TESTING THE EFFECTS OF AFFIRMATIVE ACTION RATIONALE ON ATTITUDES TOWARDS AFFIRMATIVE ACTION PROGRAMS AND THEIR BENEFICIARIES

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Abstract

TESTING THE EFFECTS OF AFFIRMATIVE ACTION RATIONALE

ON ATTITUDES TOWARDS

AFFIRMATIVE ACTION PROGRAMS AND THEIR BENEFICIARIES

by

Corinne Baron Donovan

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Beneficiaries of affirmative action programs are often stereotyped and stigmatized (Kravitz et al., 1997). Research on stereotypes shows that when two *cognitive processes*, sub-grouping (many groups created based on similarities and differences) and sub-typing (distinct groups of stereotype confirming and disconfirming individuals), are elicited they differentially alter the extent to which individuals stereotype target groups and attitudes towards those groups (Mauer, Rothbart & Park, 1995; Baron-Donovan, Wiener, Arnot & Felix, 2003). The purpose of the current research was to replicate prior findings about the influence of cognitive processing and also determine if it influences evaluations of affirmative action beneficiaries (AABs). Additionally, two legally justified rationales for affirmative action programs (AAPs) were tested to see if they elicit these cognitive processes. A *compensation* rationale for AAPs (making up for past harms) was predicted to cause an "us vs. them" mentality, eliciting sub-typing, while a *diversity* rationale (valuing differences in individual thinking, personality styles, speech patterns, ethnicity, national origin, religion, age, gender, and experiences*)* was predicted to elicit sub-grouping. Sub-grouping was expected to reduce stereotype strength and enhance

attitudes towards AAPs and AABs. Results from Study 1, a laboratory study where affirmative action new hires were reviewed and sorted, showed that different rationales produced differences in cognitive processing in the predicted direction, but there were no differences between conditions for either stereotype or attitude measures. Results from Study 2, an on-line evaluation of newly hired employees conducted with full time working adults, showed that hire status (affirmative action or not) influenced anticipated career outcomes, but not attitudes or stereotyping. However, no differences were found between the 3 rationale conditions (compensation, diversity, or none) on any dependent variables (anticipated career outcomes, attitudes, or stereotyping). Results revealed that the AAP rationale manipulations were weak and may have contributed to the lack of differences on the outcome measures in both studies. Finally, organizational diversity climate (individual perceptions of organizational diversity culture) was examined as an exploratory variable in Study 2, and was not related to any of the stereotype, attitude, or evaluation measures.

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Chapter I. Introduction

Testing the Effects of Affirmative Action Rationale on Attitudes Towards Affirmative Action Programs and Their Beneficiaries

The use of affirmative action (acting positively and affirmatively to implement the policy of nondiscrimination, Sykes, 1995) has helped reduce the unequal treatment of various groups of disadvantaged individuals. Positive outcomes of affirmative action programs (AAPs) include greater value for diversity (Jackson, 1992; EEOC, 1997), greater exposure for minorities in business (Catalyst, 2004; KPMG, 2002), and less overt racism (Schuman, Steeh, Bobo & Krysan, 1997). Unfortunately, AAPs may also contribute to unintended negative consequences in the workplace. First, AAPs are often perceived as unfair and may foster reverse discrimination (Kravitz et al., 1997; Kravitz & Klineberg, 2000). Second, minority group members are often stereotyped and stigmatized as incompetent as a result of AAP use despite strong qualifications (Heilman & Alcott, 2001; Heilman, Block, & Stathatos, 1997; Northcraft & Martin, 1982). The use of this stereotype has had a negative influence on employment outcomes such as performance evaluations and recommendations for affirmative action beneficiaries (AABs) (Dovidio & Gaertner, 2000; Heilman, et al., 1997).

The negative stereotype depicting AABs as incompetent is robust and pervasive. While it is possible to control the use of such stereotypes when individuals are fully attentive to the situation, the ability to control stereotypes is limited when individuals are pre-occupied (Bargh, 1997; Devine, 1989). This suggests that the best way to reduce prejudice that results from using stereotypes is to actually change the stereotype.

Several researchers offer theories on how to alter negative stereotypes. Allport's (1954) intergroup contact hypothesis suggests that increasing the amount of information about individuals from a stereotyped group will reduce the use of that stereotype. A recent meta-analysis provides empirical evidence to support this hypothesis (Pettigrew & Tropp, 2000). Rothbart and John (1985) proposed the possibility that the intergroup contact hypothesis works through the use of disconfirming information. They argue that stereotypes are attenuated when minority and majority group members interact and learn details about each other that contradict or disconfirm stereotypic assumptions. Mauer, Rothbart and Park (1995) suggest that the disconfirmation of stereotypic assumptions occurs through a cognitive process called *sub-grouping* (forming multiple distinct groups based on unique similarities and differences). Alternatively, they claim that stereotypes are maintained when disconfirming information is not considered, specifically through a cognitive process referred to as *sub-typing* (two groups separated based on stereotype confirming and disconfirming traits). In an empirical investigation, Mauer, Rothbart and Park (1995) instructed participants to use either a sub-grouping or sub-typing method to categorize stereotyped individuals, and found that these two processes did indeed differentially impact stereotypes as well as subsequent attitudes. Baron-Donovan et al. (2003) found that these cognitive processes had varying effects on stereotypes relating to affirmative action. One purpose of the current study was to replicate this finding.

An additional way to change affirmative action stereotypes explored in these studies for the first time was altering the rationale used to justify the affirmative action program (AAP). Historically, compensation (making up for past discrimination) was the primary justification used for AAPs. The exclusive use of compensation as a rationale

was largely based on its status as a legally justifiable rationale *(Adarand v. Pena, 1997).* However, more recently, the Supreme Court of the U.S. accepted diversity as an additional legal justification for AAPs (*Gratz v. Bollinger*, 2003; *Grutter v. Bollinger,* 2003). We argued that these justifications would produce the same cognitive processes (sub-grouping and sub-typing) as those produced by Maurer et al.'s (1995) independent variable: instructions on how to organize information. For example, a *compensation* rationale (making up for past harms) for AAPs was predicted to cause an "us vs. them" mentality, eliciting sub-typing, which would retain the stereotype category and thus would not change attitudes towards AAPs. A *diversity* rationale (valuing differences in individual thinking, personality styles, speech patterns, ethnicity, national origin, religion, age, gender, and experiences*)* was predicted to elicit sub-grouping, which would weaken the stereotype and produce more positive attitudes towards AAPs. Thus, another purpose of this study was to investigate whether the rationales used to justify AAPs would affect the way individuals mentally organize information (sub-grouping, sub-typing) and whether this would impact attitudes and evaluations of AABs and AAPs.

To investigate these questions, psychological research on stereotypes as well as pertinent case law regarding affirmative action was reviewed. First, the positive and negative consequences of AAPs were explored. Next, studies that examine the nature and tenacity of stereotypes towards AAPs and AABs were reviewed. Following this, potential interventions for overriding stereotypes were proposed and investigated. In particular, instructions to organize and AAP rationales were discussed as interventions that could reduce stereotypes related to affirmative action. Finally, two studies examined

these interventions and their impact on cognitive processing and resulting attitudes and evaluations towards AABs and AAPs were described.

Chapter II. Background and Literature Review

Executive order 11246, issued in 1965, required that all government agencies and those organizations that held contracts with them take "affirmative action" to "implement a policy of nondiscrimination" (Sykes, 1995), toward minorities and other groups that may have been historically discriminated against. Affirmative action is also required in federal civil service organizations, all branches of the U.S. military, and in some state and local government agencies (Crosby, 2004). While many people perceive affirmative action as a process that ignores skills and abilities (Kravitz at al., 1997), in actuality preferences are only given to disadvantaged individuals when skills and abilities are sufficient for the position of interest. Quotas and strong preferential treatment (defined as giving preferences to minority group members when their qualifications are inferior to non-minority group members) are illegal based on Supreme Court rulings (Harrison, Kravitz, Mayer, Leslie & Lev-Arey, 2006; Spann, 2000).

For the purpose of this paper, affirmative action is operationally defined as follows: "Affirmative action provides people with diverse backgrounds based upon race, ethnicity, gender, or other underrepresented characteristics with special consideration in employment, education, and contracting decisions. Affirmative action officers faced with two similarly qualified applicants will choose the diversity over the typical candidate." Advocates (Ferguson, 1995; Issacharoff, 1998) and critics of affirmative action (Cahn, 2002; Kull, 1992) share the desire to investigate outcomes of such programs. The following section reviews both positive and negative outcomes of affirmative action in order to allow the reader to consider how this hotly debated policy influences individuals from a psychological perspective.

Positive Consequences of Affirmative Action

Affirmative action was intended to help minorities and women gain access to positions formerly denied to them. It was also intended to help increase the frequency with which underrepresented groups enter professional and non-professional careers (Vasquez & Jones, 2006). Those groups for whom affirmative action programs were designed (i.e., minorities and women) have shown improvements in intended areas such as increased representation and greater exposure for women and minorities in business. Additionally, U.S. organizations have shown greater value for diversity. These changes are discussed below.

Enhanced Value for Diversity

Businesses have recognized the importance of diversity and its impact on organizational, financial, and social processes. Diverse employees enhance organizational capability by meeting the needs of a variety of clients, by working with a broad array of business partners, and by enabling competition in global markets through enhanced comprehension and/or respect for a variety of people and cultures (Caudron, 1998; Jackson, 1992). There is evidence that businesses recognize the need for diversity by providing training, managing for diversity, and creating task forces to study it. Some businesses have created Diversity Chief Officer positions at the executive level. Even the stock market has been affected by how organizations treat the issue of diversity. For example, Fitzpatrick (1997) described how shares in Texaco dropped by $5 shortly after a top executive was quoted as having *biased and poor reactions* to the increasing needs of minority employees.

Additional evidence suggesting the increased valued for diversity within U.S. businesses is provided by the Equal Employment Opportunity Commission (EEOC), which regularly monitors employment statistics of women and minorities in the private sector to determine if organizations are in compliance with EEO obligations and diversity objectives. The commission also seeks identification of noteworthy, creative, or innovative organizations in this domain. In December 1997, the EEOC issued a *best practices* report on their findings with regard to diversity. The report pointed out that many organziations took EEO seriously and were worthy of recognition, such that "a number of them had done outstanding work in formulating comprehensive EEO and diversity strategies. Further, these companies impressed the Task Force with their ability to integrate workplace EEO and diversity into their basic business plans" (EEOC, 1997, Section II b).

The EEOC reported that diversity and EEO have become "not just programs, nor even separate departments, but rather a way of life that is integral to all business activities" (EEOC, 1997, Executive Summary, section D) for many leading U.S. organizations. The large number of applicants vying for inclusion in such EEOC reports provides evidence that affirmative action has had a notable impact on U.S. businesses. Furthermore, these actions suggest that corporations take the matter seriously and that equal employment opportunity has become a major business objective.

Greater Exposure for Women and Minorities

In addition to enhanced respect toward women and minorities in the business community, government assistance has increased minority representation (Tuch, Sigelman & Mac Donald, 1999; Schuman, Steeh, Bobo & Krysan, 1997). A report

commissioned by the Department of Justice (DoJ) in regard to diversity in law firms (KPMG, 2002) stated that the DoJ itself has an attorney workforce that is more diverse (38% female, 15% minority) than the U. S. legal labor pool (30% female, 12% minority). Further, reports commissioned and published by the EEOC provide evidence of increased representation of women and minorities in non-government occupations and careers. A report on the legal work force states that the percentage of female attorneys in large legal service firms has increased from 14.4% in 1975 to 40.3% in 2002 (EEOC, 2003), and the number of African-American attorneys increased from 2.3% in 1975 to 4.4% in 2002.

A report evaluating trends for large companies (more than 1000 employees) in the broadcasting industry revealed that minority (Black, Hispanic, and Asian) employment rates during 1995-2000 exceeded employment rates reported in the 1990 census in three out of four occupational groups (EEOC, no date available). Increases are reported for minorities in the technician category (from 23% to 30.6%), the professional category (from 17.1% to 22%) and the category of officials and managers (from 14.96% to 16.5%). While these data specifically pertain to the broadcast and legal fields, they may be indicators of shifting employment demographics in public and private industry overall in the U.S.

While it is difficult to conclude that affirmative action programs directly cause increases in minority and female employment, they are likely to be a significant factor. For example, Catalyst, a non-profit research firm dedicated to studying the role of women in the workplace, reported an increase in female representation among Fortune 500 companies dedicated to promoting female workers in senior roles. In 1996 women represented approximately 10 percent of senior roles in Fortune 500s; in 2002 this figure

increased to 15.7 percent. Furthermore, a study of over 350 Fortune 500 companies revealed that organizations with a higher percentage of women in top management had better financial performance based on two important outcome measures: return on equity (ROE) and total return to shareholders (TRS). Catalyst found that organizations with the highest percentage of women in their top management teams had a 35 percent higher ROE and a 34 percent higher TRS than organizations with the lowest percentage of women in top management. The Catalyst study also investigated financial performance by industry and found that in five industries the organizations with the highest percentage of women at the top level had higher ROE than those with the lowest percentage of women at that level (Catalyst, 2004).

These studies show that organizations dedicated to advancement and promotion of women have attained this goal as well as financial success. Additionally, these reports support the assertion that affirmative action has helped bring about greater exposure for women and minorities in the workplace. Unfortunately, these reports do not represent the entire picture in terms of consequences of affirmative action. The next section discusses some negative outcomes that may be partially attributable to such programs.

Negative Consequences of Affirmative Action Programs

While a primary goal of affirmative action was to create equal representation for minority groups in the workplace, some negative consequences have emerged that are unintended. First, some believe that AAPs foster reverse discrimination. Second, minority group members often suffer from low self-efficacy and are often stigmatized as incompetent as a result of benefiting from AAPs. The following sections discuss these issues further.

Non-minorities Claim Reverse Discrimination

Many claim that affirmative action causes reverse discrimination (Chang, 1996). Reverse discrimination refers to discrimination targeted toward majority group members (primarily White males) rather than minority group members. Discrimination targeted toward majority group members is opposite to that which occurred throughout U.S. history. Critics of affirmative action suggest that it is a form of legalized discrimination, targeted toward majority group members (Cahn, 2002; Kull, 1992). Researchers suggest that even minority group members disregard AAPs because they oppose the American values of equality and meritocracy (Chang, 1996; Kravitz et al., 1997). Chang (1996) claims that when AAPs are used, racial group identity and other group differences are heightened, which maintains and fosters barriers between groups.

The belief that AAPs are a form of reverse discrimination may cause many non-minorities to maintain negative attitudes towards affirmative action plans as well as those who benefit from them (Chang, 1996; Kravitz et al., 1997). For example, many non-minorities believe that using affirmative action is unfair and discriminatory (Kravitz & Klineberg, 2000), while others suggest that use of affirmative action may increase prejudice toward minorities (James, Brief, Dietz & Cohen, 2001). A comprehensive literature review conducted by Kravitz et al. in 1997 emphasized White employees' displeasure with AAPs. After reviewing laboratory and field studies conducted over a period of 15 years, Kravitz et al. concluded that perceptions of fairness are closely related to attitudes toward affirmative action. They found that the more AAPs use demographic status to support preferential treatment, the less it is perceived as fair by employees (Heilman, McCullough & Gilbert, 1996; Nacoste, 1985; Singer, 1992). Several studies

revealed that fairness ratings of selection procedures increase with the quality of the candidates selected (Nacoste & Lehman, 1987; Singer, 1992). Furthermore, when employees believe that a selection procedure is unfair, they are less likely to support it or the organization that uses it (James et al, 2001). Finally, studies suggest that non-minorities are critical of affirmative action programs when they are supportive of preferential treatment, believing that such programs limit their own opportunities (James et al., 2001; Kravitz et al., 1997).

These studies show that the use of affirmative action has directly resulted in animosity and displeasure toward those who benefit from such programs. Feelings of resentment are strong among non-minorities who often believe that affirmative action plans are a form of reverse discrimination. The next section will review another negative consequence resulting from the use of AAPs.

Minorities Suffer from Stereotyping and a Stigma of Incompetence

Research has shown that AABs are increasingly stigmatized. For example, AABs are thought of as incompetent and are believed to only acquire positions and promotions because of preferential treatment (Heilman & Alcott, 2001; Heilman et al., 1997; Nacoste & Lehman, 1987; Northcraft & Martin, 1982). However, as discussed at the beginning of this section, legally, AAPs may only use preferential treatment when the individuals under review are equally qualified.

Research also shows that when people are selected based on preferential treatment alone (i.e., when they are chosen based on some demographic variable) rather than skill or ability, they doubt their own ability (Heilman, Rivero, & Brett, 1991; Heilman, Simon, & Reper, 1987 Nacoste, 1987). In addition to self-doubt, other individuals not involved

in the decision assume preferential treatment is used without any consideration of skills and ability when the selection criteria are not explicitly stated (Harrison et al., 2006; Kravitz et al, 1997). In such situations, the use of affirmative action results in a stigma that AABs are incompetent, regardless of qualifications (Heilman & Alcott, 2001; Heilman & Blader, 2001; Heilman, et al., 1997; Northcraft & Martin, 1982). Several studies provide evidence that the stigma of incompetence is especially true for tokens, defined as an underrepresented sub-group comprised of less than 15% of the group as a whole (Kanfer, 1978; Nieman & Dovidio, 1998). Heilman et al. (1997) suggest that employees may believe that if a minority co-worker were sufficiently qualified, assistance in the form of affirmative action would not be necessary. However, these and other researchers found that the stigma of incompetence persisted even after information concerning the ability of the employee hired via affirmative action was made public (Heilman, et al. 1997; Nacoste & Lehman, 1987). In Heilman et al. (1997) managers evaluated hypothetical employees, supposedly hired by the organization 6 months earlier. Performance information was provided and manipulated through a 6-month review from the hypothetical employee's supervisor. Managers continued to evaluate AAP hires as less competent than non AAP hires and recommended smaller salary increases unless disconfirming information was provided and it was *unequivocally* positive (Heilman, et al. 1997). Therefore, the use of affirmative action may possibly increase representation of women and minorities; however, it does not eliminate negative assumptions about these individuals unless extensive positive information is provided. Furthermore, Heilman, et al.'s (1997) results show that unless overwhelming evidence is provided for AAP hires, they are discriminated against at work in regard to compensation.

As shown, the stigma of incompetence for affirmative action beneficiaries is strong. However, this is not the only problem with this negative stereotype. The next section introduces an additional issue related to stereotypes that exacerbates the situation for AABs.

Automatic stereotype activation. When we cannot inhibit the use of stereotypes, they become activated and are used to make judgments (Devine, 1989). Stereotypes are automatically activated in certain situations (Bargh, 1997; Devine, 1989; Dovidio & Gaertner, 2000) and can have a detrimental effect on judgments because they prevent us from accessing and applying detailed individuating information necessary to arrive at correct decisions (Bargh, 1997; Devine, 1989). It is important to understand how this occurs, especially when thinking about judgments that occur in organizations, such as hiring decisions, performance evaluations, as well promotion and reward decisions.

Bargh (1997) offers a comprehensive background on the process of automatic cognitive activation of stereotypes. He argues that much of what people do socially is automatic. He states that "as with all preconscious processes, what determines whether the stereotype becomes automatically activated…is whether it was frequently and consistently active in the past in the presence of relevant social group features" (Bargh, 1997, p. 14). Therefore, individuals will automatically access stereotypes when they hold strong negative or positive associations about the group and encounter members of that group. This affective association influences individuals by leading to biased behavior as a result of the automatic negative or positive attitudes/ evaluations evoked in a situation where the stereotype is salient. As the following evidence shows, automatic affective evaluations occur even when the stereotype is not salient.

A pair of studies by Devine (1989) shows how stereotypes are pervasive and may influence our decisions at times when we are not aware of it. Participants in Devine's first study (1989) reported negative attributes of Blacks (poor, aggressive, lazy, low intelligence, and criminal behavior) among their trait descriptions of the Black cultural stereotype, regardless of bias level (as measured by the Modern Racism Scale). This finding suggests that regardless of prejudice level, people are aware of negative attributes about the Black cultural stereotype.

Devine (1989) conducted a follow-up study in which she manipulated unconscious priming of the Black stereotype. Undergraduate students who scored in the top and bottom third on the Modern Racism Scale pretest returned to participate in a second study. Participants engaged in a vigilance-priming task in which they reacted to stereotype confirming and neutral words. The Black cultural stereotype was primed by manipulating the percentage of stereotype confirming words provided to participants (80% or 20% stereotype confirming words respectively). Following the prime, participants read a paragraph describing ambiguously hostile behaviors of a hypothetical person (Donald, race not identified), formed an impression, and then evaluated him on a series of trait scales. Although hostile behavior is part of the Black racial stereotype, the priming task did not use any words directly related to hostility. Devine (1989) found that all participants (high and low prejudice) in the strong prime condition (80% stereotype confirming) rated Donald as more hostile than those in the low prime condition (20% stereotype confirming).

This finding demonstrates that when people are unable to override the effects of stereotypic thoughts, in this case because they were unconsciously primed, more negative

evaluations are made. This suggests that activating this racial stereotype stimulates a cognitive link between Blacks and hostility, thus explaining why participants rated ambiguously hostile behaviors as more aggressive when stereotype-confirming words were more strongly primed. In real-life situations, activation of negative stereotypes may occur automatically as people encounter environmental cues in the presence of a person from the stereotyped group. This result also suggests that even when people do not deliberately use stereotypes to make decisions, knowledge of the social stereotype can be activated and lead to prejudiced evaluations. This has major implications for individuals in the workplace who fall into a negatively stereotyped group; they may receive negative evaluations from others that are not consciously intended.

Neurological studies related to race based recognition provide corroborating evidence that there are automatic and uncontrolled reactions from individuals towards other races (Eberhardt, 2005). For example, several studies show greater amygdala activity (indicating emotional responses) and other physiological reactions (e.g., heart rate, skin sweats, increased brow activity, and decreased cheek activity associated with negative affect) when individuals from one race viewed faces from other races (Cunningham et al., 2004; Vanman, Paul, Ito, & Miller, 1997; Wheeler & Fiske, 2005). However, these differences may be moderated by the situation. For example, Wheeler and Fiske (2005) found differences in brain activity between racial targets only when participants were asked to socially categorize the targets, and not when they were asked to conduct a visual search task or an individuation task, suggesting that the task has an influence on how and when stereotypic information is accessed. Based on a review of the neuroscience findings, Eberhardt (2005) suggested that such differences may not be

attributable to bias, but "may simply reflect the social knowledge that Blacks are often associated with negative affect" (p. 184). This supports Devine's (1989) results that knowledge of social stereotypes influence cognitive processing.

