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PREFERENTIAL SELECTION IN THE ACADEMIC DOMAIN:
A STIGMA-BASED MODEL OF ANTECEDENTS AND OUTCOMES

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PREFERENTIAL SELECTION IN THE ACADEMIC DOMAIN: A STIGMA-BASED MODEL OF ANTECEDENTS AND OUTCOMES

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ABSTRACT

PREFERENTIAL SELECTION IN THE ACADEMIC DOMAIN:
A STIGMA-BASED MODEL OF ANTECEDENTS AND OUTCOMES

By

Anna Lorin Imus

Presented in the current paper is a framework that was created to understand self-perceptions of preferential selection in a college setting. A multi-level model was developed and tested to look at individual and school-level characteristics that contribute to Blacks and Hispanics perceiving that they were selected into their current institution for reasons other than merit. In addition, outcomes identified in the literature as being related to self-perceptions of preferential selection were identified. To further understand how preferential selection relates to these outcomes, potential moderating factors were examined. A sample of students from colleges and universities across the U.S. were used to test the proposed relationships. Self-perceptions of preferential selection were predicted by core self-evaluations. The small number of schools used for analyses prevented an empirical investigation of the interaction of the school-level variables and individual differences. However, a qualitative analysis of the cross-level relationships is provided. Self-perceptions of preferential selection were related to the proposed outcomes of academic satisfaction, life satisfaction, and current GPA. Moderating variables including academic self-efficacy and attitudes towards AAPs provide an understanding for the nature of these relationships. Future research directions related to self-perceptions of preferential selection are offered as well as practical implications related to the findings.

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INTRODUCTION

> Affirmative action serves many purposes. Unlike most educators who make the case for affirmative action primarily on the basis of diversity, we argue that the main reason to endorse affirmative action in education and employment is to reward merit. ...one positive consequence of the debates on affirmative action can be a new awareness of how—at the level of groups—merit and diversity are inextricably linked. (Crosby, Iyer, & Clayton, Downing, 2003; p. 109).

Affirmative action policies (AAPs) were brought about in the 1960's to facilitate a diverse workforce. AAPs have expanded the employment opportunities afforded females and minorities (Crosby, et al., 2003) in the United States. They have also brought into question the abilities of individuals whom the policies seek to aid (e.g., Heilman, Block, & Lucas, 1992). Preferential selection can be defined as the procedures utilized by an organization or academic institution which rely in part on demographic features rather than depending solely on relevant qualifications. Despite the illegality of incorporating strict quotas or keeping separate lists of applicants by ethnicity or gender (Newman, 1989; Spann, 2000), the common public view in the U.S. equates AAPs with preferential treatment (Kravitz & Platania, 1993). Even more unsettling is the empirical evidence which shows that beneficiaries of preferential selection experience self-doubts about their abilities in work and school domains (e.g., Blaine, Crocker, & Major, 1995; Heilman & Alcott, 2001).

The focus of the current study is not to extend the debate as to whether AAPs are legally or morally correct. Rather, the principal objective is to further the literature by enhancing the theoretical understanding of the psychological experience of being a member of racial or ethnic group targeted by AAPs. In support of the quote by Crosby et al. (2003) which opened this paper, the ultimate goal is the development of a

theoretical framework of self-perceptions of preferential selection which would ultimately facilitate coping strategies for individuals to manage the stigma of being an AAP hire. Only when we understand how AAPs affect target-group members will we be able to establish a cultural recognition that merit and diversity do not have to be mutually exclusive.

Towards this end, the current paper used research related to the experience of being stigmatized in order to develop a framework that captures the psychological process of self-perceptions of preferential selection. Individual difference and contextual factors that are expected to lead to self-perceptions of preferential selection were identified. Furthermore, the relationship between preferential selection and outcomes of preferential selection were explored by examining potential moderators.

This study enhances the literature related to preferential selection in at least four ways. First, only a small number of studies looking at self-perceptions of preferential selection have taken place outside of the laboratory. By using a sample of minority individuals in academic settings, I was able to assess constructs which contribute to self-perceptions of preferential selection, rather than having to rely on manipulations of the construct. Second, the majority of studies looking at preferential selection are gender-based and contextualized as being work-related. This study facilitates insight relevant to the experience that racial/ethnic minorities experience in college, furthering the generalization of the current preferential selection literature. Third, while the preferential selection literature has identified out-group members as being stigmatized, to my knowledge, no studies have thoroughly integrated this literature with a stigma-based model. Finally this study serves to further unify the disciplines of social and I/O

psychology by merging theory related to applicant perceptions of the selection process with a stigma-based model of inter-group contact.

This thesis is organized such that a review of the literature related to perceptions of preferential selection is presented. A description of stigma theory and evidence for stigmatization associated with preferential treatment is given. Subsequently, I drew on stigma theory to lay out the framework developed. I then describe the methods that were utilized for this study as well as the results. Finally, a discussion is given which offers the implications of the findings and directions future research can take that would extend both the methodology I adopted as well as the theoretical framework.

LITERATURE REVIEW

The literature on preferential selection has taken two general paths to establish that there are perceptions of preferential selection. One stream demonstrates that AAPs can lead to the belief that women and minorities are often selected for employment or education for reasons other than merit. A second line of research establishes that females and minorities have self-perceptions of being the beneficiaries of preferential treatment during the selection processes. The following section reviews the literature on these two themes within the preferential selection literature.

Perceptions that others were preferentially selected.

Beneficiary status refers to the demographic traits that establish whether an individual will benefit from an AAP (Kravitz & Klineberg, 2000). Examples of these characteristics include gender, ethnicity, age, and mental/physical disabilities. Perceptions that out-group members are commonly viewed as beneficiaries have been demonstrated (Heilman & Blader, 2001, Heilman, 1996; Heilman, et al., 1992).

Heilman and Blader (2001) focused on the cues that lead individuals to believe that group members associated with AAPs have been preferentially selected. Constructs examined include cohort composition, gender of employee, and the selection policy (either affirmative action-based or merit-based). When the hired individual was male, assumptions of gender-based preferential selection did not occur, regardless of whether the selection policy was explicitly stated as being merit- or demographic-based. On the other hand, perceptions that females were selected because of their group membership occurred in every condition where females were in the minority except when it was unambiguously stated that merit was the single criterion for their hire. Heilman and Blader (2001) also found that perceptions of preferential selection and reduced

competency ratings were shown in both the affirmative action and ambiguous conditions. In other words, unless it is specifically stated that the female was hired because of her merit-based qualifications, she was automatically assumed to be less qualified for the job and less likely to succeed.

Features of the selection process have also been looked at in relation to perceptions of preferential selection. Heilman, et al. (1992) instructed participants to evaluate a series of application materials of fictitious recent hires. When the materials stated that the fictitious hire was associated with an AAP, the individual was automatically perceived as being less competent. Heilman et al. (1992) performed a field experiment which supported the above findings. When White men were asked to report about their co-workers in a male sex-typed job, they reported that co-workers assumed to be preferentially selected were considered to be incompetent and less likely to succeed on the job. These findings held, regardless of whether the co-worker was a White female, Black female, or a Black male (Heilman, et al., 1992).

The above empirical findings make clear the cultural viewpoint that preferential selection does occur. Furthermore, this literature demonstrates that AAP-hires are viewed as being under-qualified. Given the proliferation of attitudes which lead individuals to the assumption that AAPs result in preferential treatment, it is not of surprise that there have been research findings of self-perceptions of beneficiary status. The following section reviews the literature that looks at self-perceptions of preferential selection and the resulting negative consequences.

Self-perceptions of preferential selection.

Most literature that focuses on self-perceptions of preferential selection manipulates the selection method so that beneficiary status is forced on women and minorities (Heilman & Alcott, 2001; Heilman, Rivero, & Brett, 1991; Heilman, Simon, & Repper, 1987; Nacoste & Lehman, 1987; Chacko, 1982). This group of studies has demonstrated that when preferential selection is made known, a wide-array of outcomes result, including affective reactions to work (Blaine, et al., 1995; Chako, 1982) and perceptions of ability (Heilman & Alcott, 2001; Heilman, et al., 1987). Suggestive of this is the assumption that in order for such manipulations to be effective, participants must hold the belief that preferential selection is a practice accepted as commonplace in current society.

Research looking at self-perceptions of preferential selection that exists outside of the lab setting has been very limited. Brown, Charnsangevej, Keough, Newman, and Rentfrow (2000) looked at minorities' suspicions of preferential selection into college. They found that minorities (Blacks and Latinos) had significantly higher scores on suspicions of preferential treatment during the admissions process than did non-stigmatized group members (Whites and Asians). Brown et al. (2000) also established that minority group members had significantly lower grade point averages (GPA), and that GPA was negatively correlated with suspicions of preferential selection, paralleling the findings of laboratory studies (e.g., Heilman & Alcott, 2001; Heilman, et al., 1987).

A number of studies have demonstrated that perceptions (both other and self) of preferential selection exist. One weakness of the literature on preferential selection is a lack of theory that predicts how an individual comes to the conclusion that they have been preferentially selected. While the research does suggest that perceptions of

preferential treatment during the selection process may lead to negative outcomes, there is also a scarcity of literature that examines factors related to how individuals who believe they were preferentially selected manage this belief in relation to expected outcomes. Finally, one of the major gains achieved by further understanding self-perceptions of preferential selection is that it connects organizational literature on perceptions of the selection process with the social psychology literature on the experience of being a member of a stigmatized group. Thus, this study focused on *self-* rather than *other-* perceptions of preferential selection so that the psychological process of being the target of a stigma can be better understood in the workplace domain. This is not to say that perceptions that others have been preferentially selected are of lesser importance, but simply that these other-focused perceptions and related behaviors were beyond the scope of the current study.

The following sections will use a stigma-based model to propose antecedents and outcomes connected to self-perceptions of preferential selection. Additionally, moderators will be presented which are expected to interact with the perception of preferential selection to influence associated outcomes.

Definition of Social Stigma.

Goffman (1963) defined stigma as a discrediting attribute of individuals that reduces them "from a whole and usual person to a tainted, discounted one." Crocker, Major, and Steele (1998) further this definition by stating that stigmatization occurs when a person possesses or is believed to possess a characteristic that is devalued in a social context. It is critical to note that this definition encompasses two important dimensions: personal attributes and situational factors. Further, stigma is a social process which relies

on (1) contextual factors that provide cues that certain personal characteristics are devalued in a given situation and (2) personal characteristics of out-group members that lead to the perception of these cues and the assessment of their self-relevance. Thus, the backbone of stigma theory is the notion that assumptions and perceptions derived from inter-group contact drive the experience of the stigmatized.

Preferential selection: The mark of incompetence.

"The dynamic posited to underlie the stigma of incompetence based on affirmative action is the discounting of a beneficiary's qualifications as a basis for selection and the assumption that the individual was hired only because of his or her group membership" (Heilman, Block, & Stathatos, 1997, p. 605). Females that have been labeled as beneficiaries of preferential selection are automatically deemed as less able than females whose qualifications have been made salient (Heilman et al., 1997). When the researchers presented participants with a list of imaginary female employees, there was no difference between their competency ratings for beneficiaries of AAPs regardless of whether they were explicitly told of a situation where the employee had failed at a task or not. In other words, the stigma of incompetence for a recipient of preferential selection is prominent regardless of the female's performance. Further, Heilman et al. (1997) found that when participants were told that the female employee was *not* linked to AAPs, she was judged as incompetent only when the participant was specifically told that the employee had performed unsuccessfully. In sum, when the perception of preferential treatment exists, out-group members who are thought to have benefited from the selection procedure are automatically deemed less competent.

As the implication for studying preferential selection and perceptions towards such policies becomes apparent, it is important to briefly discuss how the legal issues surrounding AAPs can influence the stigmatization of beneficiaries. Evans (2003) performed a study in which participants were presented with three different policies utilized by a fictitious organization during their hiring process. The first stated that the company gave "strong preferences to qualified women and ethnic minorities, even if we must turn away more qualified or more highly skilled non-minority applicants." The second stated that the company gave, "slight preferences for qualified women and ethnic minorities, so long as they are as well-qualified and as highly skilled as other non-minority applicants." The final policy stated that the company gave, "no preferences to women and ethnic minorities in hiring applicants." The study found that participants rated Blacks lower in achievement orientation when the company utilized an illegal policy of selection (giving preference to women and minorities regardless of their qualifications) than under the legal policy (selecting comparable candidates). In contrast, Whites were rated as being higher in achievement orientation than Blacks when illegal selection procedures were used. Findings such as these are noteworthy because they demonstrate that when organizations use selection criteria that are suggestive of preferential treatment based on group membership, beneficiaries become stigmatized.

