school graduates are more likely than African-American high school graduates to attend college because they are better prepared academically.
4. Many academically qualified African-American students are unable to attend college because it is too expensive.
5. More White high school graduates attend college than African-American high school graduates.
6. White students have more opportunities to attend college than African-American students.
7. Academically qualified White students are more likely to attend prestigious universities than academically qualified African-American students.
8. African-American high school students tend to be recruited by less selective colleges and universities than White high school students.

9. African-American students often face obstacles that prevent them from attending college.

Attitudes Toward Diversity Scale

1. I support university efforts to increase diversity.
2. I believe diversity enriches my college education.
3. Increased diversity will help Clemson become a top university.
4. I believe that racial diversity is beneficial to students.
5. I believe multicultural course requirements do little to improve race relations.
6. Learning about different cultures is an important part of my college education.
7. Contact with individuals whose background is different from my own is an essential part of my college education.
8. Having cross-racial friendships is not more difficult than having same-sex friendships.

Attitudes Toward “Soft” Preferential Treatment Scale

1. The idea that affirmative action admits too many students who have a low chance of academic success is a misconception.
2. All colleges and universities should have an affirmative action program.
3. Federal law should be changed to make affirmative action illegal.
4. It is reasonable for colleges and universities to give special consideration for admission to minorities.
5. I believe the Supreme Court was wise to uphold affirmative action in college and university admissions.
6. Overall, affirmative action is a good idea.
7. I support the use of affirmative action in college and university admissions.

Willingness to Work and Socialize with Beneficiaries

1. I would be less friendly to a student who was admitted under affirmative action.
2. If I knew a student was admitted under affirmative action, I would be less likely to help them with classwork.
3. I would have no interest in socializing with a student I knew was admitted under affirmative action.
4. I would be less likely to be pleasant to a fellow student if I thought they were admitted through affirmative action.
5. Socially, I would feel less comfortable around a student admitted under affirmative action than around other students.
6. I would prefer not to be in a work-group with a student admitted under an affirmative action policy.
7. I would feel resentful toward an affirmative action beneficiary if I had to work in a group with them.

Need to Belong

1. Overall, my group memberships have a great deal to do with how I feel about myself.
2. The social groups I belong to are an important reflection of who I am.
3. The social groups I belong to are important to my sense of what kind of person I am.
4. In general, belonging to social groups is an important part of my self-image.

Perceptions of Beneficiaries' Abilities

Directions: Think about an African-American student admitted to Clemson University through an affirmative action program consisting of “soft” preferential treatment. Relative to a student who was not admitted to Clemson through an affirmative action program, rate the following:

1. How qualified you believe this individual is to attend college.
2. How well-equipped this individual is to complete course-related assignments, based on their qualifications.
3. How well you expect this individual to perform in college.
4. How effective you think this individual will be in completing assignments on time.
5. How effective you think this individual will be in completing assignments with a high degree of accuracy.
6. How likely would you be to seek help with course assignments from this individual.
7. In relation to other students, how much effort you expect this individual to exert in completing course assignments.
8. How much of the requisite knowledge needed to complete assignments do you expect this individual to possess?
9. How likely you think it is that this individual will graduate in four years.
10. How likely you think it is that this individual will graduate with honors.
11. Rate how likely you think it is that this individual will attend graduate school.
12. How likely you think it is that this individual will graduate with a GPA of 3.0 or higher.

Indicate the degree to which you feel the following reactions to those who benefit from an affirmative action policy that entails “soft” preferential treatment. Responses range from “1” for not at all to “7” for extreme.

Affective Reactions to Beneficiaries

1. Hostility
2. Admiration
3. Disliking
4. Acceptance
5. Superiority
6. Affection
7. Disdain
8. Approval
9. Hatred
10. Sympathy
11. Rejection
12. Warmth