Other studies suggest that different forms of prejudice exist. Dovidio and Gaertner (2000) discussed one specific form of automatic prejudice, *aversive racism*, that only occurs when the situation is ambiguous (when a politically correct response is not obvious) and when other factors may be blamed for the negative behavior. Dovidio and colleagues suggest that "because aversive racists consciously endorse egalitarian value and deny their negative feelings about Blacks, they will not discriminate directly and openly…they will discriminate, often unintentionally, when their behavior can be justified on the basis of some factor other than race" (Dovidio, Gaertner, Kawakami & Hodson, 2002, p. 90). These researchers present a series of studies supporting this theory. The claim that aversive racists are unaware of their attitudes and behavior is the most alarming aspect of this type of racism. Individuals maintain a positive, non-prejudiced self-image while simultaneously behave in a prejudiced manner.

Unlike in prior eras, prejudice currently operates as a subtle yet powerful force. It occurs automatically, implicitly, and subconsciously (Bargh, 1997; Devine, 1989; Dovidio & Gaertner, 2000; Weitz, 1972). As Devine's studies (1989) show, when stereotypes are automatically activated they are applied at a sub-conscious level and may result in prejudicial or discriminatory behavior. The studies reviewed above show that stereotypes are unavoidable and that they are often applied to interpersonal judgments when individuals are not fully attentive to the task at hand. The question, therefore, is how to address the negative outcomes that result from the negative stereotype of AABs?

Attempting to eliminate the use of stereotypes may be considered a useless effort since they enhance our cognitive efficiency (Fiske, 1980; Fiske & Taylor, 1984). Therefore, a more constructive use of time would be to alter the stereotype itself. The following section considers this strategy.

Altering Stereotypes

Recent studies provide evidence that automatic activation of cognitive structures, including stereotypes, is malleable (Dasgupta & Greenwald, 2001; Kawakami, Dovidio, Moll, Hermsen, & Russin, 2000; Pettigrew, 1986; Rudman, Ashmore & Gary, 2001). Several techniques used by researchers attempt to eliminate the detrimental effects of both controlled and automatic activation of stereotypes (Allport, 1954; Dasgupta & Greenwald, 2001; Kawakami, et al., 2000; Pettigrew, 1986; Rudman, et al., 2001). While techniques such as priming and training have been successful, there are practical limitations to their use outside controlled, laboratory situations. For example, Dasgupta and Greenwald (2001) sought to change the social context for participants using photographs of admired Black Americans and disliked White Americans as a prime to manipulate the type and frequency of exposure to this stereotype group with the intention of altering automatic intergroup attitudes. While this manipulation was successful at altering attitudes, it would be difficult to implement these contextual elements (type and frequency of exposure) in organizations where pictures of celebrities would be perceived as out of place and irrelevant. Allport's (1954) intergroup contact hypothesis focuses on increased interaction between groups (intergroup contact) as a way to reduce stereotypes and the negative outcomes that result from their use. This technique is important for organizations that have diverse groups of employees, business partners, and clients and

want to reduce conflict and tension between these groups. Therefore, the following section focuses on intergroup interaction as a method for altering stereotypes.

Intergroup contact hypothesis. Allport (1954) offered the *intergroup contact hypothesis* as one method to alter individual stereotypes. Based largely on the assumption that people are only superficially prejudiced, the theory claims that if Whites interact with minorities they will realize many stereotypic assumptions are incorrect, causing a conflict between normative beliefs and their own experience. To reduce this conflict, the theory suggests that people will begin to change their attitudes to more closely reflect their experiences, thus reducing stereotypes and resulting prejudice (Allport, 1954; Katz, 1991). Allport (1954) identified four situational constraints that help maximize the effect of "contact and acquaintance." He suggested that the contact environment should " lead to a sense of equality in social status, should occur in ordinary purposeful pursuits, avoid artificiality, and, if possible, enjoy the sanction of the community in which they occur" (Allport, 1954, p. 454).

Results from a meta-analysis of intergroup contact studies show that intergroup contact is negatively related to prejudice (Pettigrew & Tropp, 2000). The authors report an overall weighted mean estimate of effect sizes from 203 studies as a Cohen's d of -.42. Pettigrew and Tropp (2000) report this significant effect size across a diverse set of participants, target groups, measures and situations. Included in this group of studies are those that are considered to be the most robust tests of the contact hypothesis; participants *assigned* to groups that would not typically have contact with other groups. Pettigrew and Tropp explain that there is little chance that such individuals will have low prejudice scores since these individuals are not motivated or pre-disposed toward interacting with

an out-group member. Using individuals who were not motivated to work with diverse groups prevents a potential bottom-out effect on measures of prejudice change since those who naturally seek intergroup contact are less likely to change already low prejudice attitudes. The mean effect size of intergroup contact and prejudice for participants *assigned* to an intergroup setting was a d = -.72 for 30 studies and -.69 for 44 samples, which are among the largest effect sizes reported in the analysis, suggesting that those who are naturally most resistant to intergroup contact are those who have the greatest attitude change. Additionally, studies conducted with the most rigor (i.e., those with control groups, with multiple items measuring the dependent variable [with high reliability, alpha > .70], and those in which intergroup contact was observed as opposed to self-reported), yielded larger effects sizes between intergroup contact and prejudice. Most importantly, studies that occurred in organizational settings had the largest effects, followed by those in laboratories, and mixed settings. This suggests that studies that were conducted in natural settings were more effective than those in the lab, an important consideration for organizations who are contemplating use of intergroup contact.

Overall, this meta-analysis provides evidence that increased interaction between groups generally results in less prejudiced attitudes. This evidence is so strong, in fact, that the American Psychological Association (APA) uses it as the basis of empirical support for affirmative action in legal cases. They have filed amicus briefs in support of affirmative action in the *Grazt v. Bollinger* (2003), *Grutter v. Bollinger* (2003), and *Comfort v. Lynn* (2004) cases (Greer, 2005). In these briefs, the APA suggests that AAPs are one way to increase interaction between racial groups and thus decrease stereotypes and prejudice. Since the intergroup contact hypotheses has substantial empirical support

backing it, it is the theoretical rationale used for the current investigation. Several researchers expand the hypothesis, offering more detailed explanation of how it works. This is reviewed below.

Expanding the Intergroup Contact Hypothesis

Theoretical and empirical work provided by several researchers supports and expands the *intergroup contact theory*. For example, Fiske (2000) suggests that paying attention to detailed information about individuals helps alter perceptions; moving from "category based to attribute based" perceptions. She suggests that when individuals carefully scrutinize others, it is rare to find a complete match of an individual to a group stereotype. Thus, she claims that attention promotes individuation (Fiske, 2000; Fiske, Xu, Cuddy & Glick, 1999).

Rothbart and John (1985) offered a slightly different model of how intergroup contact works. They proposed a two-phase process which alters stereotypes based on disconfirming information. They suggest that "1) stereotypic beliefs themselves are susceptible to disconfirmation; intergroup contact provides experiences that disconfirm the stereotype, and 2) those experiences become associated with the superordinate stereotypic category" (Rothbart & John, 1985, p.82). Thus, stereotypes are attenuated under cross-group interactions that disconfirm the stereotype.

Maurer et al. (1995) continued developing Rothbart and John's model, pointing out that how individuals categorize information leads to two distinct processes by which subordinate groups are represented: sub-grouping and sub-typing. Conceptually, sub-grouping and sub-typing are two different processes used to categorize information about subordinate groups that are part of a larger stereotyped group. Each subordinate group,

individually and in combination with other subordinate groups, influences views of the superordinate group (i.e., stereotype). For example, suppose you were asked to recall a particular class you taught where students worked together on a joint project. Your description of the class as a whole would be influenced by your impressions of those students as individuals as well as by their group performance and association. Similarly, the number of individuals and the content of subordinate groups influence the impression of the larger, superordinate group (stereotype). When the number of people in each group and the content of the groups are changed from distinct stereotype confirming and disconfirming groups to smaller groups distinguished by features other than stereotype confirming traits, the perception of the stereotype overall will change.

When sub-*grouping*, people partition subordinate groups into homogeneous categories within which exemplars show maximum similarity and between which they show maximum dissimilarity. Mauer et al. (1995) argue that sub-*grouping* results in the perception of increased variability among individual group members, which breaks down boundaries of the stereotype by providing more information about those within the group. This process highlights the frequency of different characteristics within the group. Sub-grouping forces people to focus on detailed information about individuals, which expands the characterizations of the original group. The stereotype may still exist, however, there are additional ways to characterize the group, thus reducing negative perceptions of it. For example, stereotypic traits of AABs are primarily negative and include traits such as lazy, hostile, and unskilled. When people sub-group individuals from this stereotype, they are likely to use a combination of both stereotype confirming (negative) and some stereotype disconfirming (positive) traits together, fostering a less typical or stereotypic

conception of the group overall (whatever typical is for the stereotype of interest). For example, one might describe an AAB as unskilled in one area, but also as creative in another area. When thinking about a positively stereotyped group (e.g. Asians are skilled in math), sub-grouping would lead to less focus on math skills as the dominant categorization criteria.

On the other hand, sub-*typing* is a process in which subordinate groups are formed such that disconfirming exemplars are separated from the stereotype so that the structure and meaning of the superordinate group and its stereotype remain intact. The groups formed are based on one's current stereotype and do not change the composition of the superordinate group. Sub-*typing*, is hypothesized to retain stereotypic boundaries by focusing on distinguishing characteristics of the stereotype (e.g. those that maintain versus those that oppose it). Sub-typing maintains the stereotype by isolating disconfirming examples as ones that "do not fit the mold". Therefore, Maurer et al. (1995) argue that preservation of the original stereotype ultimately preserves original stereotypic perceptions of the group. Thinking about the AAB stereotype again, individuals are likely to describe an individual as either stereotype confirming (lazy, hostile, or unskilled) or stereotype disconfirming (creative or mature), but would not use both types of traits to describe one particular person when sub-typing.

Maurer et al. (1995) provide evidence to support their assertions about these two cognitive processes. They used instructions to organize information about 16 target individuals (in the form of index cards) as the independent variable with three conditions: restricted instructions, unrestricted instructions, and a control condition (no instructions). The restricted instructions condition asked participants to create two groups, those who

confirm and disconfirm perceptions of the group overall. The unrestricted instructions condition asked participants to create as many piles as they would like based on similarities and differences among individuals in the group. A third condition served as the control, in which participants were asked to review the individuals and form a general impression of the group of 16 individuals on index cards.

The study used volunteers in a Big Brothers program as the target stereotype. This stereotype depicts Big Brother volunteers as social organizers, academic leaders, and having supportive parents (mostly positive). The researchers provided participants with descriptions of 16 individuals (on index cards) who represented a larger group of 100 Big Brothers. Most individual descriptions (12 of the 16 cards) had a combination of three stereotype confirming statements and two stereotype-disconfirming statements. The remaining four cards had stereotype-disconfirming statements only. Four cards were used for the stereotype disconfirming group to provide at least one card with opposing traits to each of the four stereotype confirming groups.

As predicted, Maurer et al. (1995) found that participants in the unrestricted instructions condition (who created an average of 4.4 groups) rated the target group members as less homogenous and less stereotypic of the Big Brothers stereotype than did those in the restricted instructions condition (who created 2 piles: stereotype confirmers and disconfirmers). Scores from the control condition fell in the middle of these two groups; they did not differ from either group on homogeneity or stereotypicality ratings. This study showed that instructions for how to organize information influenced cognitive processing of the superordinate stereotype group (i.e., how the category is defined) as evidenced by the number of groups created. This study also supported the notion “that

the perceived atypicality of discrepant individuals, a marker of where the category boundaries are placed, predicts perceptions of a stereotyped group" (p.821). Providing numerous details combined with explicit instructions on how to organize information altered the cognitive process, which influenced the underlying stereotype or categorization of the group as a whole.

Baron-Donovan et al., (2003) replicated these results using affirmative action hires as the target stereotyped group. A pilot study identified both the positive and negative traits associated with the stereotype of individuals hired through affirmative action. Content analysis of these lists yielded approximately 20 negative traits, from which the top three frequently listed were lazy (53%), hostile/negative (44%), and unskilled (40%). The top two positive traits listed were creative and mature. While participants did list positive traits, negative traits were listed about 3 times more often than the positive traits. Also, since we specifically asked for positive traits, these descriptors should not be considered as an ecologically valid description of AABs overall.

Based on these traits, 16 cards were created for use in a follow-up study; 12 cards had three negative and two positive statements (highlighting the specific traits above) while the remaining four cards had only positive statements. Participants were told that these 16 cards represented a larger set of 100 individuals hired by a large, multinational organization, through affirmative action. Similar to the results of Maurer et al., instructions on how to organize information influenced cognitive processing (number and content of the piles of cards) and the target stereotype. The unrestricted instructions condition sub-grouped the cards, creating an average of over 4 groups based on multiple,

non-stereotypic traits (determined through content analysis). They also rated the affirmative action hires as less similar to each other and less typical than the overall group of affirmative action new-hires than did those in the restricted instructions condition (Baron-Donovan et al., 2003). The restricted instructions condition created approximately 2 piles of cards of stereotype confirmers and disconfirmers (determined through content analysis). This supports the assertion that instructions on how to organize influenced the cognitive process and strength of the stereotype of the targeted group for the stereotyped groups assessed.

In addition, Baron-Donovan et al. (2003) measured attitudes towards affirmative action programs after measuring the strength of the stereotype. We found that those in the unrestricted instructions condition had more positive attitudes towards affirmative action programs than those in the control condition, in which participants were not given instructions to sort, but rather, to form a general impression of the group. Participants in the restricted instructions condition did not differ from the control condition or the unrestricted instructions condition, but the composite, standardized means were trending in the predicted direction (restricted instructions condition $M = .09$, unrestricted instructions condition $M = .28$ with higher numbers indicating more positive attitudes towards affirmative action), and may have reached significance with a larger sample. In a mediation analysis, we found that attitudes towards affirmative action were completely mediated by the strength of the stereotype since the relationship between instructions to organize and attitudes was not significant once the stereotype measures were entered into the model as a covariate.

Altering Stereotypes Through Rationale

Research shows that justifications for hiring and promotions in the workplace matter (Heilman et al., 1997; Harrison et al., 2006; Kravitz et al., 1997). The procedures surrounding implementation of AAPs have been shown to influence perceptions of fairness (Kravitz et al., 1997). When affirmative action is perceived as using strong preferences towards minorities (decisions based solely or primarily on demographic status, not ability), it is also perceived as highly biased. However, when it is perceived as merit-based (ability to perform required job skills is priority before demographic status), ratings of fairness are high. In the Heilman et al. (1997) study, justifications for salary recommendations for AABs were important; the recommendations were influenced by evidence of successful performance and that the performance was clearly attributed to the AAB of interest.

Similarly, how AAPs are implemented in the workplace is likely to influence perceptions of such programs. For example, different reasons for implementing affirmative action may influence perceptions of it for all employees. The two reasons most widely used to justify the use of affirmative action are *compensation* and *diversity* (Lehmann, 2003; Perloff & Bryant, 2000). Using only one of these rationales, as opposed to the other, is likely to result in different reactions toward affirmative action (Kidder et al., 2004; Kravitz et al., 1997; Perloff et al., 2000). Research has repeatedly established that individuals are opposed to affirmative action when it is seen as preferential in nature as opposed to merit-based (Harrison et al., 2006; Kravitz et al., 1997; Kravitz & Klineberg, 2000; Son Hing et al., 2002). Such opposition may be partially due to the long-standing use of compensation as a rationale to justify its use.

Therefore, the use of diversity as an alternative rationale for AAPs has become more prevalent in recent years (Crosby, Iyer, Clayton, & Downing, 2003).

Relevant case law dictates what rationale can be used based on the organizational type and situation. For many years organizations have been restricted to using compensation as the only legal justification for affirmative action. Recently, the Supreme Court accepted diversity as a legal rationale for AAPs for the first time, but only in educational settings. Diversity is an extremely different concept from compensation, seeking differences in employees to enhance the workplace, and may result in less opposition to affirmative action. Legislation and case law, however, influence how affirmative action is manifested in the real world. The following section highlights important background information about the legality of using affirmative action.

Affirmative Action Programs: Origin and Case Law

After affirmative action was instituted in 1965, U.S. citizens began to challenge its constitutionality. Laws created to endorse affirmative action have been reversed in certain situations by judicial decisions, sometimes reflecting public opinion. As a result of these legal changes, the situational requirements necessary for affirmative action to be accepted are unclear. The judicial system helps interpret the law when groups or individuals question it. If the specific issue and facts of a case can be applied to other legal cases, the resulting court decision is regarded as legislative fact. Legislative fact extends the law in question, often providing clarification to vague language or providing further explanation as to the "spirit of the law" (Monahan & Walker, 1998). This section will review the origin of affirmative action as well as the current status of case law which dictates how and when affirmative action is acceptable.

History of Affirmative Action Programs

Many believe that the Civil Rights Act of 1964 was the legal impetus for AAPs. While Title VII of the 1964 Act prohibits "employment discrimination based on race, color, religion, sex, or national origin" (EEOC, 2001), affirmative action was not instituted until President Johnson issued Executive Order 11246 in 1965. Ten years prior to Johnson's EO, Truman expressed his belief that government intervention was necessary, suggesting that the government should not only forbid discrimination in employment, but should also "act positively and affirmatively to implement the policy of nondiscrimination…"(Sykes, 1995). Affirmative action was originally mandated only for federal agencies and for those who obtained contracts for work with the government (Lyndon B. Johnson, Executive Order 11246, 1965). However, to show support for minorities, many private organizations implemented AAPs as well. As a result of using such programs, non-minorities began filing lawsuits claiming reverse discrimination. Supreme Court findings from such cases continue to shape the way affirmative action is implemented today.

Case Law Related to Affirmative Action Programs

A number of court cases have examined the need for and legality of AAPs in the public and private sectors. Most have challenged their use based on a claim of preferential treatment in the implementation of AAPs. This section reviews court cases that protested the use of AAPs, suggesting that they are a form of reverse discrimination.

In recent years, the Supreme Court raised standards for equal protection (14th amendment) and due process (5th amendment) for AAPs. For example, in *Adarand v. Pena* (1995) the Court adopted a review of *strict scrutiny* for AAPs in the workplace.

Adarand, a White owner of a highway construction company, filed a complaint claiming violation of his equal rights under the fifth and fourteenth amendments, after "allegedly losing a subcontract on a highway construction project [in Colorado] to a certified competitor as a result of a subcontractor compensation clause" (Adarand, 1995). The trial judge found in favor of Pena (one of several federal officials named in the suit), ruling that this particular government program involving subcontracting clauses was serving a compelling government interest of affirmative action through compensation to minorities. On appeal, the tenth circuit court affirmed the decision. However, the U. S. Supreme Court accepted the case and overturned the lower courts in 1997, stating, "all programs imposing race-based classifications must be adjudicated under a strict scrutiny standard" (Adarand, 1997). For a program to satisfy a review of *strict scrutiny*, the Court outlined two requirements: the program must 1) serve a compelling state interest, and 2) be narrowly tailored to meet that interest. Compensation was accepted as the justification for affirmative action in this case, however, the AAP in this case was not narrowly tailored to meet the interest of compensation. The Supreme Court ruled to remand the case to the lower courts and be reconsidered with the newer review standard of strict scrutiny.

The finding from *Adarand* (1997) severely limited prior findings from *United Steelworkers v. Weber* (1979) and *Metro Broadcasting v. FCC* (1990) regarding the use of compensation as a compelling state interest. When considering the *Weber* case (1979), the Court had used a review of intermediate scrutiny to review affirmative action, a more lenient process than the one now required based on *Adarand (1997)*. Similarly, in *Metro (1990)*, the court required that affirmative action served an *important* government

objective, not a compelling interest. Additionally, requiring a program to be *narrowly tailored* is intended to limit the extent to which the program is applied. For example, recent rulings require organizations to provide evidence of the particular discrimination within the organization as a means to justify the AAP in question (Robinson, Seydel & Douglas, 1998). This change requires a "substantial increase in the burden of justifying many federal preferential programs" (Robinson et al.,1998, p. 107), and eliminates justifying such programs as satisfying a general diversity objective. Therefore, *Adarand* had a tremendous impact on the ability of organizations to display evidence of how their programs are narrowly tailored to address the compelling interest of either compensation or diversity.

The requirement of a compelling state interest has predominantly been satisfied with a justification of *compensation* (making up for past harms) toward minorities. However, two recent cases filed against the University of Michigan (one against the law school, one against the undergraduate institution) used a different justification. These cases both claimed that individuals were rejected based on racial discrimination (*Grutter v. Bollinger*, 2002; *Gratz v. Bollinger*, 2003). In these cases, the defendant used *diversity* as the compelling state interest. Barbara Grutter, a White resident of Michigan, filed a suit against the University, its dean, Lee Bolinger, and the president of the University, claiming that she was rejected from the University of Michigan Law School (UMLS) based on racial discrimination (*Grutter v. Bollinger*, 2002). A similar case was filed against the University on behalf of two White undergraduate applicants, denied access in 1995 and 1997 (*Gratz v. Bollinger*, 2003). In both cases, diversity was accepted as a *compelling state interest*, satisfying the first requirement of strict scrutiny. However,

only the law school satisfied the second requirement of strict scrutiny (i.e., *narrowly tailored)*, resulting in a split decision to uphold the use of affirmative action in the Law School's application process, but not in the undergraduate application process. Notably, the UMLS stated that it wished to obtain "educational benefits that flow from student body diversity" (*Grutter*, 2003). This was the first decision since *Bakke* (1978) to recognize diversity as a legal rationale for affirmative action. Justice O'Conner delivered the majority opinion, stating that "the law school's assessment that diversity will, in fact, yield educational benefits is substantiated by respondents and their amici" (*Grutter*, 2003). In addition to compensation for past discrimination, diversity is now acceptable as a justification (compelling state interest).

In this case, the law school's use of race in selection decisions was narrowly tailored to meet the interest of diversity satisfying the second requirement in the review of strict scrutiny that is required when reviewing the legality of AAPs. The undergraduate admissions process was not narrowly tailored because it placed too much emphasis on race/ethnicity in admissions and did not consider each individual's entire application to assess their diversity (*Gratz*, 2003; *Grutter*, 2003). The UMLS admissions policy sought to enroll a "critical mass of minority students," as opposed to "some specified percentage of a particular group merely because of its race or ethnic origin" *(Grutter*, 2002). Justice O'Conner stated that to be narrowly tailored, "a race-conscious admissions program cannot use a quota system" and that "truly individualized consideration demands that race be used in a flexible, non-mechanical way" (*Grutter*, 2003).

The main difference between the Law school and undergraduate programs was procedural; the undergraduate program did not "assess all of the qualities an individual possesses" (*California v. Bakke*, 1978), but rather focused on race as the main aspect of diversity, assigning a specific number of points to race. Therefore, the court accepted diversity as a legal justification for AAPs only when race is *one of many factors* considered. Some suggest this focus on multiple unique characteristics of employees/applicants fosters a sense of empowerment and trust (Perloff & Bryant, 2000; Walker & Hanson, 1992).