The inferences of Heilman et al. (1997) and Evans (2003) when considered together, confirm that beneficiaries of AAPs are stigmatized, and when the type of AAP that is thought to be utilized by the institution is illegal, this mark of incompetence can be intensified.

Jones, et al. (1984) state that stigma is seen as both an emergent property and as a definitional process which stems from a specific social interaction, not as a characteristic that a person has when they acquire it. In other words, a minority or female who is selected will not automatically be seen as a recipient of preferential selection. Only when they are believed to have been selected into a job due to their group membership will they be "marked" as being a beneficiary of the hiring process. This is an important distinction to make as all minorities and women will not be automatically deemed to be beneficiaries of AAPs. Towards, this end, the focus of this study was on understanding *why* certain individuals are more likely to believe that they have been preferentially selected and what environmental factors contributed to the perception of beneficiary status.

The following section will identify individual differences expected to contribute to self-perceptions of preferential selection as well as to propose contextual factors which lead to the experience of stigmatization. The framework tested in the current study is illustrated in Figure 1.

Antecedents of Self-Perceptions of Preferential Selection

This section identifies the three individual difference factors and two contextual factors that were expected to be antecedents of self-perceptions of preferential selection. The individual difference factors examined were: core self-evaluations, sensitivity towards stereotypes, and perceptions of fairness of the selection process. The contextual factors include the ratio of minorities (Blacks and Hispanics) at a given school as well as the climate for diversity at each institution. Finally, interactions between individual and contextual factors are discussed.

Individual Differences as Antecedents of Preferential Selection.

Core self-evaluations. Core self-evaluations (CSE) are "fundamental, subconscious conclusions individuals reach about themselves, other people, and the world" (Judge, Locke, Durham, & Kluger, 1998). This dispositional construct enables individuals to approach situations with different evaluations of themselves as well as the environment in which they exist. CSE has been developed as a broad personality dimension which encompasses self-esteem, generalized self-efficacy, neuroticism, and locus of control (Judge, Erez, Bono, & Thoresen, 2003). Furthermore, people high in CSE are more likely to attribute positive outcomes as a product of the self.

The common cultural assumption related to selection based on AAPs contends that when there is ambiguity surrounding a person's qualifications, both in-group and-out group members likely presume that preferential selection has occurred (Heilman & Blader, 2001; Heilman & Alcott, 2001; Brown, et al. 2000). One could argue that an academic setting is not ambiguous in nature because common methods are often used across institutions to select applicants into colleges or universities, but research measuring mean level self-perceptions of preferential selection has found that minority students (Blacks and Hispanics) are more likely to believe their selection was due to AAPs than students not stigmatized in the academic domain (Whites and Asians) (Brown et al., 2000). In other words, there is much variance in perceptions of preferential selection, and group status increases variability in perceptions.

The collective representations that individuals carry with them from situation to situation help to shape the context of the situation, which means that the same situation can be evaluated differently by different individuals (Major & O'Brien, 2005). One's dispositional nature can provide a strong lens through which ambiguous situations are

interpreted. Minority members in workplace settings or academic environments may find themselves in a particularly elusive situation when trying to determine whether their demographic features have played a part in their being selected into the current role. Individuals who are predisposed to evaluate themselves in a positive light, as defined by high levels of CSE, should be more likely to attribute their reason for hire on personal qualifications, rather than a product of their demographic features. Based on this argument, I offered the following hypothesis:

> *Hypothesis 1: CSE will relate to self-perceptions of preferential selection such that minority students (Blacks and Hispanics) high in CSE will be less likely to perceive that they have been preferentially selected than minority students who are lower in CSE.*

Sensitivity to stereotypes. For individuals to feel stigmatized, they must acknowledge that there are negative stereotypes that exist regarding their group (Crocker et al., 1998). Past research has established that individuals differ in the degree to which they believe others treat them according to a negative stereotype (Aronson & Inzlicht, 2004; Mendoza-Denton, Purdie, Downey, Davis, & Pietrzak, 2002; Pinel, 1999). Additionally, research suggests that even when legal structures, such as AAPs, are enacted to increase diversity, some members of groups that have faced prior discrimination continue to be sensitive to stereotypes that have plagued their group (Aronson & Inzlicht, 2004; Mendoza-Denton, Purdie, Davis, & Pietrzak, 2002; Pinel, 1999; Steele, 1997; Steele & Aronson, 1995). In relation to preferential selection, sensitivity towards stereotypes would suggest that women and ethnic minorities will differ in the degree to which they perceive they have been selected due to AAPs.

For the purposes of this study, I used "sensitivity to stereotypes" to refer to the individual difference experienced by out-group members that would lead some minority students to believe that treatment by others is stereotype-based. It is important to acknowledge that terminology in the literature referring to the construct of sensitivity to stereotypes differs. Aronson and Inzlicht (2004) use the phrase stereotype vulnerability to describe the "tendency to expect, perceive, and be influenced by stereotypes that exist about one's social category" (pg. 830). Pinel (1999) applies "stigma consciousness" to the differences across out-group members in the belief that they are stereotyped by others. Steele and Aronson (1995) utilize "racial vulnerability" to describe the heightened anxiety experienced by some ethnic minorities across situations that is a result of exposure to race-related cues. While semantically there is not an accepted label for this construct, the correlates associated with each operationalization are consistent (Aronson & Inzlicht, 2004; Mendoza-Denton, et al., 2002; Pinel, 1999).

It is not a requisite of sensitivity to stereotypes that out-group members believe they possess the devalued trait associated with the stereotype, but rather that they view others' treatment as being stereotype-based. Further, individuals high in sensitivity to stereotypes see the devalued trait as always being salient. Related to the current study, some individuals will focus on ethnicity as the reason for their selection into college because they are more sensitive to race-based cues. This does not imply that individuals high in sensitivity to stereotypes believe they are in need of assistance through AAPs, but merely that they were more likely to suppose that others evaluate them based on their race, which would lead to self-perceptions of beneficiary status. The following hypothesis was offered based on this theoretical line of reasoning:

Hypothesis 2: Sensitivity to stereotypes will relate to self-perceptions of preferential selection such that minority students (Blacks and Hispanics) higher in sensitivity to stereotypes will be more likely to perceive that they have been preferentially selected than minority students with lower levels of sensitivity to stereotypes.

Perceptions of fairness of the selection process. The literature on applicant reactions to the selection process has established that perceptions of the fairness of the process can be linked to important outcomes for individuals and organizations. Meta-analytic research (Hausknecht, Day, & Thomas, 2004) has demonstrated that applicants who feel that the selection process is unfair are more likely to perceive an organization as unattractive, are more likely to pursue legal action against the organization and are less likely to report intentions to accept a job offer. One shortcoming of this body of literature relates to how fairness reactions lead to post-hire outcomes (Chan & Schmitt, 2004). Towards an integration of literature on applicant reactions and preferential selection, this study incorporated justice perceptions related to selection procedures into the tested framework.

Organizational justice has been defined as the perceptions that individuals have of fairness and related behaviors that take place in the context of work (Cropanzano & Greenberg, 1997; Ployhart & Ryan, 1997). Relevant to applicant reaction research, procedural justice (i.e., perceptions of how fair a process is) and distributive justice (i.e., perceptions of how fair an outcome is) are researched most frequently in the literature. The goal of this study was to look at justice as a precursor for perceptions of preferential selection and thus focused only on procedural fairness for three reasons. First, Ployhart and Ryan (1997) found that self-perceptions of ability were lower for individuals who believed they were hired through unfair selection procedures. Second, individuals are more likely to perceive that outcomes are fair when they are self-serving (Miller & Ross,

1975), which would suggest that individuals can feel that they were fairly admitted into the school (i.e., high distributive justice perceptions) without believing the process that selected them was impartial (i.e., low procedural justice perceptions). In fact, Ployhart and Ryan (1997) point out that distinctions between fair and unfair procedures will be maximized when outcomes are seen as just, which could be accounted for by considering that unfair procedures lead to decreased certainty about subsequent outcomes (e.g.,Brockner & Wisenfeld, 1996). Third, all participants in the current study received the same outcome—they were all admitted into the school they currently attend. It can therefore be assumed that there would be little variance on assessments of distributive justice.

Jones, et al. (1984) posited that the dynamics of social stigma are set in motion by some type of "discrediting process" (p. 297). Nacoste and Lehman (1987) contend that selection decisions based on unfair procedures lead an individual to perceive beneficiary status. In support of this, research based on attribution theory (e.g., Weiner, 1986) states that when individuals perceive an outcome as being unforeseen or important, they automatically search for causal reasons for its occurrence (Ployhart & Ryan, 1997).

Given the outcome of being admitted is one of great value to students, attribution theory supposes that they will look for explanations that would account for why they were selected into the school. The findings of Ployhart and Ryan (1997) suggest that part of this process includes the justice of the selection system that accepted them. When the process is seen as unfair, which would lead to the formation of external attributions for the outcome, the individual would be more likely to reach the conclusion that they have been preferentially accepted. Thus, I offered the following hypothesis:

Hypothesis 3: Perceptions of the fairness of the selection procedure will relate to perceptions of preferential selection such that minorities (Blacks and Hispanics) who report fair procedures used during the selection process for the institution that they attend will be less likely to perceive they have been preferentially selected than out-group members who perceive less fair selection procedures.

Contextual Factors.

Institutional Diversity. AAPs required by Executive Order 11246 (1965) categorize Blacks, Native Americans, Hispanics, and Asian Americans as protected target groups (Crosby et al., 2003). While these four groups may be similar in terms of legal provisions, researchers looking at perceptions of preferential selection (e.g., Brown, et al., 2000) rely on group-based stereotypes when classifying individuals. It is important to clarify the difference between legal protection of certain groups and categorizations based on social identities because it highlights the fact that while AAPs are designed to offer all minorities equal opportunities, it is actually the commonly held stereotype about a group which facilitates the stigmatization process. The impetus for such classification is based on the stereotyping literature which has demonstrated that the stereotypes for Blacks and Hispanics include such adjectives as stupid, ignorant, and lazy (Krueger, 1996; Devine, 1989; Marin, 1984), whereas a stereotype common across Asians and Whites is intelligence (Hurh & Kim, 1989; Krueger, 1996).

Based on the methodology of Brown, et al, (2000) as well as the literature on stereotypes relevant to the academic domain, in this study, institutional diversity refers to the percentage of students who are ethnic minorities belonging to stigmatized groups (i.e., Blacks and Hispanics) at a given school.

Research on discrimination in organizational settings suggests that the proportion of individuals from a stigmatized group has a direct effect on a target group member's

perceived discrimination (Knight, et al., 1999). Supportive of this notion is research that demonstrated that when the percentage of individuals who have a certain stigmatized trait decreases, those who possess the characteristic or "mark" will become *increasingly* self-conscious of their social identity (Ethier & Deaux, 1994). In a setting in which in-group and out-group membership is made salient (such as a college or university with a small proportion of Blacks), target group members are more likely to be aware of group differences, which can have a negative effect on attitudes and behaviors (Mullen, 1983). Research has identified that specific outcomes affected by the demographic representation of a given workgroup include not only attitudes towards the work group (Wagner, Pfeffer, & O'Reilly, 1984; Riordan & Shore, 1997), but also affect self-perceptions such that out-group members believe that their chances for advancement opportunities are diminished (Wagner, et al., 1984; Riordan & Shore, 1997).

One explanation for the relationship between the ratio of group representation and discrimination can be explained by the process of categorization. According to Fiske (1998) categorical reactions (i.e., the automatic process of placing individuals into groups of "us" and "them") exist because they offer a cognitive shortcut during social interactions. Further, she stresses that the categorization process is not merely of value when dealing with others, but that the social context is actually the driver of the process (Fiske, 1998). For example, a White person who talks to a Black athlete after a basketball game may automatically categorize the individual by a stereotypic adjective such as physically skilled (Krueger, 1996), while an interaction between the same two individuals during a math class may lead the White individual to categorize the Black

athlete as lazy or stupid solely because of the social context which leaves the Black individual in the role of a negative stereotyped-minority.