Appendix C

Descriptive Statistics for Factor Indicators

VARIABLE	GENDER	SDO1	SDO2	SDO4	SDO5
MEAN	1.5896	2.4223	2.8287	2.5521	2.6494
STANDARD DEV.	.4929	1.7126	1.6293	1.6058	1.5429
VARIABLE	SDO7	SDO8	SDO9	SDO10	SDO11
MEAN	2.2510	2.7171	5.7450	5.6534	6.2107
STANDARD DEV.	1.3464	1.5861	1.2739	1.3036	1.0462
VARIABLE	SDO12	SDO13	SDO14	SDO16	POI3
MEAN	5.4746	5.6920	5.5628	5.1137	3.8207
STANDARD DEV.	1.3431	1.2281	1.4014	1.5373	1.6887
VARIABLE	POI5	POI6	POI7	POI8	POI9
MEAN	3.2112	3.8312	4.2995	3.5100	4.2948
STANDARD DEV.	1.6992	1.6682	1.5369	1.5320	1.6201
VARIABLE	ATD1	ATD2	ATD3	ATD4	ATD5
MEAN	5.5170	5.4542	5.2145	5.5518	4.5866
STANDARD DEV.	1.2696	1.3449	1.4276	1.2245	1.5539
VARIABLE	ATD6	BELONG1	BELONG2	BELONG3	BELONG4
MEAN	5.0159	4.6214	5.0598	4.8367	4.5454
STANDARD DEV.	1.4028	1.4188	1.3388	1.4090	1.5574
VARIABLE	SOFT1	SOFT2	SOFT3	SOFT4	SOFT5
MEAN	4.1713	3.1713	3.9084	3.4422	3.6147
STANDARD DEV.	1.4389	1.5819	1.7238	1.6946	1.6140
VARIABLE	SOFT6	SOFT7	WWS1	WWS2	WWS3
MEAN	3.5100	3.3865	5.7035	5.7809	5.9262
STANDARD DEV.	1.6355	1.6487	1.5836	1.4899	1.3486

VARIABLE	WWS4	WWS5	WWS7	POBA1	POBA2
MEAN	5.8606	5.8211	5.6285	4.6141	4.6980
STANDARD DEV.	1.3915	1.3632	1.4905	1.2670	1.2433
VARIABLE	POBA3	POBA4	POBA5	POBA6	POBA7
MEAN	4.3561	4.8369	4.6155	4.0400	4.3636
STANDARD DEV.	1.1107	1.3919	1.3988	1.4535	1.2488
VARIABLE	POBA8	POBA9	POBA10	POBA11	POBA12
MEAN	3.0851	4.6089	3.7130	4.2074	4.2709
STANDARD DEV.	.7663	1.4472	1.4274	1.4442	1.3502
VARIABLE	AFFECT1	AFFECT3	AFFECT4	AFFECT5	AFFECT6
MEAN	5.4167	5.7052	4.7922	5.5697	3.3533
STANDARD DEV.	1.4912	1.3888	1.4600	1.4499	1.6213
VARIABLE	AFFECT7	AFFECT8	AFFECT9	AFFECT11	AFFECT12
MEAN	5.5008	4.1086	6.0916	5.8845	3.7610
STANDARD DEV.	1.5084	1.5648	1.3607	1.3471	1.5332

Appendix D

Standardized Factor Loadings for Final Measurement Model

Indicator	OEQ	GBD	POI	ATD	Soft	WWS	POBA	Aff_N	Aff_P
SDO 1	.691								
SDO 2	.604								
SDO 4	.661								
SDO 5	.797								
SDO 7	.793								
SDO 8	.812								
SDO 9		.707							
SDO 10		.733							
SDO 11		.663							
SDO 12		.854							
SDO 13		.939							
SDO 14		.709							
SDO 16		.620							
POI 3			.659						
POI 5			.701						
POI 6			.508						
POI 7			.809						
POI 8			.620						
POI 9			.748						
ATD 1				.734					
ATD 2				.775					
ATD 3				.774					
ATD 4				.766					
ATD 5				.542					
ATD 6				.611					
Soft 1					.532				
Soft 2					.859				
Soft 3					.596				
Soft 4					.783				
Soft 5					.870				
Soft 6					.919				
Soft 7					.950				
WWS 1						.874			
WWS 2						.922			
WWS 3						.948			
WWS 4						.932			
WWS 5						.898			
WWS 6						.808			
WWS 7						.829			
POBA 1							.796		
POBA 2							.797		
POBA 3							.832		
POBA 4							.733		
POBA 5							.797		
POBA 6							.717		
POBA 7							.426		
POBA 8							.651		

POBA 9							.799		
POBA 10							.817		
POBA 11							.828		
POBA 12							.852		
Affect 1								.830	
Affect 3								.880	
Affect 5								.426	
Affect 7								.759	
Affect 9								.787	
Affect 11								.844	
Affect 4									.792
Affect 6									.573
Affect 8									.844
Affect 12									.652

SDO = Social dominance orientation

OEQ = Opposition to equality dimension of SDO

GBD = Group based dominance dimension of SDO

POI = Perceptions of inequities

ATD = Attitudes toward diversity

Soft = Attitudes toward “soft” preferential treatment

WWS = Willingness to work/socialize with beneficiaries

POBA = Perceptions of beneficiaries’ abilities

Affect = Affective reactions to beneficiaries

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