The above review of case law highlights that there are two rationales for affirmative action that are legally acceptable (compensation and diversity). The use of these rationales is expected to have an impact on how affirmative action is implemented in the workplace and how beneficiaries and non-beneficiaries perceive it. For example, in Kidder et al. (2004) although diversity and compensation are not compared, there was greater backlash from White employees when a diversity program was implemented *as a reaction to the government's call for affirmative action* than when the program was implemented *as a competitive business strategy*. A compensation rationale for AAPs may create an "us vs. them" mentality for employees due to the nature of how privileges are awarded. For example, White males may see that privileges are not awarded to "us" non-minorities, but to "them" minorities, who have historically been discriminated against (Walker & Hanson, 1992). Additionally, Kravitz and Klineberg (2000) provide evidence that Whites, Blacks, and Hispanics had different perceptions about discrimination in the workplace and the need for affirmative action. Compensation as a justification, therefore, is hypothesized to maintain stereotypes and facilitate division of

minorities into sub-types (confirmers and disconfirmers) based on the distinct perception of minorities as a type of out-group (Fiske, 2000; Kidder et al., 2004; Kravitz et al., 2000; Walker et al., 1992). Alternatively, diversity is a more inclusive term and can potentially apply to many more people in regard to many different characteristics (e.g., religion, geographical background, personality, etc.). Therefore, diversity is likely to foster the sub-grouping process because it emphasizes the unique attributes of all individuals, not just one characteristic (such as race). It should therefore facilitate integration of detailed information about the targeted individuals, thus altering the stereotype strength and ultimately attitudes and evaluations.

Diversity and compensation are the rationales typically used in support of AAPs, and they are both accepted from a legal standpoint. Therefore, this dissertation examined the effects of affirmative action rationales on stereotypes of AABs, attitudes toward AAPs, and intended behavior toward AABs. Ultimately, the goal of this research was to determine how these two legally defensible rationales influence attitudes and behavior of managers and colleagues in the workplace towards those hired through AAP. As described earlier, discrimination towards affirmative action beneficiaries continues to be a problem in terms of work outcomes such as perceptions of incompetence (or lack thereof) as well as lower salary increases (Heilman et al., 1997; Nacoste & Lehman, 1987). Therefore, this research used two studies to investigate antecedents of behavior including attitudes, evaluations, stereotype and the cognitive processes used to determine each of these.

The research reviewed provides evidence that stereotypes (Maurer et al., 1995) as well as attitudes can be altered through different instructions on how to organize

information (Baron-Donovan et al., 2003). Specifically, when individuals are given two different instructions on how to organize information about a stereotyped group, different cognitive processes (sub-grouping and sub-typing) occur that differentially alter the strength of the stereotype toward a targeted group (Mauer et al., 1995; Baron-Donovan et al., 2003). The current study investigated if sub-grouping and sub-typing cognitive processes were elicited as a result of using the different AAP rationales. The rationales were expected to influence cognitive processing, which was expected to influence the strength of stereotype and attitudes towards AAPs. The diversity rationale was expected to foster sub-grouping because it emphasized the unique attributes of all individuals, not just one characteristic (such as race). Therefore, the diversity rationale was expected to facilitate integration of detailed information about the targeted individuals, thus altering the stereotype strength and ultimately attitudes. The compensation rationale was predicted to foster an "us v. them" categorization, preventing individuals from processing detailed information about the targets and preventing changes in stereotype and attitudes. This study also sought to replicate results from prior studies; instructions to organize information were predicted to influence cognitive processing, stereotype strength, and attitudes towards affirmative action and its beneficiaries.

It should be made clear that the "cognitive processing" variable had two different uses in this study. In prior work, this variable served as a manipulation check to determine if participants followed instructions on how to organize. However, in this study it is being used to assess how participants cognitively process the individuals. It was used throughout Study 1 as a dependent variable in order to allow comparisons across conditions.

A pair of studies examined the stated predictions. Study 1 investigated the influences of AAP rationales and instructions to organize on cognitive processing by comparing the influence of instructions and AAP rationales on cognitive processing, strength of stereotype, and attitudes toward AAPs and AABs. Study 2 examined the use of AAP rationales outside a laboratory setting to see if they would continue to influence stereotyping and attitudes. Additionally, anticipated career outcomes were measured in Study 2 to determine how AAP rationales would influence them. Learning how to prevent bias in career outcomes of AABs is another main focus of this research, and thus anticipated career outcomes were added as an additional measure in Study 2.

Chapter III. Study 1

The purpose of Study 1 was to investigate the influence of AAP rationale and instructions on how to organize information about groups on cognitive processing, strength of stereotype, and attitudes (see Figure 1). Cognitive processing and strength of stereotype were expected to mediate the influence of AAP rationales and instructions to organize on attitudes toward AAPs and AABs. The AAP rationales were also compared with the instructions to organize information to see if they produced the same results on the three outcome variables.

To test these predictions, five conditions were used; two types of instructions to organize (with or without restrictions), two types of AAP rationales (diversity and compensation) and a control condition which has neither instructions nor an AAP rationale. This provided a replication of prior findings for instructions on how to organize (Mauer et al., 1995; Baron-Donovan et al., 2003), as well as a comparison between instructions and AAP rationales. When compared, the diversity rationale and non-restricted instructions conditions were expected to elicit the sub-grouping process, a weaker stereotype, and more positive attitudes. The compensation rationale, instructions with restrictions, and control conditions were expected to elicit the sub-typing process, thus maintaining the stereotype and negative attitudes.

The diversity rationale was expected to foster sub-grouping because it emphasized the unique attributes of all individuals; it was expected to facilitate integration of detailed information about the targeted individuals, thus altering the stereotype strength and ultimately attitudes. The non-restricted instruction condition was expected to lead to sub-grouping because it should allow participants to look at the details of each individual

target as a basis for forming groups. This process should emphasize unique attributes, alter (weaken) the stereotype, and ultimately enhance attitudes towards AABs and AAPs.

The compensation rationale was predicted to foster an "us v. them" categorization, preventing individuals from processing detailed information about the targets and preventing changes in stereotype and attitudes. Similarly, restricted instructions on how to organize information was expected to maintain the stereotype because individuals were asked to create groups based on stereotype confirming and disconfirming traits, thus focusing attention on these general categories and not on individual details. The sub-typing process should allow the stereotype to remain intact because no new subordinate groups would be created which would alter the superordinate stereotype group. The control condition was not expected to produce changes on the stereotype since participants in this condition did not sort the cards at all. Therefore they would not create any new subordinate groups, and as a result their stereotype and attitudes towards AABs and AAPs would remain intact.

It should be made clear that the "cognitive processing" variable had two different uses in this study. For the restricted and non-restricted instructions conditions, this variable served as a manipulation check to determine if participants followed instructions or not. For the diversity and compensation rationale conditions, this variable served as a dependent measure to assess the type of cognitive process used to categorize individuals. It is understood that these were two different types of outcomes with different meanings based on the condition under examination. However, cognitive processing was referred to as a dependent measure throughout Study 1 in order to allow comparisons across conditions.

Participants were asked to review information about a company and its affirmative action policy and then review 16 newly hired employees (all through affirmative action). They were asked to group the new hires for placement into jobs (with instructions to organize with restrictions, non-restricted instructions to organize, compensation rationale, diversity rationale, or no instructions and no rationale). Cognitive processing, strength of the stereotype of affirmative action hires, and attitudes towards affirmative action programs and beneficiaries were measured. The following specific hypotheses were tested:

> *H1: The compensation rationale would lead to sub-typing, a stronger stereotype and more negative attitudes compared to the diversity rationale, which would lead to sub-grouping, a weaker stereotype, and more positive attitudes.*
>
> *H2: Instructions with restrictions on how to group information would lead to sub-typing (cognitive processing), a stronger stereotype and a more negative attitude compared to instructions without restrictions on how to group information, which would lead to sub-grouping (cognitive processing), a weaker stereotype, and more positive attitudes.*
>
> *H3: The compensation rationale, restricted instructions on how to organize, and control group (who did not receive a rationale or instructions on how to organize) would not differ on the outcome measures (cognitive processing, strength of stereotype, and attitudes).*
>
> *H4: The diversity rationale and non-restricted instructions on how to organize would not differ on the outcome measures (cognitive processing, strength of stereotype, and attitudes).*
>
> *H5: The combined conditions from H4 will lead to a weaker stereotype, more positive attitudes, and sub-grouping compared to H3.*
>
> *H6: Cognitive processing and strength of stereotype would mediate the relationship between instructions to organize and attitudes, as well as between affirmative action rationale and attitudes.*

Method

Participants and Setting

Psychology students at a large, urban college in the Northeastern region of the United States participated in Study 1. Similar to the procedure from Word, Zanna and Cooper (1974), students were recruited to participate in a study testing "Strategies in Selection and Assessment." The ostensible aim of the study was to investigate student preparation for more realistic business tasks and practice with selection procedures.

Students received an hour of course credit in exchange for participation; 137 students participated, satisfying part of their general psychology research participation requirement (1 hour credit). The study took place during the fall 2005 semester. Students ranged in age from 18 to 36 with an average age of 20 years old. The study sample was 52% (71) female and was ethnically diverse with 34% (47) White, 31% (43) Asian/ Pacific Islander, 17% (23) Hispanic/ Latino, 8% (11) African American, and 7% (10) other. An overwhelming majority of the students, 96% (131), reported working at the time of the study; 83% (106) of those worked part-time.

Design

Study 1 was a one way between subject design with 5 conditions; two different instructions to organize (*instructions with restrictions, non-restricted instructions),* two AAP rationales *(compensation rationale, diversity rationale)*, and a control group (no instructions or rationale) as the independent variable. Based on a power analysis, with power equal to at least 90% and a moderate effect size, a sample of approximately 100 participants was sufficient to find moderate effects with a minimum of 20 participants in each condition. This power analysis ensured that there would be a sufficient sample size to detect actual differences between groups, but not too large for results to be simply due to chance (Glass & Hopkins, 1996; Tabachnick & Fidell, 2001). There were 25

participants in the control condition, 25 in the *instructions with restrictions* condition, 27 in the *non-restricted instruction* condition, 28 in the compensation rationale condition, and 32 in the diversity rationale condition.

Materials

Hypothetical organization description. This statement consisted of an organizational description and mission statement based on actual statements from companies currently in the private sector. Participants read a brief paragraph describing the company's policy on hiring and promotion through affirmative action. The rationales for using affirmative action appeared after the company description. Those in the two affirmative action rationale conditions received either the compensation or diversity rationale, while the three other groups (two instructions to organize and the control group) did not receive a rationale, just the company description and mission statement (see Appendix A for three versions of company description, affirmative action statement, and affirmative action rationales in the Hypothetical Organization Description).

New-hire index cards. Information about 16 black male new hires was provided to participants on index cards, one per card. Each card contained 5 sentences describing the individual with various traits. Based on Maurer et al. (1995), 12 of the 16 cards had two positive traits that were stereotype disconfirming (creative and mature from Baron-Donovan et al, 2003 pilot study), as well as three negative traits that were stereotype confirming (lazy, hostile, unskilled from Baron-Donovan et al., 2003) so that these 12 cards were predominantly stereotype confirming, as depicted here.

Mr. S shows he is creative in his ideas for new sales promotions (stereotype *dis*confirming).

Mr. S rarely meets deadlines (stereotype confirming).

Mr. S often misses meetings because he forgets to check his calendar (stereotype confirming).

Mr. S shows he is mature by being well mannered when top executives visit his department. (stereotype *dis*confirming)
Mr. S boasts that he is the best negotiator at work (stereotype confirming).

The remaining 4 cards were also described with 5 stereotype statements, but all were disconfirming traits in which three positive traits were opposite to the negative ones used on the other cards (e.g., energetic, skilled, pleasant) as well as creative and mature as depicted here.

Mr. K shows interest when his coworkers make suggestions (*pleasant*).
Mr. K schedules enough time to follow up with people (*energetic*).
Mr. K shows he is creative in the way he dresses.
Mr. K shows he is mature by filing his taxes independently.
Mr. K's quarterly reports are usually accurate (*skilled*).

Therefore, 12 of the 16 cards were primarily negative/ stereotype confirming (with some positive/ stereotype disconfirming information) and the remaining 4 were all positive/ stereotype disconfirming (see Appendix B for a chart of these descriptions). The 12 stereotype confirming cards contained some stereotype disconfirming information (positive in this case) based on the reasoning that targeted stereotype groups (of any type) are not considered completely stereotypic (negative in this case); however, such traits are the predominant perception of the group. All 16 cards contained the same amount of information; they all had 5 trait statements.

Independent Variables

Participants were placed in one of five conditions varying either instructions on how to organize information (with or without restrictions), AAP rationale conditions (diversity, compensation), or neither (control group). The company description portrayed the hypothetical organization (Global Technologies, GT) as an equal opportunity employer with an anti-discrimination policy, which stated that the company does not

"discriminate against any applicant based upon race, color, sex, religion, or national origin." Participants in all conditions were told the group of 16 individuals was part of a larger group of 100 people hired across the organization through affirmative action.

Instructions to organize. Participants in these two conditions were provided with one of two instructions on how to group information before reviewing the cards. The *instructions with restrictions* condition provided directions restricting participants to organize the cards into two piles. These instructions asked participants to read the cards and "place in a pile those individuals who fit your view of affirmative action workers as a whole." Next, they were asked to "set aside in a second pile those individual workers who did not fit in with the affirmative action workers from the first pile," and then describe and name these piles.

The second condition, *non-restricted instructions*, provided directions asking participants to sort the cards of affirmative action workers into as many piles as necessary based on similarities and differences between the individuals. These instructions asked participants to read the cards and "sort the 16 affirmative action workers into separate piles of workers who are similar to each other. You may create as many piles as you need." Therefore, participants could make as few as one or as many as 16 piles. Participants were also asked to describe and name each pile.

AAP rationales. Two conditions were used to test the effects of the affirmative action rationale, which was located within the company description. Participants in these two conditions were provided with AAP rationales. The rationales were constructed based on language that was legally accepted for AAP rationales, and which is currently used in U.S. Fortune 500 organizations.

The *compensation rationale* condition stated that GT used affirmative action to compensate for prior discrimination. The *diversity rationale* condition emphasized the individuality and unique contributions of employees. Participants in both of these groups were given the same instructions to organize. They were asked to review the cards, sort them into groups, and finally to describe and name each group on the sheets provided (1 sheet per group).

The *control group* was asked to review the cards and form an impression of the group with the goal of answering questions about them afterwards, "As you read the cards, please form an impression of the full group of 100 workers." See Appendix A for detailed instructions.

Dependent Variables

Manipulation check. The first two questions that participants answered verified that they understood the organization's specific rationale for using affirmative action. The first question asked, "What do you think is the MAIN reason this organization is using affirmative action?" The second question asked "What do you think is the MAIN reason this organization treats women and minorities differently from others?" Both questions had three possible choices (the correct answer plus two distracters) and participants were asked to select one answer (See Appendix C).

Cognitive processing. This was measured by counting the number of sets participants formed in the sorting task as well as the content of the sets formed. The sub-typing cognitive process was expected to retain the stereotypic boundaries, resulting in two sets of cards based on stereotypic categories of confirmers and disconfirmers. The sub-grouping cognitive process was expected to break down the stereotypic boundaries,

therefore resulting in more than two sets of cards not based on the stereotypic categories. These sets would consist of both stereotype confirming and disconfirming individuals who are similar on some trait.

Content analysis was used to determine the composition of the formed sets. Specifically, it was used to determine if they were formed based along stereotypic lines; thus using the stereotype confirming and disconfirming categorization. The original stereotype confirming set included 12 cards of individuals who all had primarily negative stereotype traits (sets 1-4 on Appendix B: card numbers 1,2,4,6,7,8,9,10,11,13,15,16). The stereotype disconfirming set included the remaining 4 cards of individuals who were described with all positive traits (set 5 in Appendix B: card numbers 3,5,12,14). Alternatively, other sets could be created with individuals who were similar on one or more traits, but are not divided distinctly as stereotype confirmers and disconfirmers.

Two criteria were used in this analysis to determine if participants maintained the stereotypic categories (i.e., sub-typed). The first criterion was based on a minimum standard of over 50% matching cards between the sorted and original stereotype confirming and disconfirming sets (at least 7 of 12 or, 3 of 4 original individuals); second, only 1 card was allowed to come from the other set. This dual requirement (over 50% matching AND limitation of cards from other sets) therefore prevented accepting sets as a match if they had grown beyond a *critical mass* of the original stereotype confirmers and disconfirmers. Anything less than the 51% match to stereotype categories, or a 51% match with 2 or more individuals from other sets would indicate that there are factors or traits other than the stereotype being used to categorize the individuals.

Strength of stereotype. Appendix D contains five measures based on Maurer et al. (1995), which assessed participants' views of the 16 target individuals as well as the whole group of 100 affirmative action hires. Baron-Donovan et al. (2003) used these measures in the context of affirmative action hires, and reported reliability (coefficient alpha) for each measure at .75 or above.

The first measure, *typicality of confirmers and disconfirmers*, asked participants to rate the typicality of each of the 16 workers in relation to the total group of 100 affirmative action workers on a seven point Likert scale (1= extremely typical, 7 = extremely atypical). Participants were able to look back at the cards during this task. Coefficient alpha for these scales were .91 for stereotype confirmers, .89 for stereotype disconfirmers in Baron-Donovan et al., (2003), and were .85 and .89 for the current study.

The next two measures assessed overall similarity (*global similarity*) of affirmative action hires as well as specific similarity (*trait similarity*) of the new hires on the three individual traits (lazy, hostile/negative, unskilled). For example, participants rated "How similar the overall group of 100 affirmative action workers are to each other" *in general*, and *with regard to each individual trait* on a 7-point scale (1 = extremely similar, 4 = neither similar nor dissimilar, 7 = extremely dissimilar). Coefficient alpha for the scale combining the similarity of specific traits was .85 in Baron-Donovan et al. (2003), and was .65 in the current study.

On a fourth measure, *percent estimate task*, participants estimated the percentage of the 100 workers that display each of 6 negative and 6 positive traits. The traits were derived from the three main confirming traits (lazy, hostile, unskilled) with two

descriptors for each. For lazy the two descriptors were late and unmotivated, for hostile/angry the two descriptors were arrogant and angry, and for unskilled the descriptors were inexperienced and disorganized. The six positive traits were descriptors based on the two main stereotype disconfirming traits of mature and creative (polite, manage time well, careful, appreciative of others, use a computer well, and productive). The purpose of using these detailed descriptors was to obtain an assessment of the group as a whole on more specific stereotype confirming and disconfirming traits than the general descriptions of lazy, hostile, and unskilled, *and* which were similar to the trait statements used on the cards. Participants were asked to determine "What percentage of affirmative action employees are ___." Two separate mean scores were calculated for the negative and positive traits, measuring participants' perceptions of the affirmative action workers as a group on stereotypic traits. Coefficient alpha for these scales were .87 for positive traits and .91 for negative traits in Baron-Donovan et al. (2003), and were .82 and .83 in the current study. The percentage of the positive (stereotype disconfirming) and negative (stereotype confirming) traits was combined separately. The percentage of disconfirming traits was subtracted from the percentage of confirming traits to determine a *difference score*. This difference score described the extent to which participants perceive that affirmative action workers confirm the negative traits of the stereotype. If the difference score was positive, participants believe the workers confirm the stereotype, while a negative score indicates that participants believe the workers disconfirm the stereotype overall (e.g., are less stereotypic).

On a fifth measure, participants assessed on a scale from 1 to 10 the average and range of behavior of the total group of 100 hires for each trait dimension (lazy-ambitious,

unskilled-trained, hostile-kind). This measure assessed participants' perceived prevalence of these traits among the affirmative action hires in question. Coefficient alpha for this scale was .77 in Baron-Donovan et al. (2003), and is .66 in the current study.

Attitudes towards affirmative action. Appendix E includes the two measures of attitudes towards affirmative action used in Study 1. On the first measure (Bell, Harrison & McLaughlin, 2000) participants evaluated statements that described possible AAP outcomes (-3 = extremely bad outcome to 3 = extremely good outcome), and rated the likelihood for each outcome to occur using a 7 point Likert scale (1 = extremely unlikely to 7 = extremely likely). The product of evaluation and likelihood ratings for each of the 13 outcomes yielded one score for each statement. This score represented an overall attitude toward an object (in this case, affirmative action) based on an expectancy-value model of attitude formation (Ajzen, 2001; Fishbein & Ajzen, 1980). Expectancy-value theories describe attitudes as evaluations that are judgmental in nature toward an object or event (as seen in the good/bad assessment), and the attitudes are normative (e.g., influenced by the frequency and relative importance of the object/event). In this measure, there were seven positive outcomes to evaluate (e.g., AAPs gives everyone qualified an equal chance), and six negative outcomes (e.g., AAPs can restrict the freedom a business has for making decisions). The evaluation ratings (good/ bad) were reverse scored for the negative statements before creating an outcome score (product of evaluation x likelihood). The average of these products was the final attitude score. Higher scores indicated more positive attitudes. Reliability for this scale from Baron-Donovan et al. (2003) was .91, and from the current study was .59. Concerned with the

low reliability, I conducted an exploratory factor analysis of the products, which resulted in a two-factor solution, consistent with the nature of the statements; one factor consisted of positive outcomes/statements about affirmative action, and the second factor included the negative outcomes/statements. Reliability for these two composite factors was higher than for one combined factor. Therefore, they were analyzed as two separate measures; coefficient alpha for the positive statements (POSAAP) was .72 and for the negative statements (NEGAAP) it was .78.

Attitudes towards affirmative action beneficiaries. Two measures assessed these attitudes. The first was the perceived self-interest scale (Little, Murry & Wimbush, 1998), which measured attitudes toward AABs based on participants' anticipated experience/exposure to such programs. (See Appendix F) A 6-point Likert scale, ranging from strongly disagree (1) to strongly agree (6), was used to measure participants responses on 6 dimensions that suggest how affirmative action would affect their career in the future (i.e., upon graduation). Some statements were positive, and some were negative. Again the negative statements were reverse scored. In this case, lower scores indicated more positive attitudes. Little et al. (1998) calculated reliability for this scale at .75. Baron-Donovan et al. (2003) divided this scale into two factors based on a reliability analysis with the first factor (two items) representing attitudes towards affirmative action beneficiaries, with a reliability of .87. The remaining four self-interest items produced a second factor representing a negative perception of AABs based on self-interest (e.g., AAP hurts "me" in some way), which had a reliability of .68. These two composite scales had reliability coefficients in the current study of .87 and .68 respectively.

The second measure, taken from Heilman, Block and Stathatos (1997), included two questions regarding specific qualifications about affirmative action beneficiaries. These questions asked participants to rate the influence of qualifications and preferential treatment in hiring the affirmative action hires. These researchers predicted that individuals have negative inferences about the process of affirmative action, and these questions were directed at measuring such inferences. In Heilman et al. (1997) each of these questions were assessed individually as dependent measures, thus no alpha for reliability was reported. These items were also left as separate measures in the current study.