Furthermore, the research on relational demography states that the composition of the workgroup serves to moderate the relationship between minority status and discriminatory treatment (Kanter, 1977; Pfeffer, 1983; Mowday & Sutton, 1993), thereby increasing the chances of discrimination when represented by fewer minority members. This claim is further substantiated by Brief, Butz, and Deitch (2004) who reviewed the literature in this area and claimed that solo status can lead to greater scrutiny about the value of those individuals who are isolated within a workgroup.

Finally, a recent meta-analysis on inter-group contact found that greater contact with minority group members reduces prejudice and discrimination (Pettigrew & Tropp, 2000). In sum, the process of categorization infers that individuals will automatically classify others according to stereotypes they believe are true about their group. In an academic setting where there are few minorities, the categorization process increases the likelihood that a student who is White will classify a dissimilar other as being an out-group member (e.g., Black) rather than as an in-group member (e.g., classmate) and thus treats them according to the stereotype associated with the group.

As established in the above paragraphs, categorization, based on social identity theory, facilitates the understanding of how group composition relates to differential treatment of out-group members. The suggestion is that the process is more likely to lead in-group members to treat individuals according to negative stereotypes in contexts where the stereotype is relevant to the situational context and when the proportion of out-group members is low. Social identity theory can also be used to explain how the

situational cues of the ratio of in-group to out-group members can have a detrimental effect on the behavior and attitudes of the stigmatized. Major and O'Brien (2005) specify that one's social identity is threatened most by situations where individuals are stereotyped as being intellectually inferior. For example, research on stereotype threat demonstrates that when threatened with the risk of confirming a stereotype, the mere salience of the cognitive ability stereotype could impair Blacks' performance, even when the test was not diagnostic of ability (Steele & Aronson, 1995). Such a threat of one's social identity can arise when an out-group member is outnumbered by individuals who do not belong to stigmatized groups (Sekaquaptewa & Thompson, 2003). While stereotype threat is usually used in reference to a single event such a standardized testing situation, research has also demonstrated that the beliefs about the stereotypes of one's group are affected by the composition of one's group relative to other groups over time (Dasgupta & Asgari, 2004). The researchers in this study looked at the long-term effect that interactions with other groups had on the acceptance of negative stereotypes about one's group. Dasgupta and Asgari (2004) found that women who attended a female college showed decreased expressions of gender stereotypes after one year in college, whereas women who went to a coeducational institution showed considerable increase in the endorsement of gender stereotypes across the same timeframe. This proposition is even further supported by Harvey (2001) who found that there was a significant interaction between the race of the participant and the composition of the university, such that individuals who attended schools where they were in the minority reported higher levels of stigmatization than individuals who attended schools where they were in the majority.

In relation to research on preferential selection, social identity theory, through the process of categorization, can be used as a reasonable explanation for findings that support the existence of perceived hiring based on demographic features. Heilman and Blader (2001) found that when it was stated that a female was the only one of her gender within a work-group, participants were more likely to believe that she had been preferentially selected. In other words, because the participants did not have other interactions to help shape their opinions of out-group members, their automatic cognitive reaction was to categorize the female as a beneficiary of the selection process.

Similarly, based on the findings of Dasgupta and Asgari (2004), we would expect that the situation offered by Heilman and Blader (2001) would also prime the sole female to believe that she was hired for reasons other than merit. Even when no blatant prejudice on the part of the in-group members has led minority group members to this conclusion, the mere vigilance towards identity threat (Steele, 1997), made salient by the lack of representation within the workgroup, may lead individuals to the perception that they were recipients of preferential selection. From this, I offered the following hypothesis:

> *Hypothesis 4: Institutional diversity (i.e., the percentage of Black and Hispanic students at a given institution) will relate to perceptions of preferential selection such that minorities (Black and Hispanics) from colleges or universities with more institutional diversity will be less likely to perceive they have been preferentially selected than minorities from colleges and universities with less institutional diversity.*

Climate for diversity. In stressing the importance of organizational and legislative change that would support a societal or institutional climate that promotes equality and accord across groups, Messick and Mackie (1989) state: "...efforts must be made to

change the social structure in ways that will promote inter-group harmony. These changes are probably the most important of all since other efforts to promote peace are unlikely to succeed in societies that condone institutional discrimination" (p. 69). Such a notion closely parallels the efforts in organizational settings that have taken place to impart climates for diversity.

Climate can be broadly defined as the shared attitudes that individuals within a specific environment have, which lead to certain employee behavior (Schneider & Reichers, 1983). Further, organizational climate is created through the expectations, rewards, and support systems that are employed by the organization and serve to inform employees of behaviors that are socially acceptable (Schneider, 1975). Ostroff, Kinicki, and Clark (2002) further assert that climate should be understood as being a construct descriptive of the environment at an aggregate level. Furthermore, while climate is comprised of the perceptions of the individuals within the environment (Schneider, 1990), it is actually an organizational-level variable which represents these shared attitudes of the employees within (Ostroff, et al., 2002). Finally, Moos (1973) stresses that organizational climate can play an important role in understanding how situational factors (i.e., climate) influences individual-level behaviors and perceptions.

Kossek and Zonia (1993) propose that a climate for diversity relates specifically to the balance of power between groups within the organization. Examples of attitudes and behaviors that define an organization's climate for diversity include: the extent to which members value the equal representation of diverse demographic groups, the belief that minority members are as qualified as white males, and the perception that the employer actively strives to increase diversity within the workplace. An organization

that has a strong climate for diversity, for example, would be one in which all members agree that groups should be equally represented, that all individuals within the organization contribute equally, and one where the management promotes events such as diversity training and/or equal opportunity hiring processes.

The management literature has focused on a number of reasons why promoting a climate for diversity can be beneficial from the perspective of the organization. Competitive advantages to having a diverse workforce can include decreased litigation and reduced levels of interpersonal conflict and harassment episodes (Probst & Nelson, 2003; Cox, 1993; Karp & Sutton, 1993; Sims & Sims, 1993; Jackson & Alvarez, 1992; Thomas, 1991; Johnston & Packer, 1987). In addition to organizational benefits of promoting a climate for diversity, there are consequences that a climate for diversity can have at the individual level. Furthermore, egalitarian environments that emphasize interdependence of all members have been demonstrated to advance a culture devoid of inter-group hostility and prejudice (Amir, 1976; Gaertner, Rust, Dovidio, et al. 1993; Haghighat, 2001; Sherif, 1966).

The stigma literature provides a theoretical basis for why inter-group discord exists and how situational variables play an active role in inter-group perceptions. One of the initial proponents of this line of research was the social psychologist Gordon Allport. His (1958) *The Nature of Prejudice* stressed that inter-group conflict would intensify unless a series of factors existed within environments where group interaction occurred. These conditions included: status equality across groups, organizational structure that emphasizes interdependence and common goals across groups, social norms that promote group relations, available situations for individuals to get to know each other as

individuals rather than members of different groups, and a culture where people have the opportunity to contradict negative stereotypes of their group (Allport, 1958). Arguably, Allport was setting the stage for research focused on diversity climate at academic institutions as well as in other organizational settings.

Specific to research related to stigma, the literature on the situational elements of group relations has shed light on how the effects of the nature of contact between groups is directly related to the quality of interactions. In other words, as established by Allport (1958), equal-status contact, endorsed by institutional structure, allows for a common humanity. Illustrative of this, a group of baseball players with the goal of winning a game will likely be more likely to view each other as athletes rather than Hispanics, Whites, or Blacks. The interaction among the individuals on the team is defined by perceptions of baseball ability and the goal of winning the game, rather than negative stereotypes related to group membership. Admittedly, some inter-group contact may be more conducive to positive climates for diversity (such as the aforementioned baseball team example), but in all situations where individuals from various groups must interact, a climate for diversity, whether positive or negative, exists.

The impact that climate has on stigmatized group members provides a theoretical explanation for the way in which self-perceptions are affected by negative inter-group interaction. Gaertner, Mann, Dovidio, Murrell, and Pomare (1990) sought to test this theory by manipulating the quality of the contact situation. Their findings demonstrated that when the situation was designed to increase separate-group representations, there was heightened inter-group bias and more negative attitudes directed towards out-group members. The foremost contribution of this study was that contact of the group members

led to attitudes rather than *attitudes* driving the quality of the contact. Further, Dovidio, Gaertner, Niemann, and Snider (2001) conclude that the encouragement of one-group representation (as opposed to inter-group relations) serves to decrease the likelihood of stigmatization. Rather than targets of stigmatization focusing on the negative stereotypes that exist about them in a given context, they are focused on the common goals of all individuals within the environment.

In the framework of the current study on preferential selection, the climate for diversity theory would suggest that out-group members would be less likely to perceive that their group membership played a role in their selection into college when they are enrolled in a college or university that has a positive climate for diversity. A climate for diversity promotes contact between minority and majority members that is focused on the mind-set that would be in line with Dovidio et al. (2001) theory of one-group representation. Rather than making salient the negative stereotypes that exist about out-group members, a school high in climate for diversity would provide an environment where individuals perceive themselves as simply being a student (i.e., one-group representation); whereas, a school low in climate for diversity would lead individuals to the perception that they are Black students, White students, etc. (i.e., inter-group representation). In other words, minority members should be less likely to perceive they have been preferentially selected when the institutional environment seeks to extinguish contact that promotes discrimination, which occurs when the student body is based on a single-group representation. Thus, I hypothesized:

> *Hypothesis 5: Climate for diversity is an institutional level variable (i.e., an aggregate of perceptions of climate across all students at a given school) that will relate to perceptions of preferential selection such that minorities (Blacks and Hispanics students) from colleges or universities with more positive climates for*

diversity will be less likely to perceive they have been preferentially selected than minorities from colleges or universities with less positive climates for diversity.

The interaction of individual difference and contextual factors.

Crocker (1999) argues that "the consequences of stigma are dependent on the immediate social context and the meaning of that context for the stigmatized person." Suggested by this quote is the idea that situational and individual characteristics work together to influence whether a person attributes treatment as being related to a stigmatized feature. In other words, personal characteristics that intensify expectations of stigmatized treatment, coupled with contextual environments that increase the salience of a stereotype, will increase the likelihood that an individual experiences stigmatization.

I offered that contextual factors would moderate the relationship between the individual difference variables and self-perceptions of preferential selection. Further, the interaction between the individual and institutional level variables was expected to be additive in nature. Specifically, for individuals high in individual differences positively related to self-perceptions of preferential selection, contextual factors would lead to even greater perceptions of preferential selection. However, it was also expected that for a person low in individual factors positively related to self-perceptions of preferential selection, contextual factors would not affect the relationship between the individual level predictors and self-perceptions of preferential selection. The proposed interactions follow.

Hypothesis 6 (a): The diversity of an institution will moderate the relationship between CSE and self-perceptions of preferential selection such that there will be a stronger negative relationship between CSE and self-perceptions of preferential selection for schools with less diverse populations.

Hypothesis 6 (b): The diversity of an institution will moderate the relationship between sensitivity towards stereotypes and self-perceptions of preferential selection such that there will be a stronger positive relationship between sensitivity towards stereotypes and self-perceptions of preferential selection for schools with less diverse populations.

Hypothesis 6 (c): The diversity of an institution will moderate the relationship between perceptions of fairness of the selection process and self-perceptions of preferential selection such that there will be a stronger negative relationship between perceptions of fairness of the selection process for schools with less diverse populations.

Hypothesis 6 (d): The diversity climate of the institution will moderate the relationship between CSE and self-perceptions of preferential selection such that there will be a stronger negative relationship between CSE and self-perceptions of preferential for schools lower in climate for diversity.

Hypothesis 6 (e): The diversity climate of the institution will moderate the relationship between sensitivity towards stereotypes and self-perceptions of preferential selection such that there will be a stronger positive relationship between sensitivity towards stereotypes and self-perceptions of preferential selection for schools lower in climate for diversity.