Procedure

Students who worked full or part time were eligible to participate in this study. Participants were asked to take on the role of a hiring manager within a hypothetical organization and review a group of newly hired affirmative action employees (in the form of index cards). They sorted the individuals for the purpose of placing the candidates into jobs throughout the organization. Participants reviewed two packets of materials. The first contained a company description, individual applicant cards, worksheets, and a memo to be completed. The second packet contained the dependent measures.

Participants opened the first packet (labeled #1), read a description of the hypothetical organization (company description, mission statement, definition of affirmative action and rationale for its use), and reviewed the 16 new hires recruited through GT's affirmative action plan. Participants reviewed the cards and sorted them for use by other department managers to place the new hires into jobs to help with the workload. Participants were randomly assigned to one of the five conditions. They

received one of the two AAP rationales (diversity or compensation), one of two instructions on how to organize the cards (instructions with or without restrictions), or were in the control group and received neither.

Participants were told the department managers would use the sorted pool of hires for placement to help reduce workload. Participants were asked to name, list, and describe each group of sorted individuals and then explain to the department managers how they grouped the 16 individuals (Appendix G).

Once participants sorted the cards and described the groups, they opened and completed the second packet of paper and pencil measures, including manipulation check, attitude measures and stereotype measures. They were given approximately one hour to complete the full exercise. After dependent measures were completed, participants were debriefed (Appendix H), and allowed to ask questions.

Results

Manipulation Check

Two questions were used to verify that participants in the rationale conditions were aware of the different rationales used to justify affirmative action in the organization. The first question asked, "What do you think is the MAIN reason this organization is using affirmative action?" Table 1 (part 1) provides the answers to these questions according to condition. A chi-square test of differences by AAP rationale condition revealed a significant difference, X^2 (4, N = 85) = 16.66, p = .002. Results showed that 39% of individuals in the compensation rationale condition believed that the main reason the organization used affirmative action was to "make up for past harms" compared to 32% who reported it was "required by government" and 29% who reported

it was to "value unique perspectives of diverse individuals." Thus, compensation was selected most often as the main reason in this condition. While this difference was significant, it is questionable in terms of implications since it was only selected slightly more often than the other two options. In the diversity rationale condition, 69% of individuals reported the main reason for use of affirmative action was because the organization "values the unique perspective of diverse individuals," compared to 6% and 25% who selected the other two reasons. Thus, diversity was accurately selected as the main reason. To further verify these results, I combined responses to check for "correct" versus "incorrect" answers, which differed by condition. This combination of participant responses is found in panels 2 and 3 of Table 1. For the diversity condition, the correct answer for this question was that the organization "Values the unique perspective of diverse individuals", which was compared with the other two answers combined, "To make up for past harms" and "Required by government." The pattern of responses were also significantly different in the expected direction between combined response options, X^2 (2, N = 85) = 11.10, p = .004. I then compared the correct answer for the compensation rationale, "To make up for past harms" with the two other incorrect responses for this condition. This analysis yielded significant differences as well, X^2 (2, N = 85) = 10.54, p = .005. This manipulation check showed that individuals in the diversity condition understood and remembered their instructions (69% correct compared to 31% incorrect) but those in the compensation condition made a significant number of errors (39% correct compared to 61% who reported an incorrect reason). These data suggest that the diversity manipulation was as strong as intended, but the compensation

manipulation was not as strong as intended, based on the first manipulation check question.

The second manipulation check question read "What do you think is the MAIN reason this organization treats women and minorities differently from others?" Table 2 (part 1) displays responses to this question according to condition. There were no significant differences between responses in the compensation and diversity rationale conditions for this question, X^2 (4, N = 85) = 4.88, p = .30. Examination of the actual and expected response frequencies suggests that the data was trending in the expected direction for the diversity rationale. That is, 34% of participants in the diversity rationale condition responded that the main reason the organization treated women and minorities differently from others was that "women and minorities offer unique perspectives" (compared to 14% of those who chose this response in the compensation condition and 28% in the control group). However, the majority of participants in all three conditions selected "women and minorities were discriminated against in the past" as the main reason (79% in the compensation condition, 63% in the diversity condition, and 72% in the control condition). Answers were again combined to check for "correct" versus "incorrect" responses. First I compared the correct response for the diversity rationale, "Women and minorities offer unique perspectives" to the two other incorrect responses combined, "Women and minorities are better workers", and "Women and minorities were discriminated against in the past." Table 2 (panel 2) displays results for these combined responses by condition. With the incorrect responses combined, there still were no differences in responses by condition, X^2 (2, N = 85) = 3.22, p = .20. In fact, the data were trending in an opposite direction than expected for this condition; those in the

diversity condition only selected the correct reason 34% compared to 66% who selected the incorrect reason, suggesting a weak manipulation according to this question. I then compared the correct response for the compensation rationale, "Women and minorities were discriminated against in the past" with the other two incorrect responses combined, and again there were no differences by condition, X^2 (2, N= 85) = 1.89, p = .39. Table 2, panel 3 displays each group by correct and incorrect answers for the compensation condition. Participants in the two rationale conditions and the control (no rationale) thought that women and minorities were treated differently from others because they were discriminated against in the past. These data together with Table 1 draw into question the effectiveness of the rationale manipulations overall.

Main Effects

Cognitive processing. Hypotheses 1 and 2 predicted differences between the rationale conditions and between the instructions to organize conditions on cognitive processing (as measured by the number of groups created and their content). Hypothesis 1 predicted the compensation rationale would lead to sub-typing (two separate groups of stereotype confirmers and disconfirmers) while the diversity condition would lead to sub-grouping (more than 2 groups categorized on traits other than stereotype confirming and disconfirming). Results assessing the first aspect of cognitive processing (number of groups created) supported this prediction; those in the compensation rationale condition created fewer groups (M = 3.11) than those in the diversity rationale condition (M = 3.99), t (108) = - 4.21, $p \leq .001$. While the number of groups created differed, the compensation rationale did not meet the first criterion for sub-typing, namely by creating only two groups. Hypothesis 2 predicted that the restricted instructions condition would

lead to sub-typing and the non-restricted instructions would lead to sub-grouping, and this was also supported since the restricted instructions condition created significantly fewer groups (M=2.0) than the non-restricted instructions condition (M = 4.33), t (108) = -2.33, $p \leq .001$. In this case, the restricted instruction condition met the first requirement of sub-typing by creating only two groups of cards.

Hypothesis 3 predicted that the compensation condition and restricted instructions condition would create the same number of groups. This was not supported; those in the compensation condition created significantly more groups (M=3.11) than those in the restricted instructions condition (M=2.0), t (108) = -5.08, $p \leq .01$. Hypothesis 4 predicted that the diversity condition and the non-restricted instruction conditions would create the same number of groups; this was supported since there were no differences between the 3.9 and 4.3 groups created respectively. As predicted in hypothesis 5, differences between combined conditions, were found t (108) = -10.64, $p \leq .01$; those in the restricted instructions and compensation rationale conditions had fewer groups than those in the non-restricted instructions and diversity rationale conditions. Table 3 shows means and differences by group.

The second aspect of cognitive processing was the content of the groups. Therefore, the primary investigator conducted content analysis, based on categories defined earlier (over 50% match to original sets combined with only 1 outside card and uniquely formed sets: less than 51% match with the original sets or over 51% match and 2 or more outside cards). Chi-square tests were used to see if the actual counts differed from the expected counts by condition. Hypothesis 1 predicted the compensation rationale would lead to sub-typing (groups composed of primarily stereotype confirmers

and disconfirmers) while the diversity condition would lead to sub-grouping (groups categorized on traits other than stereotype confirming and disconfirming). Content analyses of participant sets revealed that the compensation condition matched the original stereotyped sets 44% of the time compared to a 25% match in the diversity condition, which was significantly different, X^2 (1, N = 215) = 8.59, p < .001. Stated differently, this means that the diversity rationale condition created significantly more unique groups (75%) than the compensation rationale condition (56%). These results support hypothesis 1 since the diversity condition used the stereotype traits as the organizing criterion less often than the compensation condition. Hypothesis 2 predicted that participants in the restricted instructions condition would use a sub-type cognitive process while the non-restricted instructions condition would use a sub-group cognitive process. Content analysis supported this hypothesis as well since 72% of participant sets in the restricted instructions condition matched the stereotype sets while those in the non-restricted condition matched the stereotype sets only 24% of the time, which was significantly lower, X^2 (1, N = 165) = 34.76, p < .01. This result shows that, as with the diversity condition, the non-restricted instructions condition used stereotype traits as the organizing criterion less often than the restricted instructions condition. Hypothesis 3 was not supported; contrary to predictions, there were significant differences between the composition of the sets created by participants in the compensation rationale condition (44% matched stereotype sets) and the restricted instructions condition (72% matched stereotype sets), X^2 (df = 1, N = 138) = 9.85, p < .01. These results suggest that participants in these two conditions differed in how they organized the cards; the restricted instructions condition used stereotype traits as the predominant organizing

criterion more often than the compensation rationale condition. Hypothesis 4 was supported since there were no significant differences between the composition of the formed sets in the diversity rationale condition and the non-restricted instructions condition. See Table 3 for statistical results and Table 4 for percentages by category.

Strength of stereotype and attitude measures. Hypothesis 1 predicted that the compensation rationale would lead to a stronger stereotype and more negative attitudes than the diversity rationale. Hypothesis 2 predicted that instructions with restrictions on how to group information would lead to a stronger stereotype and more negative attitude than instructions without restrictions condition. Hypotheses 3 predicted that the compensation rationale, restricted instructions on how to organize, and the control group (combined conditions 1) would produce the same results on strength of stereotype and attitudes while hypothesis 4 predicted that the diversity rationale and non-restricted instructions on how to organize (combined conditions 2) would produce the same results. Hypothesis 5 predicted that combined conditions 2 would lead to more positive outcomes compared to combined conditions 1.

First, I calculated two Multivariate Analyses of Variance (MANOVA) with strength of stereotype and attitudes as the dependent measures and the 5 conditions (restricted instructions, non-restricted instructions, compensation rationale, diversity rationale, and control group) as the independent variable. Since this procedure evaluates a set of dependent variables for one or more independent variables simultaneously, it is preferred to using several independent ANOVAs because it tests whether multiple dependent variables are different between groups when considered together. The MANOVA offers an increased chance of detecting statistical differences between groups

and dependent measures (cognitive processing, strength of stereotype, and attitudes) by analyzing them using a combined procedure. This method also reduces the chance that a Type I error will occur if dependent measures are likely to be correlated (Tabachnick & Fidell, 2000). There should be no differences on these dependent variables between the compensation rationale, restricted instructions, and control conditions (combined conditions 1), as determined by post-hoc tests, nor between the diversity rationale and non-restricted instruction conditions (combined conditions 2). However, the first group of combined conditions was predicted to have more negative outcomes than the second group of combined conditions, per hypotheses 5. The overall MANOVA for strength of stereotype was not significant using Hotelling's Trace, F (28, 418) = .94, p = .55, nor was the overall MANVOA for attitudes, F (20, 490) = .76, p = .76.

Strength of stereotype. The MANOVA reveals that hypotheses 1 and 2 were not supported for the strength of stereotype measures. There were no significant differences between the compensation and diversity rationales, or between restricted and non-restricted instruction conditions for these measures. There were no significant differences between conditions on rated mean behavior of counter-stereotypic traits, on the percent estimate of stereotype confirming traits (e.g., late, angry, unmotivated), on the percent estimate of stereotype disconfirming traits (e.g., polite, careful, appreciative), on the difference score between the stereotype confirmers and disconfirmers, on global similarity of the hired workers, on the combined trait similarity (lazy, hostile, unskilled) of the hired workers, on the typicality ratings of stereotype confirming individuals from the group, and on typicality ratings of stereotype disconfirming individuals from the group, or on the atypicality of the group (typicality of confirmers minus typicality of

disconfirmers). Table 5 lists the means, F-ratios, and effect sizes by condition for the strength of stereotype measures.

Planned contrasts were used to measure hypotheses 3, 4 and 5, differences by combined conditions. Specifically, those in the first group (non-restricted instructions, compensation rationale, and control group) did not have a stronger stereotype than those in the second group (non-restricted instructions and diversity groups) on any of the individual measures. See Table 6 for detailed results of the planned contrast analyses. None of the comparisons reached significance.

Attitudes towards affirmative action and its beneficiaries. The MANOVA revealed that hypotheses 1 and 2 were not supported for the attitude measures either. There were no significant differences between the compensation and diversity rationales, or between restricted and non-restricted instruction conditions for the attitude measures. The results for the group differences were not significant on the perceived self interest (PSI) scale of work place help from affirmative action, on other perceived self-interest items, on the negative AAP evaluation and likelihood measure, on the positive AAP evaluation and likelihood measure, on affirmative action opinion 1 (assessing the extent to which affirmative action hires in general are hired based on qualifications), or on affirmative action opinion 2 (the importance of special treatment in determining affirmative action employees' performance). See Table 7 for detailed means and statistical results.

Planned contrasts were used to measure Hypotheses 3, 4 and 5, differences by combined conditions. Specifically, those in the first group (non-restricted instructions, compensation rationale, and control group) were not significantly different from those in

the second group (non-restricted instructions and diversity groups) on any individual attitude measures. See Table 8 for detailed results of the contrast analyses.

Mediation

Hypothesis 6 predicted that strength of stereotype and cognitive process would mediate the relationship between attitudes and AAP rationales as well as between attitudes and instructions to organize. To test this mediation effect, three elements are required (Baron & Kenny, 1986). First, the independent variable must produce differences on the mediators. Second the mediator must correlate with the dependent measures. Third, the independent variable must produce results on the final outcome dependent variable. If the effect of the independent variable on the dependent variable is smaller after controlling for the mediator, the mediation hypothesis is supported (Baron & Kenny, 1986). However, since there were no differences between groups on the stereotype or attitude measures, I did not conduct tests for the remaining conditions for the mediation analyses.

Study 1 Discussion

The main finding was that AAP rationales had an influence on cognitive processing but not on stereotype or attitude measures. Several limitations may have prevented finding the predicted differences on the latter outcome measures. First, results suggest that the manipulation for affirmative action rationales was weak. Only the first of the two manipulation check questions yielded differences between conditions, indicating that those in the diversity condition understood that the organization valued diverse individuals and that was the main reason for using affirmative action, while those in the compensation condition selected incorrect reasons for affirmative action more

often than the correct reason. These results suggest that the manipulation was weaker than expected and may have prevented significant differences by condition on the dependent measures.

The weakness of the rationale manipulation may have been due to the extensive amount of information that participants received about the hypothetical organization and the job description; therefore this one piece of information (i.e., rationale used to justify affirmative action) lacked emphasis or importance. These AAP rationales were not pilot tested. This is a critical step that was missing; it is essential to determine participants' level of understanding and clarity of the rationale before use. In future studies this should be the first thing addressed to enhance the quality of the study. Stronger and/or more prominent rationales may have resulted in a more proficient test of the study hypotheses. For example, perhaps repetition of the rationale as well as different presentations of the rationale (e.g., order of when it is shown, font used, etc.) would enhance clarity and emphasis.

A second limitation of Study 1 was the wording of the instructions to organize information. The restricted instructions asked participants to create two groups: one pile that contained "individuals who fit [their] view of affirmative action workers as a whole" and a second pile of "workers who did not fit in with the affirmative action workers from the first pile." The non-restricted instructions do not reference participants "view of affirmative action workers" at all. Thus, this difference between conditions may confound results from this independent variable. For example, it is possible that the wording used in the restricted instructions condition primed the AAB stereotype with the reference to affirmative action workers as a whole. The use of this phrasing, therefore,

may have been the ultimate cause of differences on outcome variables rather than the instructions to organize. One could argue, however, that the AAB stereotype is primed for all participants equally since the 16 cards used in all five conditions were described as a group of affirmative action new hires. However, this particular wording should be re-considered in future studies that employ similar materials and tasks.

Despite these limitations, there were differences in the predicted direction in cognitive processing for most comparisons. Expected differences were found between the diversity and compensation rationales (H1), and between non-restricted and restricted instructions (H2) for both aspects of cognitive processing: the number of groups created and the content of the groups. H3 predicted that the compensation rationale and restricted instructions would have the same cognitive processing outcome of sub-typing. The results did not support this with either cognitive processing measure; the number of groups created was different, as was the content of the groups. H4 predicted the diversity rationale and non-restricted instructions would be the same, which was supported by both cognitive processing results. As predicted in H5, differences were found between the combined conditions in H3 and H4 for number of groups created.

There may be some concern about the stereotype in question. Specifically the AAB stereotype is primarily negative, and therefore, there may be some question of whether the content of the confirming or disconfirming stereotype sets was primarily negative, and not necessarily stereotype confirming. However, the way the traits were listed on the cards prevents this problem since there were some positive traits listed on each card. Furthermore, participants were asked to name their sorted sets, and they tended to use names that opposed the stereotype trait. For example, they may have called

the stereotype confirming group *inefficient* or *lack potential* while naming the stereotype disconfirming group *efficient* or *asset to company.* Even though there was a potential for a confound between the stereotype confirming/ disconfirming and positive and negative traits, I believe the same pattern would occur along stereotype lines for other stereotyped groups (e.g., the positive stereotype for Big Brothers from Maurer et al., 1995).

While the manipulation was weaker than expected, the AAP rationales had an impact on some outcome measures. Perhaps the impact of the rationales was time-bound, such that their effect wore off after a certain amount of time since the influence of rationales was found on the first measure. The directions and rationales were the first information presented, and participants had ten minutes to review the cards and sort them (if asked to do so). Only after that did they begin to answer the remaining stereotype and attitude measures. Therefore, the influence of the rationales (which were weak) may have begun to expire by the time participants moved to the stereotype and attitude measures. An additional consideration in the effectiveness of the rationale was the sample in this study. Although many of the students in the sample worked, they primarily worked part-time, most likely in small organizations for a short period of time. Their limited work-force experience may have prevented them from fully understanding the situation in a meaningful way. That is, they may not have ever been exposed to information from an employer about affirmative action or equal employment opportunity, thus preventing them from relating to the task presented in this study. If the study was presented as a case of selection of college students they may have been able to relate to the task better. Therefore, future research could explore both of these possibilities; replicating the task with full time college students with an educational selection task as

well as with full time employees with a greater number of years working in organizations to more adequately test these hypotheses.

Contributions and Implications

The finding that AAP rationales influenced cognitive processing is important in several ways. First, these results contribute to the literature with the new findings that there are differences in cognitive processing (sub-typing/ sub-grouping) when individuals are given different AAP rationales. The clear differences seen between the compensation rationale and the diversity rationale condition in the number of groups created, as well as the content of those groups supports predicted differences in their influence on cognitive processing.

Second, the results suggest that there are multiple ways to elicit sub-typing and sub-grouping for individuals. For example, both non-restricted instructions on how to organize information and the diversity rationale for AAPs elicited the sub-grouping process (number of groups created and content coding). This result suggests that participants in these conditions often blurred the lines between stereotype confirming and disconfirming individuals and that the boundaries or categories typically associated with the stereotype were not the dominant criteria in their categorization. The sets created by participants in these conditions had a critical mass of individuals from the original stereotyped sets (the 12 stereotype confirming cards, or the 4 disconfirming cards) less often than those in the compensation rationale and restricted instructions condition.

Alternatively, the restricted instructions and the compensation conditions had significantly higher percentages of sorted sets that matched the original stereotype sets (77% and 44% respectively), and they had the lowest percentage of uniquely formed

groups. This pattern suggests that original stereotype traits had a stronger influence on how individuals in these conditions processed/ categorized the cards. Although these groups were different in terms of the number of sets created (the restricted instructions condition created 2 groups, and the compensation rationale condition created 3.1), perhaps this operational definition of sub-typing as two sets is not the most accurate way to define and measure this process. In retrospect, it seems more important to show that sub-typing leads to fewer sets than the sub-grouping process, and that the sets created when sub-typing use stereotype traits more often as the dominant organizing criterion. The exact number of sets is less important. As Maurer et al (1995) described, sub-*typing* is a process in which subordinate sets are formed such that disconfirming exemplars are separated from the stereotype so that the structure and meaning of the superordinate set and its stereotype remain intact. The content analyses support this description since those in the compensation rationale condition matched the original stereotyped sets almost twice as often (44%) as either the diversity condition (25%) or the non-restricted instructions condition (24%), and the restricted instructions condition matched the original stereotyped sets almost three times as often (72%) as these conditions.

Support from the content analyses is important because it provides an understanding of how the sets were created. The percentage of sorted sets that matched original stereotyped sets has a clear trend from the most matches to the least for restricted instructions down to the diversity rationale and non-restricted instructions conditions. This suggests that contexts that focus individuals on broad categories rather than individuating information fosters maintenance of a stereotypic perspective of affirmative action hires. However, when individuals are allowed to focus on individual information,

as in the diversity rationale condition or the non-restricted instructions condition, the content of sets reflect new and unique combinations and categorization. The content of sets in the current study corroborates Maurer et al's (1995) belief that new subordinate sets are created after exposure to another group. It also supports theoretical and empirical work by Fiske and colleagues (1999, 2000) that attention promotes individuation.

The most important implication for this finding is that organizations that choose to use affirmative action (or are required to by law) may want to consider justifying its use with a diversity rationale as a way to elicit sub-grouping, which enhances individuation during cognitive processing, for those hired, promoted, or evaluated through affirmative action.

Unlike prior studies, the current results do not support the assertion that the sub-grouping cognitive process altered the strength of the stereotype or attitudes towards AAPs or AABs. No differences were found between conditions on either the stereotype measures or the attitude measures. Rothbart and John (1985) proposed that drawing greater attention to disconfirming information would not only lead to changes in cognitive processing, but would also impact the superordinate stereotypic category. The lack of differences on the stereotype measures do not support this conceptual claim.

Chapter IV. Study 2

Study 1 established that diversity and compensation AAP rationales elicited different cognitive processes in a laboratory setting. The purpose of Study 2 was to determine if AAP rationales could be implemented in a non-laboratory setting and how they might influence stereotype strength and attitudes. In addition, this study looked at the impact of AAP rationales on anticipated career outcomes. The literature reviewed earlier provided evidence that discrimination in the workplace towards individuals hired through affirmative action programs remains a problem (Heilman et al, 1997; Nascoste & Lehman, 1987). Thus, studying anticipated career outcomes of AABs is a critical component of this research. Anticipated career outcomes of AABs were assessed through a measure focusing on perceived competence and career expectations. AAP hires with a diversity rationale were expected to receive more positive attitudes and evaluations compared to AAP hires with a compensation rationale. See Figure 2. Since AAP rationale was the focus of this study, it was the only variable used to elicit the cognitive processes; the instructions to organize variable was not used in Study 2.