Hypothesis 6(f): The diversity climate of the institution will moderate the relationship between perceptions of fairness of the selection process and self-perceptions of preferential selection such that there will be a stronger negative relationship between perceptions of fairness of the selection process and self-perceptions of preferential selection for schools lower in climate for diversity.

Outcomes

The vast majority of research on preferential selection has looked at the relationship between self-perceptions of preferential selection and outcomes including task choice (Roberson & Alsua, 2002; Heilman & Alcott, 2001; Brown, et al., 2000; Heilman, et al., 1991), motivation on a given task (Heilman & Alcott, 2001; Blaine,

Blaine, et al., 1995) and perceptions of performance (Heilman & Alcott, 2001; Blaine, et al., 1995; Major, Feinstein, & Crocker, 1994; Heilman, et al., 1991; Heilman, at al., 1990; Heilman, et al., 1987). Only a small percentage (e.g., Brown et al., 2000) of the preferential selection studies have taken place outside of controlled lab settings. Further, attempts to generalize lab-based research on preferential selection has had limited success. Field studies do not always find support for the theory that affirmative-action hires demonstrate decrements in outcomes such as performance (Graves & Powell, 1994), and yet other recent calls for research maintain that research on preferential selection is meaningful. In evaluating distal outcomes related to the organizational selection process, Schmitt, Cortina, Ingerick, and Wiechmann (2003) recommend that preferential selection research is of value because it focuses on selection-relevant processes that are related to post-hire outcomes.

The social psychology literature stresses that the situational context plays an integral role in the stigma process and related behavioral, attitudinal, and well-being outcomes. One of the overarching goals of the current study is to support preferential selection researchers' suppositions that the process of selection based on AAPs stigmatizes the individuals sought to benefit from them (Heilman, et al., 1992; Heilman et al., 1997; Nacoste, 1990; Blaine et al., 1995). In other words, rather than assume that preferential selection does *not* have a stigmatizing effect as would be suggested by related field studies (Graves & Powell, 1994; Holzer & Neumark, 1996), it is imperative to explore the factors that influence outcomes of preferential selection, based on the models presented by social psychological stigma researchers.

In order to gain an understanding of how the "mark" of preferential selection affects those who have the devalued self-identity associated with it (i.e., high levels of self-perceptions of preferential selection), it is of value to consider factors that moderate the relationship between this perception and outcomes of interest. The following section uses theories grounded in Crocker's (1999) concept of stigma to offer factors that were expected to influence the relationship between self-perceptions of preferential selection and the outcomes that have been associated with this belief. The four outcomes considered in relation to self-perceptions of preferential selection were academic performance (i.e., current GPA), life satisfaction, and institutional satisfaction and commitment. The next part of the paper focuses on the proposed moderators of self-perceptions of preferential selection with these four outcomes.

Moderators of preferential selection and outcomes associated with preferential selection.

Stigma literature stresses that researchers begin to focus their attention on individual differences in out-group members which affect the experience of being stigmatized so that a better understanding of the relationship between feeling stigmatized and associated outcomes can be gained (Oyserman & Swim, 2001). The following three sections offer the proposed individual differences which were expected to interact with self-perceptions of preferential selection as they relate to the aforementioned outcomes.

Attitudes towards affirmative action policies. Attitudes towards AAPs can be defined as one's view in regard to whether action should be taken to increase the numbers of underrepresented groups in an organization or academic setting (Kravitz & Platania, 1993). Note that this construct differs from perceptions of fairness of the selection process because it is not specific to the hiring process of a single organization or

institution. The research examining attitudes related to AAPs is substantial in size. This body of literature has established that Blacks are the group most likely to support AAPs, Whites are the least likely to agree that ensuring equal opportunity is the responsibility of the government, and Blacks and Hispanics are the most likely to hold the government responsible for inequities that exist (Kravitz & Klineburg, 2000).

Given the expansive literature on opposition towards AA, researchers have begun to develop a theoretical framework for understanding AAPs. From a broader theoretical perspective, AAPs and related constructs are referred to as being representative of the world view ideologies that an individual holds. While a number of specific world view ideologies have been offered, the underlying thread of each is that they are the degree to which an individual perceives the world as a just place and supports political, religious, and/or socially constructed to maintain this state of fairness. Examples of related world view ideologies include belief in a just world (BJW) which is an attitudinal construct that explains the extent to which an individual needs to believe that resources are distributed in such a manner that all humans get what they deserve in life. A second ideology related to the allocation of resources in the world is termed protestant work ethic (PWE). Similar to BJW, this attitudinal construct is aimed at encompassing fairness perceptions associated with the allocation of resources across all humans (Greenburg, 1977). Further, individuals high in BJW and PWE can be characterized as holding right-wing socio-political beliefs that stress that because the world is a just place, there is no need to change it through political action (Furnham, 2003).

For the purpose of the current study, attitudes towards AAPs have been chosen to represent world view ideologies over other related variables for two main reasons. First,

the correlates of AAPs are similar to those of BJW and PWE, which include: conservatism, social dominance orientation, and perceived threat (Renfro, Duran, Stephan, & Clason, 2006; Crosby, Ferdman, & Wingate, 2001). Second, given that the purpose of this paper is to develop a framework that combines organizational outcomes with the social psychological research on stereotyping, utilizing attitudes towards AAPs rather than other ideologies enables a more direct association between organizationally-relevant political beliefs and frameworks used to describe the process of stigmatization.

The affirmative action literature has looked at the relationship between world view ideologies and attitudes related to AAPs and found that support of AAPs is negatively related to world view ideologies such as political conservatism (Kravitz & Klineburg, 2000). In relation to BJW and PWE, it would be expected that individuals who support AAPs are less likely to hold the belief that positive outcomes should be based solely on hard work. Endorsement of AAPs for individuals who perceive they have been preferentially selected would suggest they feel that regardless of their personal abilities, the world is not a just place and they deserve to benefit from inequities faced by past group members. Conversely, individuals who do not support AAPs are more likely to see preferential selection as a negative because it detracts from the fact that it was their hard work that led to acceptance into college. Attitudes towards AAPs were offered as interacting with perceptions of preferential selection to explain outcomes because they provide an explanation of how preferential selection relates to the criteria of interest through world view ideologies.

Endorsement of world view ideologies has demonstrated relationships with performance, affect, and well-being. Greenberg (1977) showed that feedback affected

performance such that when high PWE individuals were told that they would be rewarded because their team had performed well even though they had performed poorly, the individuals worked harder to overcome their poor performance evaluation. In the same study, low PWE individuals given the same feedback performed poorly on the subsequent task (Greenberg, 1977). Further, Greenberg (1977) found that negative feedback did not affect satisfaction towards the task for high PWE individuals, but heightened satisfaction for low PWE individuals. In terms of life satisfaction, research has shown that the more a stigmatized individual believes in a just world, the more likely he or she is to see a race-based outcome as being threatening, which serves to lower self-esteem (Major, Kaiser, & McCoy, 2004). In sum, attitudes towards AAPs were offered as a moderating variable because they help to explain whether individuals who believe they were preferentially selected view their presumed beneficiary status as just or not. I proposed the following hypotheses in relation to AAPs:

> *Hypothesis 7(a): Attitudes towards AAPs will moderate the relationship between self-perceptions of preferential selection and performance such that the more an individual supports AAPs, the more self-perceptions of preferential selection will be negatively related to performance.*

> *Hypothesis 7(b): Attitudes towards AAPs will moderate the relationship between self-perceptions of preferential selection and affective reactions to school such that the more an individual supports AAPs, the more self-perceptions of preferential selection will be positively related to institutional satisfaction and commitment.*

Hypothesis 7(c): Attitudes towards AAPs will moderate the relationship between self-perceptions of preferential selection and life satisfaction such that the more an individual supports AAPs, the more self-perceptions of preferential selection will be positively related to life satisfaction.

Academic self-efficacy. Bandura (1997) set forth that self-efficacy is a belief in one's abilities to successfully implement courses of actions that lead to success in a given domain. "Efficacy beliefs influence the particular course of action a person chooses to pursue, the amount of effort that will be expended, perseverance in the face of challenges and failures, resilience, and the ability to cope with the demands associated with the chosen course" (Chemers, Hu, & Garcia, 2001, p. 55). Further, a meta-analysis of educational research found that self-efficacy was related to academic performance (r = .38) and academic persistence (r = .34) (Multon, Brown, & Lent, 1991).

To my knowledge, self-efficacy has not been considered in relation to coping with being the target of stigmatization. The foundation of self-efficacy theory is the idea that individuals high in self-efficacy have the ability to perceive "challenges" rather than "threats" (Lazarus & Folkman, 1984) and the skill to adopt strategies that would help turn disadvantageous conditions into situations that they can cope with (Bandura, 1997). When faced with the belief that one was selected due to preferential selection, such an explanation would suggest that individuals high in academic self-efficacy will not view their status as being negative, but will jump on the opportunity to prove that they are capable.

Much research has found that academic self-efficacy enhances performance (i.e., Chemers et al., 2001; Wood & Locke, 1987), but it is also expected that self-efficacy is related to life satisfaction and affect. A meta-analytic review of self-efficacy and job satisfaction found that the expected population correlation was r = .45 (Judge & Bono, 2001). Further, a meta-analysis of life satisfaction and self-efficacy demonstrated a

population correlation the same as that of self-efficacy and affect (r = .45) (Judge, Locke, Durham, & Kluger, 1998). Stemming from this logic, I offered the following hypotheses:

Hypothesis 8(a): Academic self-efficacy will moderate the relationship between self-perceptions of preferential selection and performance such that only individuals low in self-efficacy will demonstrate a negative relationship between self-perceptions of preferential selection and performance.

Hypothesis 8(b): Academic self-efficacy will moderate the relationship between self-perceptions of preferential selection and performance such that only individuals low in self-efficacy will demonstrate a negative relationship between self-perceptions of preferential selection and institutional satisfaction and commitment..

Hypothesis 8(c): Academic self-efficacy will moderate the relationship between self-perceptions of preferential selection and life satisfaction such that the higher an individual is in academic self-efficacy, the more self-perceptions of preferential selection will be positively related to life satisfaction.

Domain identification. Social identity theory is often cited as providing an explanation for how out-group members cope with their stigmatized status (e.g. Major, Quinton, & Schmader, 2003). Social identity (Tajfel & Turner, 1986) refers to the theory that the more individuals identify with a group, the more they view behavioral interactions as being group related rather than self-relevant. A person high in academic domain identification is characterized as believing that being a student is highly-self relevant, self-defining, and the most important factor contributing to the global self-evaluation process (Osborne, 1995, 1997). Furthermore, identification with a domain necessitates that a person sees the domain as attractive, important, feasible and having

internal and external rewards (Steele, 1997). In relation to the current study, one way in which an individual copes with having the perception that they have been preferentially selected is by his or her domain identification.

The relationship between identification and outcomes has been studied thoroughly under the theory of stereotype threat, which is based on the work of Steele and Aronson (1995). This quote by Steele and Aronson (1995) expresses the plight faced by the stigmatized:

> Our reasoning is this: whenever African American students perform an explicitly scholastic or intellectual task, they face the threat of confirming or being judged by a negative societal stereotype—a suspicion—about their group's intellectual ability and competence. This threat is not borne by people not stereotyped in this way. But as this threat persists over time, it may have the further effect of pressuring these students to protectively disidentify with achievement in school and related intellectual domains. This protects the person against the self-evaluative threat posed by the stereotypes but may have the byproduct of diminishing interest, motivation, and ultimately, achievement in the domain (p. 797).

Social identity theory suggests that out-group members manage negative stereotypes by disidentifying with the relevant context. Crocker, et al. (1998) point out that internalizing the stereotype is not a requisite for suffering from stereotype threat, but rather simply valuing the domain can lead to decrements in related outcomes. In other words a person who believes that they were preferentially selected does not automatically accept that he or she is incompetent, but the stress of valuing academic excellence can lead to declines in outcomes (Crocker, 1999). The case of having the self-perception that one has been preferentially selected places the individual in a precarious position. Given that the perception of preferential selection is associated with the stereotype of incompetence, an out-group member who believes he or she was selected based on their group membership has two options to cope with this dilemma in relation to his or her

domain identification. They could choose to identify with the academic domain (i.e., excelling in school is the most important part of who I am) or they could decide to disidentify with the academic domain (i.e., excelling as a student is *not* an important part of who I am).

While the literature on stereotype threat is generally focused on performance as an outcome, social identity theory would suggest that identification can have a role in life satisfaction and affect in related domains. Schmader, Major, and Gramzow (2001) found that stigmatized individuals use disengagement processes to protect their well-being. For African Americans and Hispanics, devaluing academic success can protect their self-esteem (Schmader, et al., 2001). Supportive of this are the findings of Major, Spencer, Schmader, Crocker, and Wolfe (1998) who showed that African-American students who regarded performance on intelligence tests as a central part of their identity reported lower self-esteem following poor performance feedback as compared to those individuals less domain identified.

While the process of disengagement with the domain may have other affective outcomes, it is not expected that disengagement will be related to the commitment or satisfaction specific to the institution. Oyserman and Swim (2001) suggest that the role of being stigmatized should not merely be viewed as negative for out-group members because their familiarity with prejudice likely leads to a desire to bridge cultural views. In line with this assumption is the suggestion that disengagement with one domain (e.g., academic performance) does not assume disengagement from all domains (e.g., athletics, school-sponsored clubs). Research has found that stigmatized social status is related to participation in social movements (Duncan, 1999; Gamson, 1992). Furthermore,

participation in social action provides an outlet for counteracting discriminatory attitudes (Siegal, Lune, & Meyer, 1998) as well as increasing one's social connections (Puhl & Brownell, 2003). When persons perceive that they have been preferentially selected, research establishes that while they may choose to disengage from the academic domain, it also posits that they will find other avenues to focus their interest on. For example, the individual may become more involved in institutionally sanctioned events such as ethnic/racial fraternities or athletic teams, which would suggest that academic domain identification should not influence affective reactions to the college or university.

The following hypotheses reflected the literature review related to academic domain identification and the outcomes of performance and life satisfaction:

> *Hypothesis 9(a): Domain identification will moderate the relationship between self-perceptions of preferential selection and performance such that the higher an individual is in identity towards the academic domain, the more self-perceptions of preferential selection will be negatively related to performance.*

> *Hypothesis 9(b) Domain identification will moderate the relationship between self-perceptions of preferential selection and life satisfaction such that the higher an individual is in identity towards the academic domain, the more self-perceptions of preferential selection will be negatively related to life satisfaction.*

METHOD

Participants and Design.

Participants. In Fall 2004, freshman students from 10 universities across the United States were initially recruited to take a series of measures developed by a team of researchers at Michigan State University (Drzakowski, Friede, Imus, Kim, Oswald, Schmitt, & Shivpuri, 2005). Table 1 provides detailed demographic information for the first wave of data collection as well as the additional two survey efforts that took place prior to the collection of the data used for the current study. See Table 2 for a breakdown of the ethnic representation by school for the initial sample. Also, Table 3 provides explanations for the data collection techniques that were used when initially recruiting the students by the representatives of each institution.

In order to recruit participants for the current study, individuals who participated in the first wave of the study were contacted via e-mail with an invitation to complete the web-based survey. The research team attempted to contact each of these participants at three points in time for each wave of the study. A message describing the study was sent to the participants prior to the start of the study. See Appendix A for the message that was e-mailed. Next, individuals received an e-mail that restated the details of the study and provided information about how to participate as well as the password and web-address of the survey. See Appendix B for the second message e-mailed. Finally, a follow-up e-mail was sent to remind the participants about the study and restate the needed information including the password and web-address. See Appendix C for the reminder e-mail that was distributed.

Due to the low response-rate of the Blacks and Hispanics from Wave 1 who responded to the Wave 4 data collection efforts, I further recruited the minority students

who did not fill out the Wave 4 survey. I sent another email to these students explaining the need for a sample that was representative of all ethnicities and gave detailed information about the overall goals of the research study being conducted. This email, sent only to minorities, can be found in Appendix D.

All students were presented with an online consent form (see Appendix E) and were given a debriefing form (See Appendix F) which provided further information about the purpose of the research team's study.

For the current paper, a sub-sample of the original sample described above was used. Only participants who reported being Black or Hispanic and who participated in the Wave 4 data collection were used to test the hypotheses previously discussed. A response rate of 16% was obtained for the purpose of this study (i.e., 16% of the Blacks and Hispanics from the original sample responded to this wave of data collection). This included 137 participants. Of these individuals, 77% were female, 92% reported being United States citizens, and 88% indicated that English was their first language.

Measures.

Academic Self-Efficacy. Academic self-efficacy was measured with a 4-item scale created by the research team (Drzakowski, et al., 2004). Each item was answered on a five point Likert-type scale ranging from one ("strongly disagree") to five ("strongly agree"). One example item is, "I am confident in my ability to succeed as a college student." The remaining items can be found in Appendix G.

Institutional satisfaction. The research team designed this measure of global institutional satisfaction (Drzakowski, et al., 2004). The measure contained four items. A five-point scale was used to measure the level of satisfaction for each item. A response

of one was equal to "strongly disagree" and a response of five indicated that the respondent "strongly agreed" to the given statement. All items can be found in Appendix H. A sample item from this scale is "Overall, I am satisfied with this university."

Institutional Commitment. The research team designed this measure of institutional commitment (Drzakowski, et al., 2004). The measure contained 16 items. A five-point scale was used to measure the level of satisfaction for each item. Responses ranged from one ("strongly disagree") to five ("strongly agree"). All items can be found in Appendix I. A sample item from this scale is "I believe in the value of remaining loyal to one school."

Life Satisfaction. A life satisfaction scale was used to measure overall well-being. This scale was adapted by the research team from one developed by Diener (1984). The measure contained four items. A five-point scale was used to measure the level of satisfaction for each item. A response of one was equal to "strongly disagree" and a response of five indicated that the respondent "strongly agreed" to the given statement. A sample item is "The conditions of my life are excellent." The additional items for this scale can be found in Appendix J.

Self-Perception of Preferential Selection. Brown et al. (2000) used a single item to assess whether individuals believed they had been preferentially selected into the institution they attended. In order to gain a more psychometrically sound measure of this construct, five additional items were created, all of which are included in Appendix K.

I used factor analytic techniques to develop a psychometrically sound measure based on the steps described by Clark and Watson (1995). I first examined the item-total

correlations of the six items and found that all of the corrected correlations ranged from .57 to .81.

I performed an EFA using principal axis techniques with a varimax rotation to examine whether self-perceptions of preferential selection could be treated as a single construct for further analyses. The EFA yielded only one solution with an eigenvalue over 1. Furthermore, the 1-factor solution accounted for 65% of the variance. An examination of the scree-plot provided additional support for the single-factor solution.

Attitudes toward AAPs. A six-item scale developed by Kravitz and Platonia (1993) was used to measure attitudes towards AAPs. Responses were based on a 5-point Likert type scale where one corresponds with "strongly disagree" and five corresponds to "strongly agree." A sample item from this scale is: "Affirmative action is a good policy." The rest of the scale can be found in Appendix L.

Sensitivity to stereotypes. The Mendoza-Denton et al. (2002) *RS-race scale*, which is a measure of race-based rejection sensitivity, was used to assess an individual's level of sensitivity to stereotypes. This scale consists of 12 scenarios related to situations in which stereotypes about minorities exist. Following each scenario is a set of two statements. The first assesses concerns about the likelihood that the situation would result in a negative interaction. The second statement refers to the expectations of rejection that the respondent has for each situation. An example of an item used to measure anxiety towards a negative outcome is "I would be anxious or concerned that the professor would not call on me because of my race/ethnicity." An example referring to the same situation that would be used to assess the likelihood for rejection is "It is likely that the professor would not call on me because of my race/ethnicity." Respondents used

a five-point Likert-type scale from one (strongly disagree) to five (strongly agree) to express the level of agreement with each item. The entirety of this measure can be found in Appendix M.

In order to gain both cognitive (expectation for rejection) and emotional (anxiety or concern) responses related to stereotyped situations, it was suggested by the researchers that each of the 12 scenarios be scored by multiplying the pair of items. However, I felt that while both cognitive and emotional aspects were part of the construct of sensitivity towards stereotypes, I did not agree with the authors that these two dimensions should be treated as an interaction term. Rather, I felt that using a composite score that included the mean scores across both dimensions would make more sense from both a psychometric and theoretical perspective. Multiplying the pairs of items across each dimension would decrease the overall inter-item reliability as the upper limit of the total scale reliability would be limited to the product of the scale reliabilities for each dimension.

In addition to the psychometric challenge presented by the product term, I felt that there was no theoretical basis for combining the two dimensions by multiplying the two items provided for each situation represented in the measure. This scale was created to measure the degree to which individuals are sensitive to stereotypes that exist about their groups in stigmatized situations. While I am not disputing that perceptions of stigmatization are based on cognitive and affective components as is posited by the authors, I feel that multiplying the two items for each situation could potentially inflate the reactions of some situations over others. For the purpose of all analyses that included

the construct of sensitivity towards stereotype, I chose to take the mean score across all 24 items rather than using the 12 interaction terms to create a scale score.

Fairness of the selection process. The procedural justice scale used for the purpose of the current study was developed by Colquitt (2001). The measure contains seven items where respondents are instructed to use a Likert-scale where one is equal to "strongly disagree" and five is equal "strongly agree." An example of an item is "The procedures used to select students allowed me to express my views and feelings." The remaining items are located in Appendix N.

Core self-evaluations. Judge, Erez, Bono, and Thoreson's (2003) scale for CSEs was used. This scale contains 12 items, which are provided in Appendix O. Participants were asked to respond to each item using a five point Likert-type scale. A response of one was equal to strongly disagree and a response of five was equal to strongly agree. A sample item is, "I am confident I get the success I deserve in life."

Despite the fact that this measure is composed of four dimensions (i.e., generalized self-efficacy, self-esteem, neuroticism, and locus of control), researchers have argued that this construct is representative of a single trait (Judge, et al., 2003). I performed an EFA using principal axis techniques with a varimax rotation to examine whether CSE could be treated as a single construct for further analyses. The EFA yielded two factors with eigenvalues over 1. However, the 1-factor solution had an eigenvalue of 4.84, which explained over 40% of the variance, and was over 3 times than the size of the 2-factor solution (eigenvalue = 1.50), suggesting that this was a unidimensional scale. An examination of the scree-plot further supported the single factor solution. Finally, I examined the content of the items for the 2-factor solution. There was no discernable

pattern in factor loadings which paralleled the theoretical nature of the four dimensions (i.e., generalized self-efficacy, self-esteem, neuroticism, and locus of control) that would support the 2-factor solution. Further, it appeared that the 2-factor solution was related to the directionality of the wording for each item as most of the items that loaded highly on the second factor were negatively worded.

Domain identification. The domain identification measure that was used for the current study is based on the measure developed by Smith and White (2001). The measure contains three items. Respondents were instructed to indicate the degree to which they agreed with the given item. Using a five-point scale, a score of one would indicate that the participant strongly disagreed with the statement and a score of five would signify strong agreement. An example item from this scale is, "I value being a student a great deal." The remaining items can be found in Appendix P.

Diversity of institution. The diversity of the institution was determined by the percentage of the entire student body who were either Black or Hispanic. This operationalization of diversity was chosen due to the fact that these are the two ethnic groups of interest for the study as they are considered to be out-group members for the academic domain. Percentages were obtained from the College Board website (www.collegeboard.com, 2005) and are based on the current statistics as reported by each academic institution.

Climate for diversity. The *Diversity Mission Evaluation Questionnaire* (Tori & Dalia, 2004) was used to assess each institution's level of climate for diversity. Respondents were asked to respond to the 13 items in the measure using a five point Likert-type scale where one is equal to strongly disagree and a five represents an answer

indicating that the individual strongly agrees with the given statement. A sample item for this measure is, "Race and/or ethnicity issues are openly discussed at my college or university." The entirety of this scale can be found in Appendix Q.