Study 2 also examined the effects of hire status (whether or not affirmative action was used in selection) on evaluations of hypothetical employees. This variable was introduced in Study 2 because hire status has consistently had an impact on evaluations (Heilman & Alcott, Heilman & Blader, 2001; Heilman et al., 1997; Northcraft & Martin, 1982). For example, research has shown that when the hiring status of minorities is unknown, the use of affirmative action is assumed (Heilman & Blader, 2001). Additionally, when the hiring status is known to be affirmative action, beneficiaries are often stigmatized as incompetent (Heilman & Alcott, 2001; Heilman, et al., 1997;

Northcraft & Martin, 1982). Therefore, it was important to include hire status in the study design to examine how AAP rationales would interact with it. In this sense, it was important to replicate the AAB bias finding in order to examine if AAP rationales could reduce this bias. I predicted that hire status would moderate the effect of affirmative action rationale on attitudes towards AABs and perceived competence such that the relationship between these variables would be greatly reduced when the targeted individuals were not hired through affirmative action. This moderation hypothesis is based on the above research findings that AABs are stigmatized and rated as incompetent.

The following specific hypotheses were tested:

H1: Hire status would have a direct influence on anticipated career outcomes such that workers hired through standard practices, as opposed to AAPs, would have more positive anticipated career outcome ratings.

H2: AAP Rationale would directly influence the strength of the stereotype, attitudes and anticipated career outcome such that a diversity rationale would lead to a weaker stereotype, more positive attitudes and anticipated career outcomes than a compensation rationale.

H3: Hire status would moderate the influence of AAP rationale on attitudes and anticipated career outcomes such that the relationship between AAP rationale and attitudes and anticipated career outcome would be significantly reduced for employees not hired through affirmative action.

H4: Strength of stereotype would mediate the relationship between affirmative action rationale and anticipated career outcomes.

In addition to the predicted influence of AAP rationales, organizational culture was also expected to influence attitudes and anticipated career outcomes of employees. The manner in which organizations handle diversity is a reflection of their culture. Schein (1992) suggested that organizational culture is more than the "values, rituals and

behavior patterns," but also the "structural stability and integration" which is developed, shaped, and managed by organizational leaders.

Kopelman, Brief, and Guzzo (1990) offered a model explaining how organizational culture influences individuals in the workplace. These researchers suggested that organizational culture is a product of societal culture. Kopelman et al. (1990) suggested that *organizational climate* is nested within the *culture* of an organization, and is specifically influenced by human resource processes such as hiring, promoting, rewarding, developing, and monitoring. These practices define behavior within organizations and therefore influence how employees interpret their environment. Kopelman et al. (1990) defined climate as "meaningful interpretations of a work environment by the people in it" (p. 290). Although individuals have some unique interpretations, they share a common environment with rules and customs that are the same for all employees. The model therefore suggests that the shared environment has a substantial impact on organizational climate. Using this model, Study 2 investigated individual perceptions of diversity culture (within their own organizations), henceforth-*organizational diversity climate (ODC),* and its influence on attitudes and anticipated career outcomes. Just as Schneider (2003) discussed the specific aspects of a *service culture*, this study investigated the specific aspects of a *diversity culture* within organizations. ODC was examined as an exploratory variable.

The model proposed by Kopelman et al. (1990) depicts organizational climate as influencing individual and organizational outcomes (e.g., job-performance and psychological well-being) through emotions and attitudes (e.g. job satisfaction and organizational commitment). A meta-analysis by Carr, Schmidt, Ford and DeShon

(2003) found empirical support for the mediation model offered by Kopelman et al. (1990) such that "climate's impact on organizational outcomes is mediated by its effect on cognitive and affective states" (Carr et al., 2003, p. 613). The empirical relationships established in that analysis were based on an investigation of 51 studies with 70 samples, and warrant continued research of climate perceptions, work outcomes, and mediators between the two. Therefore, the current study used a specific climate measure, ODC, to indirectly investigate organizational culture in the workplace.

Researchers recognize diversity as an important aspect of organizational culture. This notion of ODC, or employee perceptions of their shared diversity environment, is referred to by other researchers in various terms such as paradigms (Thomas & Ely, 1996), organizational diversity development (Cox, 1991; 2001), or multicultural organizational development (Sue, 1995). They all convey a similar concept of how organizations perceive and address diversity. Thomas (2005) suggests that even though these researchers have some differences between their descriptions, the organizational diversity taxonomies offer a "framework within which to consider particular organizations and where they currently are in terms of diversity management" (p.177). These taxonomies identify common elements of organizational culture that create a negative diversity climate. For example, all three suggest that organizations that adhere to norms of strong conformity and assimilation negate diversity efforts. Thomas (2005) claims that such practices foster dominance and exclusion. Additionally, several researchers suggest that focusing on fairness alone is not enough to create attitudes and behavior that value individual differences (Thomas & Ely, 1996; Thomas, Mack, & Montagliani, 2004). For example, managers may treat employees the same, which is

considered fair. However, this equal treatment prevents managers from reacting to employees as individuals with different needs (Offerman & Phan, 2005; Thomas & Ely, 1996), thus devaluing diversity.

Organizations that fully integrate individuals are suggested to have the most successful diversity climate (Cox, 1991; 2001; Sue, 1995; Thomas & Ely, 1996). When diversity is truly valued, researchers suggest that employees will identify with and be engaged in their jobs (Cox, 2001; Thomas & Ely, 1996). While there is little or no experimental evidence to support these claims, several researchers offer anecdotal evidence of valuing diversity in case studies. Walker and Hanson (1992) described the struggles and ultimate success of diversity initiatives at Pacific Bell over a period of twenty years. After much difficulty, the organization learned that valuing others (all individuals) was the best way to carry out a successful diversity initiative. Sessa (1992) and Cox (2001) made similar conclusions after researching efforts at Xerox and Alcoa.

Study 2 used ODC measures to assess how employees perceive their diversity culture. ODC should form a continuum with one end indicating an extreme value for diversity and the other end extreme rejection of diversity. However, the contempt end of the continuum was expected to be difficult to assess using the measures incorporated in the current study; strong negativity toward diversity in the workplace was difficult to accurately measure because openly expressing contempt for diversity is socially undesirable. Organizations yielding the lowest ODC score may simply tolerate diversity as an existing mandate that government and society require. Organizations that score highest on the ODC measures were believed to go beyond what is legally mandated and endorse diversity as one of its main values (EEOC, 1997). Organizational culture that

embraces diversity (high ODC) rather than simply tolerating it (low ODC) should lead to less biased attitudes and behavior since there should be greater value for all individuals and the contributions they can make to the organization. Therefore, the following specific hypotheses were tested.

Exploratory Hypotheses:

> *H5: ODC would have a direct influence on attitudes and anticipated career outcomes such that high ODC would yield more positive attitudes and anticipated career outcomes than low ODC.*
>
> *H6: ODC would moderate the influence of AAP Rationale on the strength of the stereotype such that those in high ODC organizations and given a diversity rationale would have the weakest SOS and those in low ODC organizations would have the strongest SOS.*

Pilot Studies

New stimulus materials were needed to conduct Study 2; 4 new hire resumes were used, each once included a picture of the new hire, educational background, work experiences, and comments from colleagues. Materials were designed to be similar to those used by Heilman et al., (1997), when participants evaluated and made salary recommendations for new hires. The work history section was designed to match the needs of the job description, and pictures were obtained through various sources on the Internet. The comments from colleagues' section was created from the trait statements (on cards) from Study 1.

Two pilot studies were conducted prior to Study 2 to prepare the new stimulus materials and ensure the pictures and resume descriptions were equivalent prior to use. It was important to select pictures of individuals who were approximately equivalent in appearance to prevent appearance from influencing predicted performance ratings. Similarly, it was important to verify that the resumes presented to participants were

initially equivalent to control for any differences that perceived qualifications or experience would have on predicted evaluations. Both pilot studies were conducted with undergraduate students from a metropolitan northeast college in exchange for ½ hour of study credit.

Procedure. Participants were told that their evaluations would be used to develop materials for follow up studies. In each pilot study, students read and heard a description of the purpose of the study, and were informed of their rights to ask questions or leave at any time; all were given the researchers' name and contact information.

New hire descriptions. In the first of the pilot studies, 150 participants were asked to read and rate four descriptions of newly hired employees for a hypothetical organization using Heilman's (1992) perceived competence items on which they indicated how competently the individual was predicted to perform, how effective he would be at work, how likely he would be to move up in the organization, how quickly he would be promoted, and to what extent the individual was hired based on his qualifications. The new hire descriptions included their educational background, work experience, and comments from work references. Each of the new hires had a Bachelor's degree from a state university. Work experience, major area of study, and GPA differed slightly between the new hires. All, however, were qualified to be the assistant account manager, the entry level position for which they were hired.

Analysis of variance was used to compare the five individual ratings (competence, perceived qualification, career progress expectation, effectiveness at job, and promotion expectation) as well as an overall average rating for each of the 4 new hires. Questions had behaviorally anchored rating scales where 1 = best prediction (e.g., very competent,

very effective) and 9 = worst prediction (e.g., not competent at all, not effective at all). After the sixth revision of the new hire descriptions, new hires were rated approximately equivalent on the composite measure F (3, 22) = .77, *ns* (average of the 5 individual evaluation questions), and each of the 5 individual measures. See Table 9 for detailed results.

New hire pictures. Pictures were selected as a medium to communicate the race and gender of the new hires. The use of Black males made it clear that race, not gender, was the demographic factor used for the AAP. In this pilot study, participants were given 10 black and white pictures of Black men to evaluate (obtained from various Web sites, all with permission for use). Participants were asked to provide ratings of appearance on a scale from 1 (not at all attractive) to 7 (very attractive). An approximately equal number of male and female students, with an average age of 20 (range 17-32) provided ratings. A total of 45 students participated.

From the pool of 10 pictures, four were selected for the experiment based on similarity of appearance ratings. The pictures were presented to students in 5 different orders (color coded) to eliminate order effects on ratings. A multiple analysis of variance was used to determine if there were differences between pictures on their overall attractiveness rating, or if ratings differed by color (order effects). None of the F ratios were significant (ranged from .12 to 1.64), indicating that overall ratings between these pictures did not differ. The appearance ratings range from an average of 2.36 (picture 7, least attractive of group) to 3.91 (picture 5, most attractive of group), with a median of 3.36. To select four pictures of approximately equivalent appearance in ratings for use in Study 2, the pictures were ranked based on mean rating and divided into approximately

three sections. Those who fell into the two extreme groups (rated "most" and "least" attractive) were eliminated. Once the resumes and pictures were selected, and equivalent, Study 2 commenced.

Study 2 Method

Participants and Setting

A total of 102 people who worked full time or part time (more than 20 hours a week) in an office environment participated in Study 2 in exchange for a $10 gift card for music (itunes) or coffee (Starbucks). There were 64 females in the study. A majority of the participants were White (85) and were between 25 and 50 years old (89). Participants were from a wide range of industries and company sizes. See Table 10 for detailed demographics by condition.

Respondents participated in the task over the Internet from their home or office. They reviewed four newly hired employees to a hypothetical organization and answered a series of questions. The exercise took approximately 45 minutes to complete (determined through a simple pre-test with 5 people to assess time and basic understanding of the materials).

Procedure

Full time employees were recruited from various places of employment through a snowball sample participated in Study 2. Colleagues, business contacts, and friends received an email with a description of the study with the title "Selection Strategies & Organizational Diversity Climate Study." The solicitation email described eligibility for the study as those who worked full time or part time (more than 20 hours a week) in an office environment. The email described the study as "focused on investigating selection

strategies and employee performance" and stated that it would entail reviewing and evaluating four newly hired employees and then answering a series of questions about participants' own attitudes and organizational diversity climate. Organizational diversity climate was described as "how their organization views minorities and how the organization might respond to situations involving diverse individuals." The email described the length of the study, and included an Internet address and password to access the study. Finally, participants were told in the initial email that they would receive a $10 gift card (for either Starbucks coffee or itunes) that would be sent in the mail upon completion of the survey.

Independent Variables

Study 2 used three independent variables in a 3 (rationale of the affirmative action program) x 2 (hiring status) x 2 (grouping, a counterbalance variable for hiring status) mixed subjects design.

Affirmative action rationale. The two affirmative action rationales accompanied the organization description, as in Study one. Approximately one-third of the experimental participants received the diversity rationale, one-third received the compensation rationale, and one-third received neither rationale.

Hiring status. All participants evaluated four new employees, two of which were affirmative action hires and two were traditional hires. Hire status was manipulated with a notation at the top of each new hire resume indicating whether or not the employee was an affirmative action hire. For two employees, the note read, "Hired through traditional selection procedures", while for the remaining two it stated "Hired through affirmative action" (See Appendix J).

Grouping. In order to counterbalance which new hire targets were presented as affirmative action hires, half of the conditions received grouping 1 (targets 1 and 3 as affirmative action hires and targets 2 and 4 as traditional hires) and the other half received grouping 2 (targets 1 and 3 as traditional hires 2 and 4 as affirmative action hires). The specific order in which targets were presented was also counter balanced to prevent order effects.

Dependent Variables

Anticipated career outcomes of AABs: Predictions of competence, career progress, and attitudes. Heilman et al. (1992) used two measures to examine perceived competence and career progress expectations, with reliability (coefficient alpha) of .96 and .80 respectively (with 2 questions each). These same four questions from Heilman (1992) measured perceived competence and career progress expectations for the new hires in the current study (Appendix K, questions 1-4). In addition, two questions from Heilman et al. (1997) inquired about the hires perceived qualifications and the importance of special treatment accounting for their performance evaluations (questions 5-6, Appendix K). All six questions were completed for each of the four new hires. Questions had behaviorally anchored rating scales where 1 = best prediction (e.g., very competent, very effective) and 9 = worst prediction (e.g., not competent at all, not effective at all). Depending on the participant's condition, they received new hire targets 1 and 3 as the affirmative action hires (grouping 1) or new hire targets 2 and 4 as the affirmative action hires (grouping 2). Responses were combined for each participant to create two composite scores (based on the average for each of the two new hire targets): affirmative action and non-affirmative action new hire evaluations. These 6 questions

were combined as one composite which had strong reliability for both groups: coefficient alpha = .81 for affirmative action hires, .83 for non affirmative action hires.

Strength of stereotype. Due to differences in study tasks, only the last measure from Study 1 was used in Study 2, as described here. The *percent estimate task* asked participants to rate affirmative action workers overall on 6 stereotype disconfirming and 6 stereotype confirming traits; "What percentage of affirmative action employees are ___." The stereotypic disconfirming traits yielded an alpha reliability = .89, and the stereotypic confirming traits yielded an alpha reliability = .93. Additionally, the percentage of disconfirming traits was subtracted from the percentage of confirming traits to determine a *difference score* that describes the extent to which participants perceive that affirmative action workers confirm the negative traits of the stereotype. If the difference score is positive, participants believe the workers confirm the stereotype; if it is negative, participants believe the workers disconfirm the stereotype (e.g., are less stereotypic). The other measures from Study 1 were specifically focused on evaluating the group of 16 new hires; therefore they were not adaptable for Study 2.

Attitudes towards affirmative action programs (AAPs). The same two measures from Study 1 assessed attitudes toward affirmative action in Study 2. Each of 13 outcomes was evaluated for how good/bad it was and the likelihood of occurrence; the product of these ratings constituted a composite measure for each outcome. This was referred to as the *evaluation and likelihood* measure. Similar to Study 1, a two-factor solution resulted from a factor analysis, with positive and negative outcomes combined separately. The alpha reliability for both the negative and positive scales was .91; higher scores on the composite indicated more positive attitudes.

The second measure evaluating AAPs consisted of five statements from Bell, Harrison, and McLaughlin (1997), referred to as the *semantic differential* measure. Participants rated their perception of affirmative action, using a 7-point Likert scale, with the stem, "In general, affirmative action programs are ___", (e.g. harmful – helpful, negative – positive) (included in Appendix E). Bell et al. (1997) reported reliability (coefficient alpha) of .94 for this scale, and Baron-Donovan et al. (2003) reported a reliability of .91. The coefficient alpha for this combined scale was .92 in the current study; higher scores indicated more positive attitudes.

Attitudes towards affirmative action beneficiaries (AABs). The same three measures from Study 1 were used in Study 2. These measures assessed attitudes towards AABs in general, not toward each of the specific 4 new hires presented. The first measure examined perceived self-interest from AAPs, which measured two dimensions: self-assessment of help in the work-place from AAPs (*work place help*) and general self-interest as a result of AAPs (*perceived self-interest*). Both scales had adequate coefficient alpha reliabilities, .89 for the work place help items (5,6), and .84 for the remaining self-interest items.

The second measure, *general opinions of affirmative action*, assessed inferences about the affirmative action process, taken from Heilman et al. (1997) with two individual items. The questions test assumptions that affirmative action always gives minorities preference over males, whether the minority is qualified or not (*AA opinion 1*), and that non-whites are always given preference over whites, whether the non-white is qualified or not (*AA opinion 2*). Both questions use a 7 point likert scale, with 1 = strongly disagree and 7 = strongly agree. Lower scores indicated more positive opinions

of AAPs. These items were combined to form one score for *general opinion of affirmative action*, and had an $\alpha = .93$

Organizational diversity climate. All participants completed three measures to assess the diversity climate in their own organization (Appendix L). Participants were instructed to "Think about the organization that you work for, and answer the following questions based on your beliefs and experiences in that organization." Three measures were used to assess ODC to reflect the robustness of the construct: perceptions of fairness, frequency of exposure to diversity efforts, and the likely norms of behavior associated with discrimination towards minorities in the workplace. The first measure was the Diversity Perception Scale (DPS) (Mor Barak, Cherin, & Berkman, 1998), which assessed individuals' perceptions of organizational fairness. It asked respondents to rate the ways they have been treated by their organizations based on demographic characteristics as a measure of how well the organization deals with diversity issues. This scale consisted of ten items reflecting two factors; an organizational dimension (e.g., "Managers in my organization interpret human resource policies (such as time off) fairly for all employees") and a personal dimension (e.g. "I feel I have been treated differently in my organization because of my race, sex, religion, or age"). The reliability (coefficient alpha) for these factors with over 2,500 participants in an electronics company was .86 and .80, respectively. Reliability for the personal dimension in the current study was low (.34), and was therefore dropped from further analyses. The organizational dimension, consisting of 8 items had a coefficient alpha = .78. Therefore, the composite consisted of the average of the 8 remaining items. This was a 7 point Likert scake; higher scores represented more positive perceptions of diversity.

The second measure consisted of two items from Probst and Nelson's (2003) Organizational Diversity Climate Scale (ODCS). This scale asked respondents to predict consequences of various hypothetically harassing and discriminating behaviors in the workplace. While the full scale assessed scenarios regarding discrimination and harassment based on gender, age, race/ethnicity, disability, and sexual orientation, the current study only used the two scenarios related to race/ethnicity. A validation study indicated that the scale was highly reliable and exhibited good construct and criterion-related validity (Probst & Nelson, 2003). Participants were asked to read each hypothetical scenario, imagine that it occurred in their organization, and indicate the 1) risk of a harassed employee to file a complaint (answers range from *extreme risk* to *no risk*), 2) likelihood that complaint will be considered seriously (*almost no chance* to *very good chance they will be taken seriously)*, and 3) likelihood of consequences for the alleged harasser (*probably nothing would be done* to *there would be a very serious punishment*). The average of the individual scores was used to create a composite score. Internal consistency reliability was high ($\alpha = .80$) with a scale ranging from 1 to 5 with higher scores indicating a more positive diversity climate.

The third measure used to assess ODC was Gilbert and Ones' (1999) Diversity Practices Survey, which assessed diversity practices in three distinct areas: training, accountability, and organizational work design for diversity. Participants were asked to indicate which specific diversity practices their organization engages in on a scale from zero to five (*0 = does not engage in at all* to *5 = engages in a great deal*). The scale consisted of 24 items; 10 in the training section, five in accountability, and nine in organizational work design. Reliability (coefficient alphas) for the three sub-scales was

.87, .88, and .85, respectively, when tested on a group of 28 managers from 16 different Fortune 500 companies. Only half of the 24 items were used in the current study; 4 items for training (α = .85), 3 for accountability (α = .85), and 5 for organizational work design (α = .89).

Scoring for ODC. Individuals completed all three measures, assessing a total of 5 separate factors identified from the studies described above. When the 5 composites were analyzed with an exploratory factor analysis, two components emerged with eigenvalues greater than 1.0. The first factor to emerge included the three topics assessed in the diversity practice survey (training, accountability, and organizational work design), and the second included the remaining two scales, DPS and ODCS. However, after standardizing all scores (z scores), the reliability for the second factor was still low (coefficient alpha = .54). The reliability for a composite including all five scales was acceptable with alpha = .76. Therefore, one composite variable was created from the average of the five individual standardized scales. Higher scores indicate more positive ODC.

Results

Study 2

A 3 (rationale: compensation, diversity, and none) x 2 (grouping: 1 and 2 that varied affirmative action targets) x 2 (hire status: affirmative action, non affirmative action) mixed subjects multiple analyses of variance (MANOVA) tested the predicted differences in the experimental groups with rationale and grouping as between subject factors and hire status as a within subject factor. Two groupings were used to counterbalance which new hire targets were presented as the affirmative action hires.

Overall anticipated career outcomes (6 individual evaluation questions combined), stereotype strength, and attitudes served as the dependent variables.

Main Effects. Hypothesis 1 predicted that hire status would have a direct influence on anticipated career outcomes such that participants would have lower ratings of career outcomes towards individuals hired through affirmative action compared to those who were not. This hypothesis was partially supported; there was a marginal effect of hire status on anticipated career outcomes of AABs, F (1,96) = 3.54, p =.06, η^2 = .04, such that those hired through affirmative action had lower predicted outcomes (M = 3.25, SD = .61) than those who were not affirmative action hires (M = 3.36, SD = .61). Means are presented in Table 12. A follow up factor analysis of the anticipated career outcome measure revealed only one factor. However, when each individual question was analyzed to see if there were differences between individuals hired through affirmative action or not, there were significant differences on the competence question (Q1), perceived qualifications questions (Q4), and the role special treatment plays in their performance (Q5). See Table 13 for detailed results.

Hypothesis 2 predicted that affirmative action rationale would directly influence anticipated career outcomes such that a diversity rationale would lead to less negative outcome predictions for affirmative action beneficiaries than a compensation rationale or no rationale. Results did not support this hypothesis, F (2,96) = .19, *ns*. There were no differences between rationale conditions on the anticipated career outcomes; (diversity M = 3.34, SD = .51, compensation M = 3.30, SD = .54, control M = 3.27, SD = .50).

Hypothesis 2 also predicted that AAP rationale would directly influence the strength of the stereotype such that a diversity rationale would lead to a weaker

stereotype than a compensation rationale. A one factor MANOVA tested this hypothesis, with rationale as the IV and 5 stereotype measures as the DVs. The overall MANOVA was not significant, F (8, 192) = .76, *ns*. Results showed no effect of AAP rationales on any of the five stereotype measures. See Table 13 for details.

The final prediction of Hypothesis 2 was that AAP rationales would directly influence attitudes such that a diversity rationale would lead to more positive attitudes of AABs than a compensation rationale or no rationale. Another one factor MANOVA tested this hypothesis with rationale as the IV and 7 attitude measures as the DVs. The overall MANOVA was not significant, F (12, 188) = 1.22, *ns*. However, results from the univariate tests showed that rationale had a significant effect on one of the seven measures. The evaluation and likelihood measure of positive affirmative action outcomes showed significant differences by rationale, F (2,99) = 3.74, p = .027. Post hoc tests (LSD) showed that the difference between conditions was opposite to those predicted. Participants in the diversity rationale condition had a lower score (M = 6.55) than those in the compensation condition (M = 9.99); neither were different from the control group (M = 8.67). Higher scores represented more positive attitudes towards affirmative action, and indicated that individuals believed the event described in the statement was positive (evaluation) and more likely to occur (likelihood). Therefore, contrary to prediction, results showed that those in the compensation condition had more positive attitudes than those in the diversity condition.

There were no other differences by rationale condition for the remaining six attitude measures. See Table 14, panel 2 for detailed means and statistics for the attitude measures.

Hypothesis 3 predicted that hire status would moderate the influence of affirmative action rationale on anticipated career outcomes. In other words, the relationship between affirmative action rationale and anticipated career outcomes of AABs would be substantially reduced for those who were not hired through affirmative action. Interactions from the 3 (affirmative action rationale) x 2 (hire status) mixed model ANOVA on anticipated career outcomes tested for the moderation effects. Results indicated there were no interactions between hire status and rationale, $F(2,96) = 1.79$, *ns* nor between hire status, rationale, and grouping, $F(2,96) = 2.06$, *ns*. This suggests that there were no differences in outcomes for AABs and non AABs regardless of the group they were in or the rationale used to justify the affirmative action program.

Hypothesis 4 predicted that strength of stereotype would mediate the relationship between affirmative action rationale and anticipated career outcomes. However, the affirmative action rationale did not influence anticipated career outcomes. Further, the mediator (strength of stereotype) was not significantly influenced by AAP rationale at all. Therefore, since the first and third requirements for testing mediation were not found (affirmative action rationale did not have an influence on the mediator, stereotype strength, or the final dependent variables, anticipated career outcomes or attitudes), it is not possible to test for mediation (Baron & Kenny, 1986) using multiple regression equations.

Exploratory Hypotheses

Hypothesis 5 predicted a main effect of Organizational Diversity Climate (ODC) on attitudes and anticipated career outcomes. Results did not support this hypothesis. ODC was not related to any of the seven attitude measures using a point-biserial

correlation; see Table 15 for Pearson correlation coefficients. Hypothesis 6 predicted that ODC would moderate the influence of AAP rationale on the strength of the stereotype such that ODC would have a stronger impact on those who were given the compensation rationale compared to those given the diversity rationale. Results did not support this prediction, either. The interaction of ODC and rationale was tested on stereotyping through a one-way MANOVA, and the multivariate results were not significant, F (8, 184) = .45, p = .89, so no further tests were conducted. This suggests that regardless of ODC level, there is no influence of AAP rationale on stereotyping.

Finally, it was possible that ODC functioned as a dependent variable since it was measured at the end of the experiment. To verify that it did not function in this way, it was entered as the dependent variable in separate ANOVAs with AAP rationale and grouping as the independent variables. There were no differences between AAP rationale conditions for ODC, F (2, 102) = .75, p = .48, nor between grouping conditions for ODC, F (1, 102) = .78, p = .38.

Study 2 Discussion

The hypotheses in general were not supported in Study 2, except for hypothesis 1 which focused on the influence of hire status. As predicted, there was a difference, although marginal, between anticipated career outcomes of new hires based on their hire status; affirmative action hires had less positive evaluations than non-affirmative action hires. No other predictions were supported with the data.

Prior research established that AABs receive lower ratings and evaluations than non-affirmative action beneficiaries (Heilman & Alcott, 2001; Heilman, et al., 1997; Kravitz et al., 1997; Northcraft & Martin, 1982). Thus, these findings are consistent with

the literature. For example, Heilman et al (1997) found that women hired through affirmative action were perceived as being hired based on qualifications less often than men or women not hired through affirmative action. When individual questions were analyzed to see if there were differences on all questions, the three that were significantly different were most directly assessing competence of the affirmative action hires, questions 1, 4, and 5 which measure competence, qualifications in hiring process, and the role of special treatment for AABs in on the job performance. Questions pertaining to expected movement in the organization were not different between hire status. These results are consistent with the literature showing that the competence of the AABs (per the stereotype) was the specific domain where individuals differ in evaluations.

Several researchers offer possible explanations for why negative evaluations of AABs occur. Dovidio and Gaertner (2000) suggest that negative evaluations towards AABs could be due to aversive racism, a type of discrimination that occurs unintentionally when the evaluation could be justified by some explanation other than race, and when the situation is ambiguous (i.e., a politically correct response is not obvious). In Study 2, participants may have believed that the AAP new hires simply had a lower skill set and less experience than the other newly hired employees. However, the resumes of each of the four new hire targets were carefully pilot tested to ensure they were evaluated as equally qualified and skilled for the position of interest in the study. Therefore, it is unlikely that aversive racism was the main reason for negative evaluations. Furthermore, two of the four targets were labeled as AAP hires; thus the situation was not ambiguous.

Alternatively, the negative evaluations in Study 2 support Devine's (1989) empirical results that knowledge of social stereotypes influences cognitive processing, and that biased behavior may occur as a result. This may occur at times in a sub-conscious manner. As Bargh (1997) suggests, social stereotypes are automatically activated and can influence everyday behavior. Eberhardt's (2005) work lends further explanation to this type of discrimination from a neurological basis, suggesting that social stereotypes with negative affect may become a neurologically wired reaction, with the center of activity based in the amygdala. Eberhardt found that amygdala activity increased when racial targets (different from the participant's race) were displayed and required social categorization.

Although differences were found for anticipated career outcomes based on new hire status, there was no influence of hire status on the stereotype or attitude measures. Similarly, AAP rationales did not influence any of the stereotype measures or any of the attitude measures. Unfortunately, Study 2 did not use a manipulation check for AAP rationales. However, the lack of influence of rationale on any dependent measures suggests that the rationale, as in Study 1, was a weaker manipulation than expected. Additionally, there may have been other variables not measured that could have influenced the stereotype and attitudes.

Finally, ODC did not predict any of the dependent measures. The failure of this measure to capture differences does not mean that there is no relationship between ODC and attitudes or competence evaluations. It simply means that these measures failed to find evidence of the ODC influence with this sample of employees from organizations of various industries and size. Furthermore, the study design may have been a limitation in

assessing ODC as a construct. For example, based on Kopelman et al. (1990) definition of climate as "meaningful interpretations of a work environment by the people in it" (p. 290), it is possible that if we had larger samples of employees from each organization (or fewer organizations) we could have more accurately captured the climate of the organizations. To study differences in ODC between organizations, however, would require at least 5 different organizations, with enough individuals from each to allow for sufficient statistical analyses. While this could be possible, it would require tremendous access to the organizations that could be difficult to obtain.

Chapter V. General Discussion

The use of affirmative action and the rationales to justify its use are extremely important in today's society of increasing globalization, and an increasing number of minorities and women in the workplace. U.S. businesses have increasingly been openly supportive of diversity as evidenced through EEOC best practice reports, as well as through efforts such as big businesses filing amicus briefs on behalf of diversity in court cases that are concerned with affirmative action. It is especially important for today's business leaders to be knowledgeable and sensitive to the issues surrounding diversity. Ann Morrison (1992) highlights the benefits and challenges for organizations who seek women and minority leaders, and a research report by Catalyst (2004) showed evidence that organizations with a higher percentage of women in top management had significantly higher return on equity (ROE) and total return to shareholders (TRS).

This research examined the effects of affirmative action rationales (diversity and compensation) on stereotypes of AABs, attitudes toward AAPs, and anticipated career outcomes for AABs. The two studies in this paper explored if sub-grouping and sub-typing cognitive processes were elicited as a result of using the different AAP rationales. The rationales were expected to influence cognitive processing, which was expected to influence the strength of stereotype and attitudes towards AAPs. This research also sought to replicate results from prior studies; instructions to organize information were predicted to influence cognitive processing, stereotype strength, and attitudes towards affirmative action and its beneficiaries.

A pair of studies examined these predictions. Study 1 investigated the influences of AAP rationales and instructions to organize on cognitive processing. This was

examined by comparing the influence of instructions and AAP rationales on cognitive processing, strength of stereotype, and attitudes toward AAPs and AABs. Study 2 examined the use of AAP rationales outside a laboratory setting to see if they would continue to influence stereotype strength, and attitudes. Additionally, anticipated career outcomes of newly hired employees were measured in Study 2 to determine how AAP rationales would influence them as well.

Results from Study 1 showed that AAP rationales had an influence on cognitive processing, but not on stereotype strength or attitudes. Results from Study 2 showed that AAP rationales did not have an influence on stereotype strength, attitudes, or anticipated career outcomes; Study 2 did not measure cognitive processing. These findings present a compelling case that AAP rationales do not have an effect on stereotype strength, attitudes, or anticipated career outcomes. One possible reason for this lack of influence could have been that the AAP rationales were not as prominent and clear as they could have been since the manipulation check from Study 1 found only marginal evidence that participants understood the rationales. Therefore, the lack of results showing that AAP rationales have an influence on these outcomes may simply be due to weak AAP rationales rather than conclusive evidence that AAP rationales have no impact on stereotype strength, attitudes, or anticipated career outcomes.

Interestingly, despite the weak AAP manipulation, there were clear differences between AAP rationale conditions on cognitive processing in Study 1. Participants given a diversity rationale created more groups (3.99) than participants who were given a compensation rationale (3.11). Differences in cognitive processing between conditions were also supported by the content analysis of the sorted cards. Participants in the

diversity condition created more uniquely formed sets (75%) than those in the compensation condition (56%) suggesting that categories typically associated with the stereotype were not the dominant criteria in their categorization. Participants in the diversity rationale condition tended to focus on individual attributes of the new hires, thus decreasing focus on stereotype confirming and disconfirming traits.

The content analysis reported from this study corroborates Maurer et al's (1995) belief that sub-grouping results in the perception of increased variability among individual group members, which breaks down boundaries of the stereotype by providing more information about those within the group. These results support Allport's intergroup contact hypothesis and Fiske's assertion that attention promotes individuation (Fiske et al., 1999; Fiske, 2000).

In Study 1, a diversity rationale led participants to use a sub-group cognitive process and a compensation rationale led individuals to use a sub-type cognitive process. This finding suggests that individuals' categorization of affirmative action hires is influenced by the rationale used to justify it. As described in prior organizational descriptions (Walker & Hanson, 1992) and in a prior study (Kidder et al., 2004), a compensation rationale carries a negative connotation, due to the perception that White males may interpret affirmative action plans as rewards offered to out-groups rather than in-groups. In this study, the "us vs. them" mentality maintained stereotypic categories, as shown by the content analysis of the sets created by those in the compensation rationale. In the diversity rationale condition, participants created almost 4 sets, suggesting they focused on multiple unique characteristics of the group, not simply the general characteristics of affirmative action hires. Additionally, a key finding here was

discovered through content analysis of the sorted sets. Perhaps the exact number of sets created (2 vs. 3) does not matter as much as the content of the sets. Rather than examine the exact number of sets created, we should simply look for those who sub-type to form "fewer" sets that those who sub-group, and that the sets created in sub-typing use stereotype traits more often as the dominant organizing criterion.

These results support prior research findings on cognitive processing (Baron-Donovan et al., 2003; Maurer et al., 1995). They extend the research by establishing an additional mechanism by which the sub-grouping cognitive process is elicited. Prior research used instructions on how to organize information as the sole method to elicit this process. This finding supports the importance of future investigations of AAP rationales and their influence on cognitive processing. Unfortunately, even though participants used the predicted cognitive processes in Study 1, there were no differences found between conditions (rationales or instructions to organize) for any of the stereotype measures or attitude measures. Perhaps the additional information given to participants, which made the task more realistic than prior laboratory studies (Mauer et al., 1995 and Donovan et al., 2003) reduced the influence of the cognitive processes. Other factors, such as mood, task comprehension, or demand characteristics may have also influenced individuals' responses. For example, the expanded description of the organization may have introduced demand characteristics triggering implicit cues to respond in a "politically correct" manner. Alternatively, since all participants in Study 1 were undergraduate students who mostly worked part time, they may have been unable to comprehend adequately the organizational situation as described. As a result, the participants may not have fully appreciated the affirmative action dilemma described in

the materials. In short, these procedures may have worked better with an older sample of individuals with greater work experience.

Study 2 was designed to test the influence of AAP rationales in a more realistic work task. As predicted, affirmative action hires had marginally lower anticipated career outcome ratings. This finding supports prior findings in the literature (Heilman et al., 1997; James et al., 2001; Nacoste & Lehman, 1987). The results from Study 2 showing that AABs received more negative career outcome ratings suggests that use of affirmative action in the workplace should be used with caution. As prior studies have indicated, decisions that are made in the workplace that are motivated by affirmative action should be accompanied by evidence of the individual's ability or merit for the position or promotion (Heilman, et al. 1997). For example, when Heilman et al. (1997) provided additional evidence of the affirmative action recipient's good performance on the job had a positive influence only if the information was overwhelmingly positive. These results are also consistent with research and theory describing the automatic activation of social stereotypes and their affective association. Bargh (1997) explains how stereotypes are often automatically accessed when individuals encounter members of the stereotyped group. Behavior towards such groups is influenced by the affect associated with the stereotype (positive or negative). Devine's (1989) research provides evidence to support these claims; when people were unable to override negative stereotypic thoughts, negative ratings were given to individuals from that stereotyped group.

Cognitive processing was not assessed in Study 2 due to the use of a different task and study set up (with the intention of creating a more realistic scenario). It would be useful to assess cognitive processing of participants from both types of tasks to see how

cognitive processing relates to subsequent evaluations, attitudes, and stereotype measures. Perhaps a study could be designed where these two tasks were given in an assessment center or training program where employees were involved for a longer duration of time.

In Study 2, the exploratory variable ODC was not related to any of the stereotype or attitude measures, and did not have an influence on new hire evaluations. Kopelman et al. (1990) suggest that organizational climate is nested within the culture of an organization, and is specifically influenced by human resource processes such as hiring, promoting, rewarding, developing, and monitoring. Although individuals at the same workplace may have some idiosyncratic reactions to their work environments, they share a common environment with rules and customs that are the same for all employees. Therefore, the shared environment should have a substantial impact on organizational climate. While the measures used in this study did not find that ODC influenced any of the outcome measures, it is possible that organizational climate was not measured at a group level, thus did not represent organizational climate in the most accurate manner possible.

Practical Implications

These findings have some implications for both organizations and individuals who are exposed to affirmative action policies. First, organizations that use affirmative action policies may benefit from justifying the policy with a diversity rationale. While this study did not find differences in attitudes, stereotypes, or evaluations based on rationales, at the very least we did see differences in how individuals categorized the new hires when presented with different rationales. Even if a rationale only influences

cognitive processing style, this effect is worth pursuing and it may ultimately lead to a change in stereotyping of affirmative action hires. These results suggest that sub-grouping enhances attention for individuating information for those from a stereotyped group. Perhaps a residual or cumulative effect of the diversity rationale would eventually influence attitudes and behaviors towards the stereotyped individuals. Future research could explore the possibility of cumulative effects.

Second, individuals who are affirmative action beneficiaries should be aware that stereotypes, while less overt in the current social environment, still exist and may influence evaluations towards them. Individuals who evaluate beneficiaries of affirmative action should be mindful of this as well, and strive not to make assumptions about such individuals. Instead, they should attempt to substantiate all evaluations based on the individuals' performances over time.

These findings are also important from a legal perspective. It is impossible to predict how court decisions will be decided or if and when AAP legislation will be revised. However, the findings from Study 1 suggest that how AAPs are justified influence individuals' categorization of affirmative action beneficiaries. This is consistent with Allports' assertion that the context of inter-group interactions plays an important role in the success of the interaction. Furthermore, it lends support for further exploration of the ODC variable, as that should have an influence on the context in which AAPs are implemented. The Supreme Court has used this type of argument as a basis for AAPs without empirical evidence. For example, prior court decisions required that AAPs "assess all of the qualities an individual possesses" when diversity is the compelling state interest (*Bakke*, 1978; *Grutter*, 2002). Justice O'Connor further clarified how AAP

programs can be narrowly tailored to meet the compelling state interest of diversity (thus satisfying both requirements of a strict scrutiny review), suggesting that "truly individualized consideration requires that race be used in a flexible, non-mechanical way" (*Grutter*, 2003). These statements by Justices of the Supreme Court suggest that they believe in the value and need for programs that focus attention on individuating information as a key to effective diversity efforts. Finally, the results from this study combined with the assessment of Supreme Court Justices suggest that businesses should pay attention to how affirmative action is described and justified.

Limitations

These studies have several limitations. The most obvious problem was the weak manipulation of AAP rationales. In an ideal situation, they would have been pilot tested prior to Study 1, or at least altered after Study 1 results were analyzed. Unfortunately, data collection for Study 1 and Study 2 were so close together that Study 1 results were not analyzed prior to the launch of Study 2. Therefore, the opportunity to address this problem with the rationales was lost. Additionally, Study 2 did not use a manipulation check for AAP rationales. Thus, it is difficult to determine how clearly the AAP rationales were understood, and if they had an impact.

Results from Study 1 have limited generalizability due to the sample and setting of the study. The student sample does not easily allow generalizations to the workplace population. However, the participants were realistic sample of undergraduate students of all ages who will enter the workforce in the near future. Further, laboratory studies provide a high level of control and allow causal conclusions, which ultimately can explain how individuals process information about affirmative action hires. Still,

replications of laboratory studies in real world environments are necessary to strengthen their conclusions and implications.

Future Research

There are two main areas of research that could be continued based on the findings (and lack thereof) from the 2 studies in this research. The first area is to more fully examine cognitive processing differences between AAP rationales. With the above limitations in mind, it is recommended that AAP rationales should be refined and re-tested to see if any of the original hypotheses hold in regard to their influence on stereotypes, attitudes, or anticipated career outcomes. Determining how to reduce the potential effects that automatically activated stereotypes have on attitudes and career outcomes continues to be a critical need in both research and practical applications. The findings from Study 1 that AAP rationales influence cognitive processing provides a promising lead, and one that needs to be more fully explicated. It is important to see if AAP rationales would elicit these two cognitive processes (sub-grouping, sub-typing) when more comprehensive information is given, such as providing information about full time employees. If sub-grouping could be elicited, would it influence other work related outcomes such as hiring, performance evaluations, salary reviews, promotions, and training/ career development. These activities are necessary for organizations to be effective. For example, the better a company can hire, retain, and develop effective employees, the better it will be at meeting the goals of the business (Goldstein & Ford, 2002; Kaufman, 2006; Landy, 1989; Shafritz, Ott & Jang, 2005). Enhancing employees' ability to focus on individuating information as they participate in these activities would benefit all involved. Those who are being reviewed and evaluated would benefit from

the accuracy of information used to evaluate their performance, those who are reviewers would benefit from having a process that helps reduce unconscious bias, and the organization would benefit from the enhanced accuracy used in such processes.

The second area of research to pursue is more detailed investigation of ODC. Prior research provides compelling evidence that organizational culture influences work outcomes (Carr et al., 2003). Yet, the lack of significant findings for ODC from Study 2 should not be taken as conclusive evidence that ODC is not related to attitudes and anticipated career outcomes. It would be useful to more fully examine ODC as a construct, perhaps with a validation study. Once the construct is more accurately defined, more effective measures could be designed to capture the nature of this construct in the workplace. Further research with the Study 2 procedures should consider a broader, more representative sample. A larger sample gathered from within organizations might enhance some of the climate instruments and find stronger relationships among the measures.

In summary, these studies provide partial support for established theory and offer some new findings for the field. This research replicated findings that show that instructions to organize influence cognitive processing. Study 1 extended prior work by establishing for the first time that AAP rationales influence cognitive processing. This finding supports Maurer and colleagues arguments about cognitive changes that arise from re-categorization of data. It also provides indirect support for Allport's intergroup contact hypothesis, offering a way in which individuating information might alter the larger group stereotype. Most importantly, though, we have evidence suggesting that the rationale used to justify affirmative action has an impact on how individuals from that

group are categorized. More research is necessary to determine how this cognitive processing influences other decisions and attitudes.

Appendix A
Hypothetical Organization Description and Rationales

Welcome to New Business Strategies in Selection!

You are a hiring manager who just participated in hiring 100 employees across our multinational organization, using an affirmative action policy to help make hiring decisions. Of these 100 affirmative action hires, 16 will work in your region (northeast).

As the personnel manager, you are asked to review the 16 individuals for the Northeast Region and sort them into groups that represent their likely work characteristics.

Instructions

- When you are asked to do so, please read each of the 16 cards. Each card describes one newly hired employee.
- Please take ten minutes to review the cards and sort them into groups.
- Please complete the memo to 4 departments (partially prepared for you). In this memo, please explain how you sorted the individuals.
- Please name the groups as you sort them, and use these names to describe the groups in your memo (use worksheets provided for this task).

Hypothetical Organization Description:

Global Technologies (GT) is headquartered in Ohio and embodies technology innovation in the manufacture, repair, and service of engines, helicopters, elevators, heating/cooling systems, space systems technologies and automotive components. It is a global company with over 170,000 employees worldwide. GT has over 70,000 employees in the US, who are engaged in engineering, manufacturing, finance, management and support functions for six flagship locations in: Florida, Texas, Oregon, Minnesota, Connecticut, and Ohio.

GT strives to be the best service provider to individual customers, entrepreneurial businesses, as well as businesses, which are leaders in the marketplace. GT is committed to technological strength and innovation for our internal work environment as well as for the services we provide our customers.

Diversity Rationale:

GT considers the world its market, since it does business in almost every nation on earth. To win these markets, GT's policy is that consumers must know that the company employs people who look like them, and that GT employees understand and appreciate them. The consumers must believe that the diversity of GT employees enhances their insights and skills that helps them meet unique business and personal needs of the consumer. For GT to attract and build the best team, all of its employees, wherever they work, must believe they are respected as much as they are valued.

The purpose of GT's Succession Plan is to ensure a continuous stream of diverse leaders/managers capable of creating effective organizations and executing business strategies. Qualified candidates are sought from a broad range of sources with the goal of promoting diversity of leadership. GT's policy is that consumers must know that the company goes out of its way to employ diverse groups of people that represent a broad spectrum of socity. GT states that future leaders are identified and developed on the basis of demonstrated capability. Individuals are involved and share ownership for determining their development plans.