Given that this is a group level variable, steps were taken to ensure that the proper method to aggregate to the school level is used. First, I established that there was adequate within-school agreement. Table 5 provides the descriptive information by school on the climate measure. In addition, Table 5 offers the $r_{wg(j)}$ and coefficient alpha by school. James, Demaree, and Wolf (1984) suggested using the $r_{wg(j)}$ as an index of agreement as it provides the degree to which respondents within a school provide consistent ratings. Similar to Nunnelly's (1978) assertion that inter-item reliability coefficients are considered adequately high at the level of $\alpha > .70$, George (1990) proposes that $r_{wg(j)}$ should also exceed the same level of reliability. For this study, the $r_{wj(g)}$ s for all 10 schools were above .90. Given that there was very little differences in $r_{wj(g)}$ across schools, I also looked at the inter-item reliability and similarly found that α was above .90 for all schools. Thus, I concluded that there was adequate within-school reliability to aggregate climate to the school-level.

In order to further ensure that aggregating the data to the school-level was appropriate, I also computed the ICC_1, (Bleise, 2000), which estimates the variance between schools. I found that ICC_1 was equal to .11. Bleise (2000) contends that ICC_1 values are generally below .20 and that the median value is .12. I concluded that in addition to there being adequate within-school reliability for the climate for diversity scale, there was also enough variance between-schools to aggregate to the institutional level.

Performance. Performance during college was operationalized as the current cumulative GPA, which was reported by the respondent. To ensure that GPA across schools accurately reflected performance, given that some courses at some colleges are presumably more difficult than others, corrections to the reported GPAs were made. These corrections were based on a single regression model where standardized GPA scores across all individuals were regressed onto each schools' GPA values and the beta weight for each school was used to correct the GPAs for all individuals who attended that institution.

High School GPA (HSGPA). HSGPA was obtained from the registrar's office at each institution. Similar corrections as for college GPA discussed above were calculated to equate HSGPA across all schools, regardless of differences in the stringency of selection decisions.

ACT/SAT scores. Test scores were also collected from the registrar's office at each institution. Because some schools only required SAT or ACT scores, many individuals had scores from a single test. The total scores for each of the two tests were standardized and then a single *z*-score representing the ACT/SAT test score was computed and used for all analyses. Corrected scores, paralleling the techniques used for college- and HSGPA were made to ensure that differences in scores across schools would be minimized.

RESULTS

All scale-level descriptive statistics and scale reliability information can be found in Tables 4-7. Tables 4 and 5 provide the descriptive statistics and scale reliabilities for the individual-level variables. Furthermore, Table 4 provides inter-scale correlations, alpha coefficients, and descriptive statistics for the sample containing the two historically Black colleges (HBC) and Table 5 provides the same information for the eight non-historically black institutions. Tables 6 and 7 contain the scale information for the diversity of each institution and the climate for diversity measure at the school-level, respectively.

Exploratory analyses were conducted to understand whether there were differences in self-perceptions of preferential selection in (HBCs) as compared with schools where there was variance in the racial groups represented. It is plausible that students from HBCs versus the traditional institutions interpreted the items in the self-perceptions of preferential selection differently. The scale was intended to measure the extent to which Blacks and Hispanic students believed that they were selected into their current institution for reasons related to AAPs. However, a student at an HBC may agree with an item such as "One reason why I might have been admitted into this institution was my race/ethnicity" simply because the school *only* selects Blacks and/or Hispanics. As such, I concluded that treating preferential selection scores at the HBCs and the other 8 schools as being representative of the same construct could be problematic when making conclusions about the relationship between this variable and the proposed correlates.

The analyses which examined preferential selection scores at the 10 schools provided evidence that the construct as operationalized by the scale used for this study

was distinct at the 2 HBCs. While an assessment of Table 4, which contains descriptive information for the HBCs, and Table 5, which provides the same information for the remaining schools in the sample, yields similar trends in terms of the reliability of the scales and the correlation of most variables, there are some indicators that students from the HBCs do not conceptualize self-perceptions of preferential selection the same as students from other institutions. These differences are explained in the following paragraph. Table 8 offers institutional-level scale information for the preferential selection measure by school and rationale for excluding HBCs from further analyses is provided below.

Correlations of self-perceptions of preferential selection with the individual difference variables (i.e., CSE, sensitivity towards stereotypes, and perceptions of fairness of the selection process) show considerably less magnitude (see Table 4). This potentially suggests that different factors in the HBCs versus the other schools may lead one to feel that race versus merit played a greater role in why a person may be admitted into the school. Second, the two HBCs had the lowest mean scores on the preferential selection measure, both of which were less than the mid-point of the scale. In addition, the two HBC samples were more kurtotic than the other eight schools, suggesting that the scores from these schools were not normally distributed.

Based on the exploratory analyses described above, I chose to exclude the two HBCs from all analyses that tested the proposed relationships. Therefore, the descriptive statistics reported in Table 5 provide information for the eight schools that were actually used in all further analyses.

For a summary of the test(s) used for each hypothesis as well as whether each hypothesis was supported, refer to Table 9.

Hypotheses 1 – 3. Presented below are the hypotheses related to individual differences predicting self-perceptions of preferential selection.

> *Hypothesis 1: CSE will relate to self-perceptions of preferential selection such that minority students (Blacks and Hispanics) high in CSE will be less likely to perceive that they have been preferentially selected than minority students who are lower in CSE.*

> *Hypothesis 2: Sensitivity to stereotypes will relate to self-perceptions of preferential selection such that minority students (Blacks and Hispanics) high in sensitivity to stereotypes will be more likely to perceive that they have been preferentially selected than minority students who are lower in sensitivity to stereotypes.*

> *Hypothesis 3: Perceptions of the fairness of the selection process will relate to self-perceptions of preferential selection such that minority students (Blacks and Hispanics) who report fair procedures used during the selection process for the institution that they attend will be less likely to perceive they have been preferentially selected than out-group members who perceive less fair selection procedures.*

Hypotheses 1 through 3 were first tested by performing correlational analyses between the proposed variables and self-perceptions of preferential selection. There was no support for the prediction that perceptions of preferential selection is related to sensitivity to stereotypes. However, there were significant correlations of $r = -.25$ and $r = -.17$ between CSE and perceptions of fairness of the selection process with self-perceptions of preferential selection, respectively. In other words, individuals who were low on these two individual difference characteristics were more likely to report that they were preferentially selected.

Multiple regression techniques were used next to examine whether CSE, sensitivity to stereotypes, and perceptions of fairness of the selection process predicted self-perceptions of preferential selection. All three predictor variables were entered into step one. This model was not significant. The three variables explained approximately 7% of the variance in self-perceptions of preferential selection. However, the regression coefficient for CSE predicting self-perceptions of preferential selection was the only significant predictor in this model.

Given that sensitivity towards stereotypes was found to be unrelated to perceptions of preferential selection, a second regression model was analyzed. CSE and perceptions of the fairness of the selection process were used to predict self-perceptions of preferential selection. This model did reach significance and explained 6% of the variance in self perceptions of preferential selection. Further, CSE was the only significant predictor of self-perceptions of preferential selection in this model. Results for this model can be found in Table 10.

Hypotheses 4 – 5. Given below are the proposed relationships between the predicted school level variables and self-perceptions of preferential selection.

> *Hypothesis 4: Institutional diversity (i.e., the percentage of Black and Hispanic students at a given institution) will relate to perceptions of preferential selection such that minorities (Black and Hispanics) from colleges or universities with more institutional diversity will be less likely to perceive they have been preferentially selected than minorities from colleges and universities with less institutional diversity.*

Hypothesis 5: Climate for diversity is an institutional level variable (i.e., an aggregate of perceptions of climate across all students at a given school) that will related to perceptions of preferential selection such that minorities (Blacks and Hispanic students)

from colleges or universities with more positive climates for diversity will be less likely to perceive they have been preferentially selected than minorities from colleges and universities with less positive climates for diversity.

Before testing each hypothesis, I tested an unconditional multi-level model. This model does not utilize predictors, but simply tests whether there is a difference between schools on the outcome variables (i.e., self-perceptions of preferential selection – a level-one variable). For this step, I looked at whether the amount of variance between-students was significantly greater than the variance between-schools. The *t*-test for model fit of the fixed effect was significant, indicating that the average difference in intercepts across schools was different from zero. Further, the residual variance for the random effects parameters illustrated that there was a significant amount of variance between individuals within a school, but not between schools. While the random effects intercept parameter was not significant, the intraclass correlation ( ) for this model was .11. In other words, the HLM analyses indicated that 10.5% of the variance in self-perceptions of preferential selection is due to school membership. Further, while the variance between schools was not statistically significant, it did explain a substantial portion of the overall variance. See Model 1 in Table 11 for the parameter estimates associated with this model.

After I examined the unconditional model, which was described above, I ran a second model (see Model 2 in Table 11) which estimated the variance between school intercepts for self-perceptions of preferential selection to see whether a significant amount of variance in the mean-level of self-perceptions of preferential selection for each school could be explained by the school's diversity. This predictor did not explain a

significant amount of the variance in the mean differences in self-perceptions of preferential selection by school. Additionally, the fixed effect on the slopes of self-perceptions of preferential selection did not change when the diversity of the institution was included in the model.

An examination of the random effects for this model demonstrates that there was no reduction of the variance in differences that can be attributed to school membership. Model 1 (unconditional model) showed that 10.5% of the variance in self-perceptions of preferential selection could be attributed to differences between groups, by adding in diversity as a level 2 predictor, was not reduced. This suggests that diversity explains very little of the between-school differences in perceptions of preferential selection. Finally, when the restricted log likelihood of this model was compared to the unconditional model via a χ^2 difference test, no significant improvement was found.

Paralleling the analyses that tested institutional diversity, I ran a model (see Model 3 in Table 11) which estimated the variance between school intercepts for self-perceptions of preferential selection to see whether a significant amount of variance in the mean-levels of self-perceptions of preferential selection for each school could be explained by the school's climate. Table 11 provides the estimates for the first model (Model 1) which had no predictor variable, and the third model (Model 3) that had climate for diversity as a level-2 predictor. Climate for diversity did not explain a significant amount of the variance in the mean differences in self-perceptions of preferential selection. However, the *t*-value, which is used to test whether the relationship of climate for diversity and self-perceptions of preferential selection significantly

different than zero, was substantial(t = -1.95, p = .08), indicating that the lack of significant findings could likely be due to the small number of groups in the sample.

An examination of the random effects for this model demonstrates that there is a reduction of variance in differences due to school membership. Model 1 (unconditional model) showed that 10.5% of the variance in self-perceptions of preferential selection could be attributed to differences between groups, by adding in climate as a level 2 predictor, was reduced to .06, suggesting that climate explains nearly half (49%) of the between school differences in perceptions of preferential selection.

Hypotheses 6(a) – 6(f). Given below are the proposed hypotheses of the moderation of school-level predictors on the relationship of individual-level predictors of self-perceptions of preferential selection.

> *Hypothesis 6 (a): The diversity of an institution will moderate the relationship between CSE and self-perceptions of preferential selection such that there will be a stronger negative relationship between CSE and self-perceptions of preferential selection for schools with less diverse populations.*

> *Hypothesis 6 (b): The diversity of an institution will moderate the relationship between sensitivity towards stereotypes and self-perceptions of preferential selection such that there will be a stronger positive relationship between sensitivity towards stereotypes and self-perceptions of preferential selection for schools with less diverse populations.*

> *Hypothesis 6 (c): The diversity of an institution will moderate the relationship between perceptions of fairness of the selection process and self-perceptions of preferential selection such that there will be a stronger negative relationship between perceptions of fairness of the selection process for schools with less diverse populations.*

> *Hypothesis 6 (d): The diversity climate of the institution will moderate the relationship between CSE and self-perceptions of preferential selection such that there will be a stronger negative relationship between CSE and self-perceptions of preferential for schools lower in climate for diversity.*

Hypothesis 6 (e): The diversity climate of the institution will moderate the relationship between sensitivity towards stereotypes and self-perceptions of preferential selection such that there will be a stronger positive relationship between sensitivity towards stereotypes and self-perceptions of preferential selection for schools lower in climate for diversity.

Hypothesis 6(f): The diversity climate of the institution will moderate the relationship between perceptions of fairness of the selection process and self-perceptions of preferential selection such that there will be a stronger negative relationship between perceptions of fairness of the selection process and self-perceptions of preferential selection for schools lower in climate for diversity.