GT is an equal opportunity employer, and will not discriminate against any applicant based on upon race, color, sex, religion, or national origin. In addition to adhering to laws against discrimination, we work hard to create formal and informal mechanisms to achieve affirmative action. We use an affirmative action policy (see below) to assure that we hire a diversified workforce at GT.

Compensation Rationale:

GT considers the world its market, since it does business in almost every nation on earth. To win these markets, GT's policy is that consumers must know that the company goes out of its way to employ underrepresented groups of people who have previously been discriminated against in the manufacturing sector. GT wishes to express its view that the organization takes seriously its responsibility to make up for this past discrimination against those groups. The consumers must believe that GT employees have the insights and skills to help them meet their unique business and personal needs. For GT to attract and build the best team, all of its employees, wherever they work, must believe that the company provides equal opportunities for all of them.

The purpose of GT's Succession Plan is to ensure a continuous stream of unique leaders/managers capable of creating effective organizations and executing business strategies. Qualified candidates are sought from a broad range of sources with the goal

of promoting leaders from all groups, but especially from those that have previously been discriminated against. GT states that future leaders are identified and developed on the basis of demonstrated capability. Individuals are involved and share ownership for determining their development plans.

GT is an equal opportunity employer, and will not discriminate against any applicant based on upon race, color, sex, religion, or national origin. In addition to adhering to laws against discrimination, we work hard to create formal and informal mechanisms to achieve affirmative action. We use an affirmative action policy (see below) to assure that our hiring policies act to <u>compensate</u> individuals who have been previously discriminated against in the manufacturing sector.

<u>No Rationale:</u>
GT considers the world its market, since it does business in almost every nation on earth. To win these markets, GT's policy is that consumers must know that the company employs qualified people. The consumers must believe that GT employees have the insights and skills to help them meet their unique business and personal needs.

The purpose of GT's Succession Plan is to ensure a continuous stream of leaders/managers capable of creating effective organizations and executing business strategies. Qualified candidates are sought from a broad range of sources with the goal of promoting effective leaders. GT states that future leaders are identified and developed on the basis of demonstrated capability. Individuals are involved and share ownership for determining their development plans.

GT is an equal opportunity employer, and will not discriminate against any applicant based on upon race, color, sex, religion, or national origin. In addition to adhering to laws against discrimination, we work hard to create formal and informal mechanisms to achieve affirmative action.

GT used the following policy when hiring this group of 100 workers:
<u>Policy</u>: Affirmative Action provides people with diverse backgrounds based upon race, ethnicity, gender, or other underrepresented characteristics with special consideration in employment, education, and contracting decisions. Institutions with affirmative action programs often use recruitment policies and training to achieve this goal. Affirmative Action officers faced with two similarly qualified applicants will choose the diversity over the typical.

To help you describe the groups you created, please use one worksheet for each pile you created.

Worker Report Sheet

In the space provided below, list the card numbers (that are found in the lower right hand corner of the cards) of each of the workers that you placed together in this group.

In the following space, describe why you grouped these individuals together.

Please provide a label/ name for this group of workers that describes their common characteristic(s).

Appendix B

Chart of Card Descriptions

Stereotype Confirming Dimensions	Set 1	Set 2	Set 3	Set 4	Set 5
Lazy	Lateness	Unmotivated	Unproductive	Careless	Counter: Not Lazy
Unskilled	Disorganized	Inexperienced	Computer Illiterate	Doesn't manage time well	Counter: Skilled
Hostile	Arrogant	Angry	Resentful	Rude	Counter: Pleasant
	↓ Yields 3 cards	↓ Yields 3 cards	↓ Yields 3 cards	↓ Yields 3 cards	↓ Yields 4 cards

Appendix C
Rationale Manipulation Check

What do you think is the MAIN reason GT is using affirmative action? (please check **one** only)

Because it will make up for past harms against discriminated groups. ____

Because it is required by government. ____

Because the organization values the unique perspectives that diverse individuals contribute. ____

What do you think is the MAIN reason GT treats women and minorities differently from others?

(please check **one** only)

Because women and minorities are better workers than others. ____

Because women and minorities have been discriminated against in the past. ____

Because women and minorities offer unique perspectives to the organization that other individuals do not. ____

Appendix D
Measures of Stereotype Similarity and Typicality from Maurer et al. (1995)

Please answer each item in this page for the full group of 100 employees hired under the affirmative action policy.

Individual Group Member Typicality Ratings
Please rate how typical each of the 16 workers in the card task was in relation to the total group of 100 affirmative action workers hired by the multinational organization. You MAY look back at the cards to complete this task.

Mr. S (card 1)
Mr. R (card 2)
Mr. F (card 3)
Mr. H (card 4)
Mr. K (card 5)
Mr. G (card 6)
Mr. B (card 7)
Mr. L (card 8)
Mr. Q (card 9)
Mr. W (card 10)
Mr. C (card 11)
Mr. P (card 12)
Mr. A (card 13)
Mr. J (card 14)
Mr. T (card 15)
Mr. E (card 16)

Note. A 7 point likert scale was provided for each individual above: 1 = Extremely Typical, 4 = neither typical nor atypical, 7 = extremely atypical.

Similarity Task

Please rate how similar the [total group of 100 (for Study 1)] affirmative action *workers are to each other overall* (circle 1 number).

Please rate how similar the total group of 100 affirmative action workers are to each other *with regard to acting lazy.*

Please rate how similar the total group of 100 affirmative action workers are to each other *with regard to being unskilled.*

Please rate how similar the total group of 100 affirmative action workers are to each other *with regard to acting hostile.*

Note. The response scale for the items above is a 7 point scale; 1 = Extremely similar, 4 = Neither similar nor dissimilar, 7 = Extremely dissimilar.

Percent Estimate Task:

Please answer each item in this page for the [full group of 100 (Study 1)] employees hired under the affirmative action policy.

What percentage of [the full group of 100 (for Study 1)] affirmative action workers can be described with the following statements? 0% - 100%

Affirmative action employees are very late. _____ %
Affirmative action employees are polite. _____ %
Affirmative action employees are unmotivated. _____ %
Affirmative action employees manage their time well. _____ %
Affirmative action employees are inexperienced. _____ %
Affirmative action employees are careful. _____ %
Affirmative action employees are disorganized. _____ %
Affirmative action employees are appreciative of others. _____ %
Affirmative action employees are arrogant. _____ %
Affirmative action employees are able to use a computer well. _____ %
Affirmative action employees are angry. _____ %
Affirmative action employees are productive. _____ %

Please answer each item in this page for the full group of 100 employees hired under the affirmative action policy.

Mean and Range Estimation Task:

1) Please mark an X to indicate the average behavior of the total group of 100 (Study 1)/ 2 (Study2) affirmative action workers on the following dimensions:(lazy – ambitious; unskilled – trained; hostile – kind).

After that, please place one slash mark (/) to indicate the highest score (most ambitious) for affirmative action workers and another slash mark (/) for the lowest score (laziest) for affirmative action workers.

Lazy ---------- Ambitious
1 2 3 4 5 6 7 8 9 10

Unskilled ---------- Trained
1 2 3 4 5 6 7 8 9 10

Hostile ---------- Kind
1 2 3 4 5 6 7 8 9 10

Appendix E

Attitudes Toward Affirmative Action Programs

Measure 1 – from Bell, Harrison & McLaughlin (2000)

Affirmative Action Statements

Please read the following statements, each of which describes an outcome that some people believe is true about affirmative action programs. You will make two ratings for each statement.

First, rate the extent to which the outcome described in each statement is good or bad. Second, rate how likely it is that each statement is true. Statements may be 1) good and likely, 2) bad and likely, 3) good and unlikely, or 4) bad and unlikely. In other words, the two ratings are independent of each other.

1. Affirmative Action Programs improve job opportunities of females and minorities.
2. Affirmative Action Programs give everyone qualified an equal chance.
3. Affirmative Action Programs reduce discrimination and in historically segregated jobs.
4. Affirmative Action Programs create greater awareness or recognition of discrimination.
5. Affirmative Action Programs help produce a more diverse workforce
6. Affirmative Action Programs enhance the competitiveness of most businesses.
7. Affirmative Action Programs reduce racial tensions among employees.
8. Affirmative Action Programs cause employers to hire those less qualified.
9. Affirmative Action Programs can produce reverse discrimination.
10. Affirmative Action Programs restrict the freedom a business has for making decisions.
11. Affirmative Action Programs frequently operate as "quota" systems for filing jobs.
12. Affirmative Action Programs take a lot of time, effort, money, and paper work for companies.
13. Affirmative Action Programs create perceptions that minorities and females would not qualify on their own merits.

Note. For each statement above, two questions were asked:
Is this outcome good or bad? (Responses were on a 7 point Likert scale from –3 = Extremely bad to 3 = Extremely good)
How likely is it that this statement is true? (Responses were on a 7 point Likert scale from 1 = Extremely unlikely to 7 = Extremely likely)

Measure 2 – from Bell, Harrison & McLaughlin (1997)

Affirmative Action Programs Evaluation

Please read the following statements and indicate by circling a number on the scale to indicate your choice of how you would complete the sentence.

1. In general, affirmative action programs are _____

Harmful -Helpful
Worthless - Worthwhile
Negative - Positive
Ready to be Phased Out - Necessary to Keep
In need of Changing - Should stay the Same

Note. Responses ranged from 1 – 7 with the above behavioral anchors.

Appendix F

Attitudes Towards Affirmative Action Beneficiaries

Please read the following statement and indicate by circling your choice whether you agree/disagree.

1. Affirmative action always gives females preferential treatment over males in jobs I will be seeking upon graduation whether the female is qualified or not.

2. Affirmative action always gives non-Whites preferential treatment over Whites in jobs I will be seeking upon graduation, whether the non-White is qualified or not.

3. My ability to get ahead in my career will be greatly limited by affirmative action.

4. My chances of being hired for a position in an area that I will seek upon graduation are diminished due to affirmative action programs.

5. My ability to get ahead in my career will be greatly enhanced by affirmative action programs.

6. My chances of being hired for a position in an area that I will seek upon graduation are increased due to affirmative action programs.

Note. Responses range from 1 = Strongly Disagree to 6 = Strongly Agree.

Please provide your opinion on the following 2 questions in regard to the new hires you just reviewed.

1. To what extent do you think these individuals were hired because of their qualifications to do the job well?

1	2	3	4	5	6
Not at all on qualifications					Completely on qualifications

2. How important do you think special treatment will be in accounting for the performance of these employees?

1	2	3	4	5	6
Not at all Important					Very Important

Appendix G

Memo to Managers

Please describe the groups you have created in the memo below. Please tell the department managers why you grouped these individuals together.

To: Jean Gattler, Marketing
Shay Zolnar, Information Technology
Kathy Chu, Accounting
Jose Ramirez, Production

From: _____, Hiring Manager

Re: Newly Hired Employees

I am pleased to announce that we have officially hired a new group of employees to help reduce the workload in each of your departments. Attached to this memo, please find 16 individual descriptions of employees who will be joining us in the Northeast region (there were a total of 100 employees hired across the U.S. this year).

I have reviewed these candidates, and have sorted them into groups that represent their likely work characteristics. There are ____ groups. They are sorted by _____

_____
_____
_____
_____
_____
_____

_____

Please let me know if I can be of further assistance.
Regards,
_____ (sign your name)

***When you have completed this memo, please turn your paper over and wait for further instructions.*

Appendix H
Study 1 Debriefing Statement

Thank you for participating in this study. The purpose of this study was to gain insight into how individuals respond to different rationales for use of Affirmative Action programs, and to explore the way in which people classify and categorize affirmative action workers and attitudes toward those workers.

There are 5 different groups of participants were presented with different rationales for using Affirmative Action. One group of participants received a description of an organization that used a compensation rationale (making up for past harms) for use of affirmative action. The second group of participants received a description of an organization that used a diversity rationale (valuing unique contributions from diverse individuals) for use of affirmative action. The other 3 groups of participants received no rationale for why the organization was using affirmative action. Two of the groups that received no rationale for affirmative action were given explicit instructions on how to group the cards.

This is a study upon which future research may be based. We will use the information you provided here to learn about common views of people hired under Affirmative Action programs. We are investigating whether different organizational views of Affirmative Action as well as different methods of categorizing affirmative action candidates affects the decisions that people make about minorities in the workplace.

It is very important that you do not discuss this study with anyone else in any of your classes at the college until the study is complete. You and a large number of other people have participated in this study devoting a great deal of their time to reviewing the materials and answering the questions. If people discuss the experiment ahead of time, we will be unable to use the data and all the participants will have wasted a great deal of time and effort.

- Once again, we thank you for your participation!
- We ask that you not discuss this research with any future participants

If you have any questions or concerns about this project, or if you would like to know the general results of the research upon its completion, feel free to contact Corinne Donovan at 718-753-1452

Appendix I
Study 2 General Job Description

Role: Assistant Account Manager Position:

Job Description: Assistant Account Managers help Account Managers maintain and process orders from multiple accounts. They help ensure that orders for new equipment, service parts, training, and technical assistance are provided for all customers. Accounts are typically combined within a region and account managers are divided into wholesale and retail.

- Assistant account managers produce and verify monthly and quarterly reports for the region, by business, and for each customer.
- They must have good analytical and computing skills to help produce and verify reports.
- They must have some basic knowledge of technology, electrical engineering, or motor design. They will be trained further in one of these areas.
- They will need to learn the background of the organization and understand how all production and sales departments work together to deliver effective service for customers.
- They must write and communicate well to enhance interactions with internal and external customers and partners.

Appendix J
New Hire Information Sheets

New Hire #1

Picture 1 Here

Notes/ Comments:

Hired: 11/03/05

Starting: 12/7/05

Education
- B.S. in Engineering, SUNY Albany, 2003
- GPA = 2.8

Work Experience
- 2003 – 2005 IBM, Sommers, NY
  - Responsible for the defining new software specifications.
  - Worked with a variety of integration engineers to develop and enhance the processes run on the software.
  - Used statistical processes and various measurement techniques to trouble-shoot problems.
- 2000 - 2003 Store Clerk – Circuit City, Queens, NY (Part-Time)
  - Provided general assistance for individual customers in audio/video section.
  - Assisted in closeout procedures at end of day (drawer counts and paperwork verification).
  - Assisted manager in creating end of quarter and year sales and service reports.

Comments from Work References:
- He's mature when answering questions from other departments in a polite and timely way.
- Thinks he is better on certain tasks than anyone else at his work.
- Shows he is creative in the solutions he offers for problems that come up at work.
- Rarely is able to find his notes for meetings.
- Is organized when trouble-shooting problems.
- Doesn't like being asked to work late.

New Hire #2

Picture 2 Here

Notes/ Comments:

Hired: 11/5/05
(affirmative action)

Starting: 12/7/05

Education
- B.S. in Physics, SUNY Buffalo, 2002
- GPA = 2.9

Work Experience
- 2002 – 2005 Verizon, Flushing, NY
  - Helped develop programs to assess performance of technicians.
  - Created reports of installations and service technicians with graphs and charts.
  - Developed and prepared periodic and ad hoc reports of results for management, employees, and contractors on changes in service ratings.
- 1998 - 2002 Auto Repair Assistant, Buffalo, NY
  - Assisted fully licensed auto repair technician part-time through college.
  - Has advanced knowledge of car engines and parts.
  - Processed monthly orders for repair stock.
  - Managed relationships with suppliers.

Comments from Work References:
- Creative by the variety of methods he uses to test a new process.
- Usually slow in report writing.
- Shows he is mature by conducting himself in a professional manner with clients.
- Sometimes misses meetings because he forgets to check his calendar.
- Skilled at managing details of a project.
- Has trouble using word processing programs.

New Hire #3

Picture 3 Here

Notes/ Comments:

Hired: 11/13/05

Starting: 12/7/05

Education

- B.A. in Marketing, Hunter College, 2003
- GPA = 3.1

Work Experience

- 2003 – 2004 Marketing Assistant, Lucent Technology, Whippany, NJ
  - Extensive training and knowledge of communications products produced and how they are produced.
  - Helped design presentation materials---slides, boards, leave behind materials.
  - Helped design special mailings, announcements, direct mailings, etc.
  - Worked with outside vendors to produce materials.
- 2000 - 2003 Summers – Riverside Day Camp, Hastings on Hudson, NY
  - Head lifeguard for large day camp.
  - Responsible for managing 15 lifeguards for 3 pools.
  - Responsible for safety of over 1000 kids ages 4 to 16.
  - Taught swimming lessons to kids and helped new instructors learn to teach.

Comments from Work References:

- Underestimates the time needed to follow up with people.
- Shows maturity by making good financial decisions.
- His budget reports are usually incomplete.
- He's creative with product designs.
- Often schedules meetings too close together.
- Explains procedures clearly and effectively.

New Hire #4

Picture 4 Here

Notes/ Comments:

Hired: 11/15/05
(affirmative action)

Starting: 12/7/05

Education

- B.S. in Math, Farleigh Dickinson University, 2002
- GPA = 3.0

Work Experience

- 2002 – 2005 Konica Minolta, Edison, NJ
  - Extensive training on photo products; knowledge of production process.
  - Worked with individual electronic stores to provide products for retail sales.
  - Initially worked as an intern, then full time after college graduation.

- 1999 - 2001 Blockbuster Video, Mahwah, NJ (part-time)
  - Provided checkout assistance to customers.
  - Processed newly released movies for store inventory and computer files.
  - Contacted customers with overdue rentals (weekly).
  - Compiled quarterly rental reports.

Comments from Work References:

- Shows he is mature by acting properly when attending meetings.
- Boasts that he is the best negotiator at work.
- Good at handling customer inquiries.
- Has little experience with report writing.
- Shows he is creative by his inventive sales pitches.
- Somewhat unwilling to learn new procedures

Appendix K

Predictions of Worker Competence and Career Progress
(from Heilman et al., 1992)

Directions: Please answer the following questions for each new-hire reviewed.

New Hire #1 (to be provided for each new hire)

1) Overall, how competently do you expect this individual to perform?

1	2	3	4	5	6	7	8	9
Very Competently				Somewhat Competently				Not Competently at All

2.) How effective do you think this individual will be at doing the work?

1	2	3	4	5	6	7	8	9
Very Effective				Somewhat Effective				Not Effective at All

3.) How likely is it that this individual will move up in the organization?

1	2	3	4	5	6	7	8	9
Very Likely				Somewhat Likely				Not Likely at All

4.) How quickly do you think this employee will be promoted?

1	2	3	4	5	6	7	8	9
Very Quickly (within 6 months)				Somewhat Quickly (within 2 years)				Not Quickly at All (within 5 years)

5.) To what extent do you believe that the employee was hired because of his qualifications to do the job well?

1	2	3	4	5	6	7	8	9
Completely				Somewhat				Not at All

6.) How quickly do you think this employee will be promoted?

Within 6 months	Within 1 yr	Within 2 yrs	Within 3 yrs	Within 4 yrs	Within 5 yrs or more

Appendix L

Organizational Diversity Climate Measures

Measure 1 - Diversity Perceptions Scale (DPS) from Mor Barak, M. E., Cherin, D. A., & Berkman, S. (1998)

Directions: Please think about the organization that you work for, and answer the following questions based on your beliefs and experiences in that organization.

Your Organization is/was: _____

I feel I have been treated differently in my organization because of my race, sex, religion, or age. (R*)
Managers in my organization have a track record of hiring and promoting employees objectively, regardless of their race, ethnicity, sex, religion, or age.
Managers in my organization give feedback and evaluate employees fairly, regardless of the employee's ethnicity, gender, age, or social background.
Managers in my organization make layoff decisions fairly, regardless of factors such as employees' ethnicity, race, gender, age, or social background.
Managers in my organization interpret human resource policies (such as time off) fairly for all employees.
Managers in my organization give assignments based on the skills and abilities of employees.
Management in my organization encourages the formation of employee network support groups.
There is a mentoring program in use in my organization that identifies and prepares all minority and female employees for promotion.
The "old boys" network is alive and well in my organization. (R*)
This organization spends enough money and time on diversity awareness and related training.

Note. Responses for the above statements ranged from 1 = Strongly agree to 7 = Strongly disagree, and 8 = Can't answer, N/A.

Measure 2 – Partial Organizational Diversity Climate Scale from Probst, T. M. & Nelson, N. L., (2003).

Below are some fictional workplace scenarios. Please read each scenario with your department/work unit in mind, then respond to the corresponding questions.

1) *An employee in your department frequently makes racial and ethnic slurs, and refers to minority employees as "token hires" who wouldn't be there without affirmative action programs.*

2) A supervisor in your department makes frequent references to "incompetent minorities who take jobs away from more qualified applicants".

The following questions were asked for both scenarios:

a) How risky would it be for a racial minority in your department to make a formal complaint about this supervisor? (please check **one**)

- □ Extremely risky; they would almost certainly create problems for themselves
- □ Very risky
- □ Somewhat risky; they would possibly create problems for themselves
- □ Slightly risky
- □ No risk; they would not create problems for themselves

b) How likely is it that an employee in your department would be taken seriously if they filled out a complaint against this employee? (please check **one**)

- □ Almost no chance they would be taken seriously.
- □ Little chance
- □ Some chance
- □ Good chance
- □ Very good chance they would be taken seriously.

c) What do you think would be done if an employee made a formal complaint about this person? (please check **one**)

- □ Probably nothing would be done.
- □ Very little; maybe someone would talk to them.
- □ They would be told to stop.
- □ They would be given a formal warning.
- □ There would be a very serious punishment.

Climate Measure 3 - Diversity Practices Survey (Gilbert & Ones, 1999)
Directions: Please indicate to what extent your organization has actually engaged in each behavior.

1) Training on dynamics of stereotyping
2) Training on limitations of affirmative action
3) Training on workers' changing values
4) Teaching managers to conduct performance appraisals with people of a different culture
5) Teaching manager to perform succession planning with people of a different culture
6) Teaching managers coaching skills to counsel more effectively those culturally different from themselves
7) Inclusion of diversity objectives in performance evaluation goals and ratings
8) Inclusion of diversity objectives in determining managers' compensation
9) Internal diversity audit or attitude survey
10) Inclusion of diversity objectives in promotion decisions, criteria
11) CEO has issued one or more statements on the importance of diversity
12) Diversity is explicitly written as part of company values
13) A senior level task force or committee is in place, which oversees diversity initiatives
14) Focus groups are held to identify diversity issues of employees

Note. Responses for the above practices were on a 5 point scale: 1= Not at all, 3 = Somewhat, 5 = A great deal; 6 = Don't know.

Appendix M
Study 2 Directions

Purpose of Study

We are currently investigating a new assessment tool to be used when individuals are hired. If this task is effective in helping to assess newly hired employees, it may be implemented in your organization/department.

Directions

1) Please review the description of the hypothetical organization, Global Technologies, found on the following page.
2) After that, review the general job description for the most recent hiring effort. Approximately 100 associates were hired to fill positions for this description across the country.
3) You are provided with information about 4 newly hired employees. Please print off these 4 pages and review their information and then answer the questions that follow.