Due to the small number of groups used for the HLM analyses as well as the low response rates from many of the schools, there was not enough power to test for cross-level interactions. However, in an attempt to provide insight as to how the individual-level relationships between self-perceptions of preferential selection and the three individual-level variables differed as a function of the two school-level factors, a series of figures were constructed so that qualitative statements could be made concerning the relationships. For each, the correlation between preferential selection and the individual difference variable were calculated by school. Next, I plotted this correlation with each school's diversity ratio or climate for diversity score. For example, in Figure 2, the correlation between CSE and preferential selection is located on the *y*-axis and the percentage of Blacks and Hispanics at a given school is plotted on the *x*-axis.

In order to determine whether support for each hypothesis was depicted in each figure, I looked for two specific characteristics. First, I examined whether there appeared to be a line formed by the points from each school. A linear pattern indicates that there is a relationship between the school-level variable and the correlation between the individual difference variable with self-perceptions of preferential selection. The second detail that I looked at was the direction of the slope for each line. For both institutional-

level variables (i.e., diversity and climate for diversity), support for the hypotheses will be evident if the points for each school form a positively-sloped line. In other words, as the percentage of minorities at each school increases, the negative relationship between the individual difference variables should weaken and approach zero.

Diversity. I first examined the plots which looked at diversity as a moderator of the individual-level relationships of perceptions of preferential selection with the proposed predictors. If the ratio of minority students helped explain the differences in the relationship between the individual level variables as proposed, it would be expected that for schools with less diversity would have a stronger negative relationship for CSE and fairness perceptions and a stronger positive relationship for sensitivity towards stereotypes than schools higher in diversity.

For CSE (see Figure 2), there was some indication that the diversity of each school did provide insight regarding its relationship with perceptions of preferential selection. The school with the greatest degree of diversity did not have a strong relationship between CSE and preferential selection. Additionally, schools with less diversity had fairly substantial negative relationships. There were two exceptions to this pattern. First, School A, which had little diversity, had a near-zero correlation between the two individual-level variables. Further, the School 7 had an extremely high positive relationship between CSE and preferential selection. This was likely due to the very small sample size within the school, and may not reflect the true relationship within the population at that school.

The relationship plot (see Figure 3) for sensitivity towards stereotypes with preferential selection moderated by diversity provided no evidence to suggest an interaction.

Overall, the relationship between fairness perceptions of the selection process and preferential selection did not vary much across the schools (see Figure 4). Most of the schools had small to moderate negative correlations. In other words, if diversity were to have an effect on this relationship, it would be expected that there should be stronger negative correlations between the two individual-level variables across the schools. The lack of differences across schools, despite the variability in diversity ratios, does not provide evidence for such an association.

In sum, while I could not empirically test hypotheses 6a - 6c, a qualitative review of the graphic representations for the proposed relationships did demonstrate some support for H6a.

Climate for diversity. To gain an understanding of how climate for diversity, at the school-level, affected the relationship between the individual-level predictors with preferential selection, I plotted the correlations between the individual-level variables on the y-axis and the aggregate school-level climate for diversity score on the x-axis.

For all three of the predictor variables, depicted in Figures 5 - 7, (i.e., CSE, sensitivity towards stereotypes, and fairness perceptions), there was no pattern that would suggest that the climate within the schools was acting as a moderator. With the exception of School F, the plots showed circular clusters. In other words, all three of the figures illustrate that the individual level predictors' correlations with preferential selection and

climate for diversity were close to zero. Therefore, there were no qualitative statements that can be made to suggest support for these hypotheses.

Hypotheses 7(a) – 7(c). Stated below are the proposed hypotheses of the moderation of attitudes towards AAPs on the relationship of outcomes of self-perceptions of preferential selection.

> *Hypothesis 7(a): Attitudes towards AAPs will moderate the relationship between self-perceptions of preferential selection and performance such that the more an individual supports AAPs, the more self-perceptions of preferential selection will be negatively related to performance.*

> *Hypothesis 7(b): Attitudes towards AAPs will moderate the relationship between self-perceptions of preferential selection and affective reactions to school such that the more an individual supports AAPs, the more self-perceptions of preferential selection will be positively related to institutional satisfaction and commitment.*

> *Hypothesis 7(c): Attitudes towards AAPs will moderate the relationship between self-perceptions of preferential selection and life satisfaction such that the more an individual supports AAPs, the more self-perceptions of preferential selection will be positively related to life satisfaction.*

A series of four hierarchical regressions were performed to test these hypotheses. In the first step of each, attitudes towards AAPs and self-perceptions of preferential selection were entered. Step Two contained the interaction term, which was based on the product of each individual's attitudes towards AAPs score and his/her self-perceptions of preferential selection score. Table 12 contains the results from these analyses.

GPA as an outcome. The hierarchical regression analyses predicting GPA as an outcome found support for attitudes towards AAPs moderating the relationship between self-perceptions of preferential selection and GPA. The interaction term was entered into Step Two of the model and explained significantly more of the variance in GPA above

and beyond the main effects in Step One. As shown in Figure 8, individuals who were high in perceptions of preferential selection had lower GPAs, regardless of their level of attitudes towards AAPs. Furthermore, individuals who were low in perceptions of preferential selection obtained much higher GPAs when they also supported AAPs. However, the relationship between self-perceptions of preferential selection and GPA was stronger for individuals high in attitudes towards AAPs. Thus, H7a was supported.

Academic satisfaction as an outcome. It was expected that attitudes towards AAPs would moderate the relationship between self-perceptions of PS and academic satisfaction. Again, a two-step hierarchical regression was performed. Neither the main effects nor the interaction term explained a significant portion of the variance in academic satisfaction. These results are contained within Table 12.

Institutional commitment as an outcome. It was expected that attitudes towards AAPs would moderate the relationship between self-perceptions of preferential selection and institutional commitment. Again, a two-step hierarchical regression was performed. Neither the main effects nor the interaction term explained a significant portion of the variance in institutional commitment. These results are provided in Table 12.

Life satisfaction as an outcome. It was proposed that attitudes towards AAPs would moderate the relationship between self-perceptions of preferential selection and life satisfaction. Again, a two-step hierarchical regression was performed. Neither the main effects nor the interaction term explained a significant portion of the variance in life satisfaction. These results are contained within Table 12.

Hypotheses 8(a) – 8(c). Stated below are the proposed hypotheses of the moderation of academic self-efficacy on the relationship of outcomes and self-perceptions of preferential selection.

> *Hypothesis 8(a): Academic self-efficacy will moderate the relationship between self-perceptions of preferential selection and performance such that only individuals low in self-efficacy will demonstrate a negative relationship between self-perceptions of preferential selection and performance.*

> *Hypothesis 8(b): Academic self-efficacy will moderate the relationship between self-perceptions of preferential selection and performance such that only individuals low in self-efficacy will demonstrate a negative relationship between self-perceptions of preferential selection and institutional satisfaction and commitment.*

> *Hypothesis 8(c): Academic self-efficacy will moderate the relationship between self-perceptions of preferential selection and life satisfaction such that the higher an individual is in academic self-efficacy, the more self-perceptions of preferential selection will be positively related to life satisfaction.*

GPA as an outcome. Hierarchical regression analyses did not provide support for academic self-efficacy as a moderator of the relationship between self-perceptions of preferential selection and GPA. Table 13 contains the results.

Academic satisfaction as an outcome. It was proposed that academic self-efficacy would moderate the relationship between self-perceptions of preferential selection and academic satisfaction. Again, a two-step hierarchical regression was performed. The interaction term, added to the second step of the analyses, was significant ($b = .19$, $p < .05$). Thus, H8b was supported for academic satisfaction as an outcome.

Figure 9 provides illustration of this relationship. As proposed, when academic self-efficacy was low, self-perceptions of preferential selection had a negative effect on academic satisfaction. Alternatively, individuals with high academic self-efficacy did not

see a decrease in academic satisfaction as a function of their self-perceptions of preferential selection.

Institutional commitment as an outcome. It was expected that academic self-efficacy would moderate the relationship between self-perceptions of preferential selection and institutional commitment. Again, a two-step hierarchical regression was performed. Neither the main effects nor the interaction term explained a significant portion of the variance in institutional commitment. These results are contained within Table 12.

Life satisfaction as an outcome. It was proposed that academic self-efficacy would moderate the relationship between self-perceptions of and life satisfaction. The interaction term was entered into Step Two of the model and explained significantly more of the variance in GPA above and beyond the main effects in Step One, providing support for H8c. Table 12 contains the results.

Furthermore, when the interaction term was also modeled, an additional 8% of the variance in the criterion of life satisfaction was explained. As the change in *R2* when the interaction was included in the model was statistically significant, the effects of academic self-efficacy as a moderator of self-perceptions of preferential selection and life satisfaction were examined. Figure 10 displays this interaction. As hypothesized, self-perceptions of preferential selection were negatively related to life satisfaction for individuals low in academic self efficacy. As is shown in Figure 10, not only was there a relationship between self-perceptions of preferential selection and life satisfaction for individuals *high* in academic self-efficacy, but the relationship was positive. In other words, there was a negative relationship between self-perceptions of preferential

selection and life satisfaction for individuals low in academic self-efficacy and there was a positive relationship between self-perceptions of preferential selection and life satisfaction for individuals high in academic self-efficacy.

Hypotheses 9(a) – 9(b). Stated below are the proposed hypotheses of the moderation of domain identification on the relationships of outcomes of self-perceptions of preferential selection.

> *Hypothesis 9(a): Domain identification will moderate the relationship between self-perceptions of preferential selection and performance such that the higher an individual is in identity towards the academic domain, the more self-perceptions of preferential selection will be negatively related to performance.*

> *Hypothesis 9(b) Domain identification will moderate the relationship between self-perceptions of preferential selection and life satisfaction such that the higher an individual is in identity towards the academic domain, the more self-perceptions of preferential selection will be negatively related to life satisfaction.*

GPA as an outcome. First, main effects for domain identification and self-perceptions of preferential selection on GPA were examined. The interaction term was entered into Step Two of the model and failed to explain significantly more of the variance in GPA above and beyond the main effects in Step One. Table 14 contains the results.

Life satisfaction as an outcome. It was hypothesized that domain identification would moderate the relationship between self-perceptions of preferential selection and life satisfaction. The interaction term was entered into Step Two of the model and did not significantly explain more of the variance in GPA above and beyond the variance explained by the main effects. Table 14 provides the results for this hypothesis.

A review of the results for all of the hypotheses in this study, including the statistical tests performed and the findings for each can be found in Table 9.

DISCUSSION

The goal of this study was to understand self-perceptions of preferential selection that minority students have while in college. Towards this end, the study first explored individual difference and school-level characteristics that would lead Black and Hispanic students to have the perception that they were selected into their higher academic institution for reasons other than merit. Second, this research tested a number of hypotheses that described the expected outcomes of self-perceptions of preferential selection. To further understand the relationship between perceived beneficiary status and relevant outcomes, three moderators of the relationships between perceptions of preferential selection and outcomes were tested.

The following sections discuss the results for the hypotheses tested. After that, a number of suggestions are given which propose future research directions that can be adopted. Next, practical implications based on the findings of the current study are offered to human resource professionals and college admissions officers. Finally, a discussion of limitations of this study is offered.

Summary of findings related to predictors of self-perceptions of preferential selection.

Evidence for the existence of self-perceptions of preferential selection. Before discussing the findings related to factors which lead individuals to the hold the belief that they have been preferentially selected into college, it is important to note that this study was able to confirm that these perceptions are held by many Blacks and Hispanics in the academic domain. While Heilman and her colleagues have been able to effectively manipulate self-perceptions of preferential selection in the lab (e.g., Blaine, et al., 1995; Heilman & Alcott, 2001), few studies have actually tested whether self-perceptions of

preferential selection generalize to real-world settings. If perceptions of preferential selection were *not* held by students, we would expect that most respondents would have scale scores close to one (i.e., very low). However, this study found that the mean score for self-perceptions of preferential selection was above the scale midpoint and had a moderate degree of variability (mean = 3.16, s.d. = .87) for the sample of eight schools that excluded the HBCs. This adds further support to the findings of Brown et al. (2000) that these perceptions generalize to the academic environment.