Study 2 Directions - Revised

WebPage 1

Organizational Research Study: Evaluating New-Hires

Welcome to the study Evaluating New Hires. The purpose of this study is to determine how well individuals can predict performance of newly hired employees.

During this study, you will be asked to review:

- Information about a large, multinational organization as well as one specific job in that organization.
- Information about four newly hired employees for that organization.

You will then be asked to:

- Provide evaluations of each new-hire you reviewed
- Respond to a series of surveys about your own personal attitudes as well as about the organization to which you belong (or recently belonged to).

You will need access to a printer and about 45 minutes to complete the study.

If you do not have these two things at this time or in your current location, please wait until you do to begin the study.

When you complete the survey, a $10 gift card to Starbucks or itunes will be mailed to you in appreciation of your participation.

Click here to begin

Web Page 2

Organizational Research Study: Evaluating New Hires

You need Adobe reader to open these files. If you do not have this, you can download it free of charge at this link… http://www.adobe.com/products/acrobat/readstep2.html

Please click on the two links below to open the files, and print off the pages in each file.

- Organizational & Job Description
- New Hires

Username = your first name (e.g., corinne)
Password = survey1

Click here to begin the survey.

If you have printed the above links, and do not have time to take the survey right away, just bookmark this page and return to take the survey later.

If you have any problems, contact cdonovan9@hotmail.com.

Appendix N
Study 2 – Debriefing Statement

Thank you for participating in this study. The purpose of this study was to gain insight into how organizational climate and different rationales for affirmative action influence the evaluations of those hired by affirmative action. Half of the individuals you reviewed were hired via affirmative action, half were not; part of the study was to investigate potential differences in evaluations based on this factor (hiring method).

Different groups of participants were presented with different rationales for using Affirmative Action. Half of the participants received a description of an organization that used a compensation rationale (making up for past harms) to justify their affirmative action program, while the other half received a description of an organization that used a diversity rationale (valuing unique contributions from diverse individuals) to justify their affirmative action program. The researcher wants to explore the way in which people evaluate and categorize affirmative action workers as well as investigate attitudes toward those workers

This is a study upon which future research may be based. We will use the information you provided here to learn about common views of people hired under Affirmative Action programs. We are investigating whether different organizational views of Affirmative Action as well as different methods of categorizing affirmative action candidates affects the decisions that people make about minorities in the workplace.

It is very important that you do not discuss this study with anyone else in your organization until the study is complete. Each person who participates in this study devotes a great deal of their time to reviewing the materials and answering the questions. If people discuss the experiment ahead of time, we will be unable to use the data and all the participants will have wasted a great deal of time and effort.

- Once again, we thank you for your participation!
- We ask that you not discuss this research with any future participants

If you have any questions or concerns about this project, or if you would like to know the general results of the research upon its completion, feel free to contact Corinne Donovan at 718-753-1452

Table 1. Study 1 – Counts by Condition for 1st Manipulation Check.

	What is the main reason the organization uses affirmative action?			
Rationale Condition	To Make up for Past Harms	Required by Govn't	Value Unique Perspective	
Diversity	2 (6%)	8 (25%)	22 (69%)	32
Compensation	11 (39%)	9 (32%)	8 (29%)	28
None	4 (16%)	12 (48%)	9 (36%)	25
	17	29	39	85

	Blocking 1: Diversity Responses vs. Non-Diversity Responses Combined		
Rationale Condition	Non-Diversity Responses	Diversity Responses	
Diversity	10 (31%)[b]	22 (69%)[a]	32
Compensation	20 (71%)	8 (29%)	28
None	16 (64%)	9 (36%)	25
	46	39	85

	Blocking 2: Compensation Responses vs. Non-Compensation Responses Combined		
Rationale Condition	Compensation Responses	Non-Compensation Responses	
Diversity	2 (6%)	30 (94%)	32
Compensation	11 (39%)[a]	17 (61%)[b]	28
None	4 (16%)	21 (84%)	25
	17	68	85

Note. Numbers represent the actual count (% within condition).
a = correct; b = incorrect

Table 2. Study 1 – Counts by Condition for 2nd Manipulation Check.

Rationale Condition	What is the main reason the organization treats women and minorities differently from others?			
	W & M are Better Workers	W & M had Past Discrimination	W&M Offer Unique Perspectives	
Diversity	1 (3%)	20 (63%)	11 (34%)	32
Compensation	2 (7%)	22 (79%)	4 (14%)	28
None	0 (0%)	18 (72%)	7 (28%)	25
	3	60	22	85

Rationale Condition	Blocking 1: Diversity Responses vs. Non-Diversity Responses Combined		
	Non-Diversity Responses	Diversity Responses	
Diversity	21 (66%)[b]	11 (34%)[a]	32
Compensation	24 (86%)	4 (14%)	28
None	18 (72%)	7 (28%)	25
	63	22	85

Rationale Condition	Blocking 2: Compensation Responses vs. Non-Compensation Responses Combined		
	Compensation Responses	Non-Compensation Responses	
Diversity	20 (63%)	12 (38%)	32
Compensation	22 (79%)[a]	6 (21%)[b]	28
None	18 (72%)	7 (28%)	25
	60	25	85

Note. Numbers represent the actual count (% within condition).
a = correct; b = incorrect

Table 3. Study 1 – Cognitive Processing Results by Condition: Orthogonal Planned Comparisons.

	Condition					
	RI	CR	NRI	DR	F (3,103)	
Number of Groups Created (SD)	2.0 (.00)	3.1 (.74)	4.3 (.88)	3.9 (1.03)	45.38***	
	Contrasts for Number of Groups Created				t (108)	η^2
	X		X		-10.62***	.71
		X		X	-4.21***	.38
	X	X			-5.08***	.44
			X	X	1.76*	.17
		X		X	-10.64***	.72
	Content Coding Differences by Condition				$X^2(df=1)$	ϕ
	X		X		(N = 165) = 34.76***	.46
		X		X	(N = 215) = 8.59***	.20
	X	X			(N = 138) = 9.85***	.27
			X	X	(N = 242) = .10	.02

Note. RI = Restricted Instructions; NRI = Non-Restricted Instructions; CR = Compensation Rationale; DR = Diversity Rationale.

* $p \leq .10$, ** $p \leq .05$, *** $p \leq .01$

Table 4. Study 1 - Categories of Formed Sets from Content Analysis.

Content Analysis Categories	Restricted Instructions	Compensation Rationale	Non-Restricted Instructions	Diversity Rationale
Matched Original Sets 51% or better AND had only 1 additional card	72% (36)	44% (39)	24% (27)	25% (32)
Unique Sets; less than 51% match or had multiple cards combined from the 2 stereotyped sets	28% (14)	56% (49)	76% (88)	75% (95)

Note. Figures presented are percent (actual count).

Table 5. Study 1: Strength of Stereotype Measure Scores by Condition.

Measure	**Condition**					**Statistical Results**		
	IF	RI	NRI	CR	DR	F (4, 112)	p	η^2
Rated Mean of Group	5.44 (1.29)	5.78 (1.18)	5.67 (.93)	5.45 (1.26)	5.78 (1.66)	.39	.81	.01
% Stereotype Confirm (C)	45.6% (21.61)	55.3% (18.67)	40.4% (15.89)	46.5% (16.11)	49.9% (16.95)	1.95	.11	.06
% Stereotype Disconfirm (D)	36.4% (20.52)	31.9% (13.22)	35.5% (10.06)	39.1% (17.02)	38.4% (18.36)	.66	.62	.02
C – D	9.2%	23.3%	4.9%	7.4%	11.6%	1.58	.19	.05
Global Similarity	3.59 (1.30)	3.71 (1.55)	4.16 (1.21)	4.12 (1.05)	3.70 (1.29)	.93	.45	.03
Trait Similarity	3.74 (1.14)	3.97 (.92)	4.11 (1.11)	4.03 (.92)	3.61 (1.05)	.99	.41	.03
Typicality Confirmers	4.23 (1.04)	3.88 (1.03)	3.94 (.99)	3.85 (.87)	3.97 (.70)	.61	.66	.02
Typicality Disconfirmers	3.58 (1.98)	3.89 (1.85)	4.37 (1.81)	4.25 (1.62)	4.10 (1.65)	.67	.62	.02
Atypicality	.647	-.01	-.428	-.40	-.13	.72	.58	.02

Note. Numbers in table are Means (Standard Deviations). IF = Impression Formation; RI = Restricted Instructions; NRI = Non-Restricted Instructions; CR = Compensation Rationale; DR = Diversity Rationale.

Table 6. Contrast Estimates for Strength of Stereotype Measures Between Combined Conditions.

Comparison Groups		**Measure**	**Statistical Results**			
			t	df	p	η^2
Combined Conditions 1:	Combined Conditions 2:	Rated Mean	-.29	119	.77	.03
		Percent estimate				
		Stereotype Confirm (C)	.58	128	.56	.05
		Stereotype Disconfirm (D)	.01	128	.99	.00
		C - D	.40	128	.69	.04
		Global Similarity	-.77	135	.45	.07
		Trait Similarity	-.35	135	.73	.03
		Typicality				
		Confirmers	.29	135	.77	.03
		Disconfirmers	-1.19	135	.24	.10
		Atypicality (confirm – disconfirm)	.97	135	.33	.08

Note. Combined Conditions 1 = Restricted Instructions, Compensation Rationale & Impression Formation; Combined Conditions 2: Non-Restricted Instructions & Diversity Rationale

Table 7. Study 1 Attitudes Towards Affirmative Action Scores by Condition.

Measure	Condition					Statistical Results	
	IF	RI	NRI	CR	DR	F(4, 112)	η^2
PSI Work Place Help [a]	3.44 (1.30)	3.24 (1.37)	3.32 (1.49)	2.93 (1.34)	2.77 (1.65)	1.1	.03
Other PSI Items [a]	2.96 (.81)	2.78 (.86)	3.10 (.91)	3.12 (1.00)	2.87 (1.28)	.69	.02
Evaluation & Likelihood Measure [b]	3.04 (3.70)	3.01 (4.16)	2.02 (3.85)	1.18 (4.03)	2.51 (4.27)	.96	.03
Negative AAP Evaluation Statements [b]	3.17 (5.99)	2.15 (5.98)	3.29 (6.65)	5.27 (5.40)	4.21 (6.28)	.98	.03
Positive AAP Evaluation Statements [b]	8.54 (4.10)	7.43 (3.62)	6.41 (4.33)	6.71 (4.19)	8.08 (4.52)	1.3	.04
AA Opinion 1 [c]: Hired based on Qualifications	3.17 (1.58)	3.44 (1.42)	3.08 (1.29)	2.89 (1.19)	3.09 (1.38)	.55	.02
AA Opinion 2 [d]: Importance of special treatment to determine employee performance	4.00 (1.62)	4.40 (.96)	4.60 (1.04)	4.00 (1.36)	3.97 (1.43)	1.3	.04

Note. The evaluation and likelihood measure yielded a coefficient alpha less than .60. Therefore, a factor analysis was conducted where two factors emerged the data: negative AAP statements and positive AAP statements. Numbers shown are Means (SD). IF = Impression Formation; RI = Restricted Instructions; NRI = Non-Restricted Instructions; CR = Compensation Rationale; DR = Diversity Rationale.

a. These scales range from 1 – 6; lower scores indicate more positive attitudes.
b. These scales range from –21 to 21; higher scores indicate more positive attitudes.
c. This scale ranges from 1-6; higher scores indicate more positive attitudes.
d. This scale ranges from 1-6; lower scores indicate more positive attitudes.

Table 8. Contrast Estimates for Attitude Measures Between Combined Conditions.

Comparison Groups		**Measure**	**Statistical Results**		
			t (132)	p	η^2
Combined Conditions 1:	Combined Conditions 2:	PSI Work Place Help	.79	.43	.07
		Other PSI Items	.12	.91	.01
		Negative AAP Statements: Evaluation & Likelihood	-.19	.85	.02
		Positive AAP Statements: Evaluation & Likelihood	.28	.78	.03
		AA Opinion 1: Hired based on Qualifications	-.51	.62	.04
		AA Opinion 2: Importance of special treatment to determine employee performance	.29	.78	.03

Note. Combined Conditions 1 = Restricted Instructions, Compensation Rationale & Impression Formation; Combined Conditions 2: Non-Restricted Instructions & Diversity Rationale.

Table 9. Pilot Test Results for New Hire Descriptions: Within Subject Contrasts.

	Composite Rating	Competence Rating	Effectiveness Rating	Likely to Move Up	Quickly Promoted	Hired on Qualifications
New Hire 1	5.1 (1.7)	4.8 (1.7)	4.4 (1.7)	5.3 (1.9)	5.8 (1.9)	5.3 (2.2)
New Hire 2	4.5 (1.2)	4.2 (1.3)	4.0 (1.4)	4.8 (1.5)	5.6 (1.6)	4.2 (1.4)
New Hire 3	5.0 (1.3)	4.5 (1.4)	4.4 (1.5)	5.3 (1.6)	5.8 (1.7)	4.8 (1.5)
New Hire 4	4.7 (1.6)	4.4 (1.7)	4.3 (1.7)	4.9 (1.8)	5.4 (1.8)	4.4 (1.9)
F (3, 22)	.95	.44	.03	.64	1.3	1.9
p	.34	.52	.87	.43	.27	.18
η^2	.04	.02	.00	.03	.03	.07

Note. Ratings on each scale range from a high of 1 (very competent, effective, likely) to 9 (not at all competent, effective, likely).

Table 10. Study 2 Demographic Counts by Condition.

		Condition			
		Diversity	Compensation	None	
Gender	Female	22	17	25	63% (64)
	Male	12	13	13	37% (38)
Race	White	12	15	16	84% (85)
	Asian	0	3	1	5% (5)
	Hispanic	1	2	1	4% (4)
	Other	1	0	0	4% (4)
	Black	0	1	0	3% (3)
Age Range	51 +	0	5	2	12% (12)
	41-50	0	3	1	12% (12)
	31-40	7	7	6	40% (40)
	25-30	5	5	9	31% (31)
	24 or less	2	1	0	6% (6)
Industry	Education	5	7	7	27.5% (28)
	Financial	5	3	4	25.5% (26)
	Professional	0	4	1	17.5% (18)
	Service	0	1	2	7% (7)
	Food	1	1	0	2% (2)
	Skilled/Tech Trade	0	0	0	2% (2)
	Other	3	5	4	18.5% (19)

Table 10. Continued. Demographic Counts by Condition.

		Condition			
		Diversity	Compensation	None	
Org Size	Very Large (5001 +)	12	7	18	36% (37)
	Large (1001-5000)	6	11	6	22.5% (23)
	Medium/Large (501-1000)	5	4	2	11% (11)
	Small/ Medium (201-500)	4	2	2	8% (8)
	Small (51-200)	1	2	3	6% (6)
	Very Small (less than 50)	6	4	7	17% (17)

Table 11. Study 2 – 3x2x2 MANOVA Statistics on Anticipated Career Outcomes.

Measure	F	η^2
Main Effect of Hire Status	(1, 96) = 3.54*	.04
Main Effect of Rationale	(2,96) = .19	.00
Main Effect of Grouping	(1, 96) = .19	.00
Rationale x Hire Status	(2, 96) = 1.79	.04
Grouping x Hire Status	(1, 96) = 5.06**	.05
Rationale x Grouping	(2, 96) = 1.12	.02
Hire Status x Rationale x Grouping	(2,96) = 2.06	.04

*$p \leq .10$, **$p \leq .05$

Table 12. Anticipated Career Outcome Means by Condition.

	Rationale			
Hire Status	Diversity	Compensation	Control	*Marginal Means*
AA	3.27 (.51)	3.21 (.76)	3.15 (.50)	3.25 (.61)
Non AA	3.39 (.54)	3.30 (.64)	3.40 (.55)	3.36 (.61)
	3.34 (.51)	3.30 (.54)	3.27 (.50)	

Note. Numbers in table are Means (Standard Deviations). Average scores range from 1-9 for anticipated career outcome, with 1 = highest score (best anticipated outcome) and 9 = lowest score (worst anticipated outcome).

Table 13. Anticipated Career Outcome Difference by Question (AA Hires vs. Non AA Hires)

Hire Status	**AA**	**Non AA**	***F* (1,96)**	***p***
Q1: How competently do you expect this individual to perform?	3.46	3.60	4.15	.04
Q2: How effective do you think this individual will be at doing the work?	3.43	3.54	2.54	.12
Q3: How likely is it that this individual will move up in the organization?	3.29	3.37	1.01	.32
Q4: Do you believe this employee was hired because of his qualifications to do the job well?	3.20	3.41	4.95	.03
Q5: How important do you think special treatment will be in accounting for the performance of this employee?	3.49	3.67	5.17	.03
Q6: How quickly do you think this employee will be promoted?	2.60	2.56	.04	.85
Mean	*3.46*	*3.60*	4.15	.04

Table 14. Study 2 Strength of Stereotype and Attitude Measures by Condition.

	Strength of Stereotype Measures				
	Rationale	Diversity	Compensation	None	F value (2,99)	η^2
Percent estimate					
Stereotype Confirming Traits	26.99 (17.43)	21.03 (14.53)	24.69 (20.31)	.90	.02
Stereotype Disconfirming Traits	64.27 (17.82)	69.28 (23.78)	68.97 (23.33)	.56	.01
Confirming – Disconfirming Traits	-37.28 (29.35)	-48.25 (28.92)	-44.28 (33.65)	1.05	.36

Note. Means with different superscripts are significantly different at the .05 level of significance. Numbers in table are Means (Standard Deviations).

*p = <.10, ** p = <.05, *** p= < .01

Table 14 cont'd. Study 2 Strength of Stereotype and Attitude Measures by Condition.

Attitudes Towards Affirmative Action and its Beneficiaries					
Rationale	Diversity	Compensation	None	F value (2,99)	η^2
Evaluation of Positive AA Statements (AAP)	6.55[a] (5.60)	9.99[b] (5.62)	8.67[ab] (4.12)	3.74**	.07
Evaluation of Negative AA Statements (AAP)	7.71 (4.11)	5.46 (7.24)	7.08 (7.20)	1.05	.02
Semantic Differential Scale (AAP)	4.13 (1.31)	4.51 (1.50)	4.29 (1.23)	.66	.01
General Opinions Affirmative Action (AAB)	6.53 (3.29)	6.67 (3.45)	6.5 (3.40)	.02	.00
Full PSI (AAB)	2.61 (1.09)	2.76 (.98)	2.64 (1.08)	.17	.00
Work Place Help (AAB)	2.47 (1.08)	2.77 (1.53)	2.63 (1.42)	.68	.01

Note. Means with different superscripts are significantly different at the .05 level of significance. Numbers in table are Means (Standard Deviations).

*p = <.10, ** p = <.05, *** p = < .01

Table 15. Pearson Correlation Coefficients between ODC and Outcome Measures.

	Attitude Measures						
	1	2	3	4	5	6	7
1. Organizational Diversity Climate	--	-.04	.18	.01	-.08	.00	-.07
2. Evaluation of Positive AA Statements		--	-.02	-.45**	.75**	-.38**	-.01
3. Evaluation of Negative AA Statements			--	.08	-.19	-.15	-.34**
4. General Opinions Affirmative Action				--	-.64*	.57*	.11
5. Semantic Differential Scale					--	-.33**	.14
6. Full Perceived Self Interest (PSI)						--	.62*
7. Work Place Help							--

Table 15 cont'd. Pearson Correlation Coefficients between ODC and Outcome Measures.

	Strength of Stereotype Measures & Anticipated Career Outcomes					
	ODC	2	3	4	5	6
1. Organizational Diversity Climate	--	.03	-.11	.05	-.06	.07
2. Percent Stereotype Confirming Traits		--	-.22	.73**	-.22*	-.08
3. Percent Stereotype Disconfirming Traits			--	-.83**	.23*	.22*
4. Confirming – Disconfirming Traits				--	-.29	-.20
5. Anticipated Career Outcomes for AA Hires					--	.46**
6. Anticipated Career Outcomes for Non AA Hires						--

Note. N = 102.
** Correlation is significant at the .01 level, * significant at the .05 level (2 tailed).

Figure 1. Predicted model of Study 1 relationships.

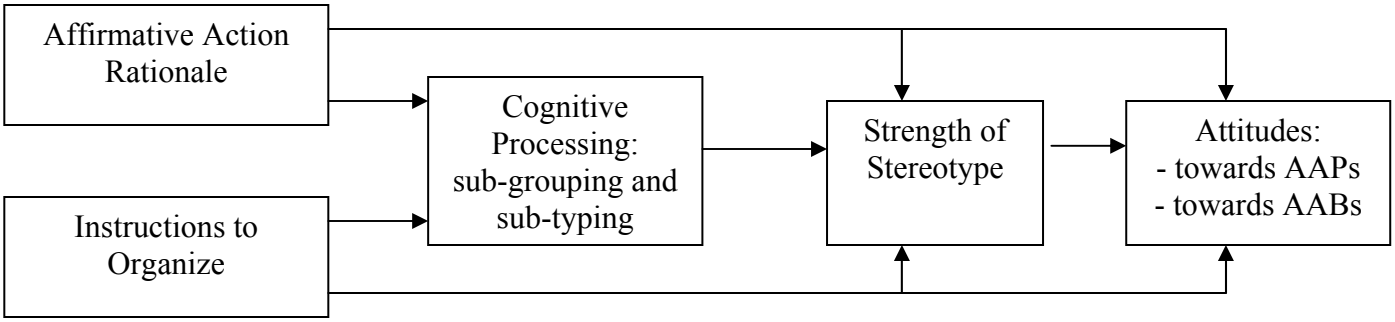
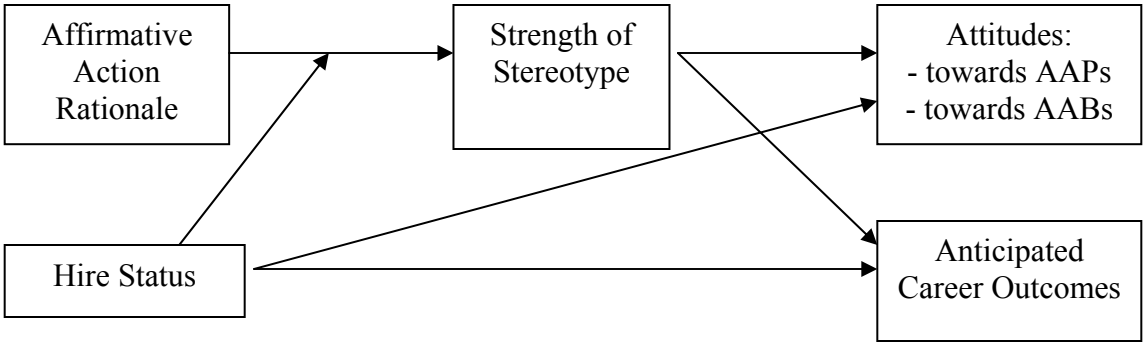


Figure 2. Predicted model of study 2 relationships.



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