An extension of Brown et al.'s work (2000) was the development of a multi-item scale to measure self-perceptions of preferential selection. Brown and his collogues relied on a single-item measure of self-perceptions of preferential selection; for the purpose of this study I developed a 6-item measure for self-perceptions of preferential selection, which showed adequate psychometric properties.

Individual difference factors. This study offered three variables that were expected to relate to minority students' perceptions that they were preferentially selected into their college/university as a function of their group membership: CSE, sensitivity towards stereotypes, and perceptions of fairness of the application process. No support was found for the relationship between sensitivity towards stereotypes and self-perceptions of preferential selection; on the other hand, CSE and fairness perceptions did explain a significant portion of the variance in self-perceptions of preferential selection (R^2=.08). However, CSE proved to be the only individual difference factor that significantly predicted self-perceptions of preferential selection when these were considered together. This relationship suggests that people high in CSE, characterized as regarding positive outcomes as a function of the self, may perceive the likelihood that

they were preferentially selected as low because they are more apt to see themselves as qualified for admission and dismiss the possibility that AAPs were used a selection factor.

While regression analyses demonstrated that CSE was a predictor of self-perceptions of preferential selection, hypotheses related to the other individual difference variables of fairness perceptions of the selection process and sensitivity towards stereotypes were not supported. However, fairness perceptions were negatively related to self-perceptions of preferential selection ($r = -.17, p < .05$). There are a couple of possible explanations for the lack of support found for the hypothesis that fairness perceptions predict self-perceptions of preferential selection. First, there was not much variance in fairness perceptions, suggesting that range restriction may have been a problem for this sample. One plausible explanation for the lack of variance in fairness perceptions as well as the absence of significant findings for the regression analyses is that the individuals in the study saw the procedures used by their current institution as fair because they were accepted and ultimately decided to attend. As such, individuals may have self-selected into schools perceived as having reasonable selection procedures and this study was unable to capture the procedural justice beliefs of those who did not attend a given institution.

The timing of the measurement in the current study hinders knowledge related to this notion. It would be beneficial to measure fairness perceptions related to procedures of each of the schools *before* acceptance decisions are made to fully identify the effect that the timing of the measurement had on fairness perceptions as they relate to perceptions of preferential selection.

Problems relevant to the sample and/or the timing of the measurement likely contributed to the lack of significance found for the proposition that fairness perceptions would predict self-perceptions of preferential selection. However, it is also conceivable that the hypothesized relationship simply does not exist. I expected that fairness perceptions would predict self-perceptions of preferential selection based on the assumption that individuals who believed that an institution that used unfair procedures to make selection procedures would also be more likely to utilize factors other than merit (i.e., race) when accepting students. One problematic aspect of my hypothesis is that it does not take into consideration the possibility that many individuals see preferential selection as being a fair selection procedure. Unfortunately, I did not measure the extent to which individuals support preferential selection so that I could control for it when analyzing the degree to which preferential selection is predicted by justice perceptions.

Sensitivity towards stereotypes was a third individual difference variable that was predicted to relate to self-perceptions of preferential selection. I expected that individuals high in sensitivity towards stereotypes would be more likely to believe they were selected due to race-related selection decisions. I found no relationship between perceptions of preferential selection and sensitivity towards stereotypes. One plausible explanation for this finding is that individuals high in race-based sensitivity towards stereotypes, characterized by a belief that others treat them according to negative stereotypes related to their ethnic group, only categorize *unwanted* outcomes as being stereotype-based. Because getting accepted into college is a desired result, the selection decision may not lead out-group members to even consider whether stereotypes about their race played a role in the outcome.

Institutional-level factors. Given the small number of schools sampled and the low response rate within many of the schools, the conclusions that can be reached about the variables of climate for diversity and the percentage of minorities at each school are limited. However, evidence was found that suggests that differences between schools may account for variability in self-perceptions of preferential selection. First, the null HLM model, which tested whether there were mean-level differences in self-perceptions of preferential selection, was significant and indicated that school-membership explained 10.5% of the variance in individual levels of self-perceptions of preferential selection. Second, the correlation between the mean self-perception of preferential selection score for each school and the school's climate for diversity score was $r = -.70$ ($N = 8$, $p = .06$).

Furthermore, school-level differences explained more of the variance in perceptions of preferential selection than the individual difference predictors. While the model testing the extent to which climate for diversity explained the variance between schools was not significant, the high correlation of climate with perceptions of preferential selection at the school-level could be interpreted as an indicator that climate is one of the central constructs that leads an individual to believe that they were preferentially selected. This is of interest because it may suggest that out-group members base their perception of whether they were preferentially selected on the extent to which their institution is supportive of diversity, and not because they believe they were in need of preferential treatment. However, there is no way to determine the causal nature of this relationship as it could be that self-perceptions of preferential selection contributed to an individual's assessment of the diversity climate.

No concrete statements for the extent to which differences in schools with regard to recruiting and admissions policies affects college student perceptions can be taken from this study. However, much research has looked at the extent to which college admissions' officers differ in opinion on the attributes a successful applicant holds, making clear that the inconsistencies across schools in terms of selection criteria and recruitment strategies likely influence the perceptions that students have with regard to the values and norms of a given institution. For example, the National Association for College Admission Counseling Admission Trends Survey (1995) reported that grades in college preparatory courses were deemed "considerably important" whereas less than half of the respondents believed that admission test scores or HSGPA were equally as important.

These differing beliefs concerning selection criteria across colleges and universities likely heavily contribute to actual recruiting policies as well as the mission statements at each school. For example, one large state school listed "academic performance" at the top of their list of criteria for admissions and "... leadership, talents, conduct, and diversity of experience " at the bottom (www.msu.edu/admission/freshman_profile, 2006). Another state school in the same geographic region listed GPA at the top of their list, but stressed that factors such as personal achievements, varied experiences, and a "unique personal background" were all needed attributes (www.admissions.umich.edu/fastfacts.html). These recruiting policies may contribute to applicant perceptions such that students at both institutions would agree that the academic achievements are valued at each institution, but they likely differ

on the extent to which they feel that their school is supportive of diversity of the student body.

In terms of the framework established by the current study, it would be of value to consider what types of statements with regard to the admission procedures across schools influence the perceptions of students at both the individual- and aggregate-level. For example, perhaps the climate for diversity would be higher at the institution that emphasized differences in background and experience, but might also lead minority students to the belief that their institution may have selected them for reasons unrelated to their academic merit and associated with their ethnic status. The following paragraphs provide further discussion about differences between individual- and school-level findings regarding climate for diversity in this study.

The literature makes the distinction between *psychological* climate and *organizational* climate (Glisson & James, 2002) such that the former is at the level of the individual and the latter is based on an aggregation of perceptions across persons. The goal of the current study was to understand climate for diversity as an institutional-level construct. However, I also examined the relationship between individual-level diversity for climate perceptions and the other variables in the proposed framework. Interestingly, there was a significant, positive relationship between perceptions of preferential-selection and climate for diversity. In other words, individuals more likely to believe they had been preferentially selected were more likely to report that they believed their school supported diversity-related issues. This finding is of great interest because it goes beyond the finding at the school-level where the relationship between the aggregate perceptions

of preferential selection scores and climate for diversity (r = -.70, N = 8, p = .06) was large and negative.

The fact that the individual- and school-level findings were contradictory provides evidence that climate for diversity is not only an important factor when trying to understand how perceptions of preferential selection arise, but also that the phenomenon is one that should be studied from a levels-perspective. Further, self-perceptions of preferential selection at the individual-level seem to indicate that individuals who believe that their school supports diversity concerns may also believe that the school is choosing to increase the diversity of the population of students via race-based selection decisions. However, differences between schools, as is assessed through HLM analyses, provides evidence that within school differences need to be addressed to understand the nature of the relationship between *all* individuals within the institution and perceptions of the selection process being used as a tool to increase diversity. A critical next step would be to look at majority group members' perceptions of climate for diversity as they relate to race-related selection procedures at schools. It is plausible that it is the differences between non-minority group members that is driving the mean school-level climate for diversity scores as the relationship between aggregated climate scores (i.e., between school differences).

Summary of findings related to outcomes of self-perceptions of preferential selection.

The literature related to self-perceptions of preferential selection suggests that perceptions of beneficiary status are related to a number of outcomes including task choice (Roberson & Alsua, 2002; Heilman & Alcott, 2001; Brown, et al., 2000; Heilman, et al., 1991), task motivation (Heilman & Alcott, 2001; Blaine, Crocker, & Major, 1995)

and performance perceptions (Heilman & Alcott, 2001; Blaine, et al., 1995; Major, Feinstein, & Crocker, 1994; Heilman, et al., 1991; Heilman, at al., 1990; Heilman, Simon, & Repper, 1987). This section is organized so that I first discuss general findings with regard to preferential selection and the outcomes tested. Next, the findings specific to each of the three outcomes is discussed in detail. Finally, I provide an additional discussion of academic self-efficacy as a moderator due to the interesting pattern of relationships found with this construct and numerous variables in the study.

General discussion of outcomes. Given the lack of research that investigates self-perceptions of preferential selection outside of the lab setting, one of the major contributions of the present study was an examination of the external validity of theory related to self-perceptions of preferential selection and associated outcomes. Correlations between self-perceptions of preferential selection with current GPA and academic satisfaction were both significant and negative in direction. These results parallel the findings of lab-based perceptions of preferential selection (e.g., Blaine, Crocker, & Major, 1995; Heilman & Alcott, 2001), indicating that the negative relationships between self-perceptions of preferential selection and outcomes generalize outside of the lab setting.

Another contribution of the present study was the identification of moderators of the relationship between self-perceptions of preferential selection and school-relevant outcomes. While the research examining outcomes related to self-perceptions of preferential selection is extensive, few studies have sought to identify variables which explicate this psychological process. A framework based on the social psychological theory of stigma was applied to this phenomenon.

Institutional attitudes as outcomes. I considered how self-perceptions of preferential selection might relate to negative academic attitudes including institutional commitment and academic satisfaction. There was no relationship between self-perceptions of preferential selection with commitment and a small correlation with satisfaction ($r = -.14$, $p<.05$). However, the moderating variable of academic self-efficacy did predict a significant portion of the differences in academic satisfaction above the variance explained by preferential selection and academic self-efficacy alone. Only individuals low in academic self-efficacy showed lower levels of school satisfaction when they believed they were preferentially selected.

Further understanding of how preferential selection related to affective outcomes was examined by considering how attitudes towards AAPs and domain identification would serve as moderating factors. However, no support was found for these proposed relationships.

The hypotheses related to attitudes towards AAPs were based on the theory that these attitudes were similar in nature to other world view ideologies including belief in a just world (BJW) and the Protestant work ethic (PWE). In retrospect, it may have been more beneficial to directly measure PWE and BJW rather than to suppose that attitudes towards AAPS could be considered an analogous construct. In spite of this, support for the hypothesis that attitudes towards AAPs would moderate the effect that self-perceptions of preferential selection had on performance (discussed in the following section) *was* supported. The fact that attitudes towards AAPs did not affect the relationship between academic satisfaction, academic commitment, or life satisfaction may suggest that an individual's level of support towards AAPs, while partially related to

their world view ideologies, only helps to understand outcomes specifically related to the policy and negative stigmas associated with it (such as poor school performance for Blacks and Hispanics in the current study).

Finally, it should also be noted that none of the proposed relationships where academic commitment was an outcome were supported in this study. Factors exist that could have contributed to the lack of significant findings for this outcome variable. For example, the scale that I used to measure commitment was focused directly on the students' commitment to the actual school they were attending, rather than to other academic features such as degree commitment and/or extracurricular activity commitment. It was my intention for this study to begin to identify how self-perceptions of preferential selection relate to commitment specific to the institution. This study's findings would suggest that self-perceptions of preferential selection, while possibly related to other types of academic-relevant commitment, do not play a significant role in general school commitment.

Life satisfaction as an outcome. One of the aims of the current study was to provide evidence that the process of preferential selection stigmatizes out-group members thought to benefit from AAPs. While no studies have tested models specific to stigmatization, a number of preferential selection researchers have suggested that the negative effects of preferential selection may be related to the negative stereotypes associated with an assumption of beneficiary status (Heilman, et al., 1992; Heilman et al., 1997; Nacoste, 1990; Blaine et al., 1995). Life satisfaction, unlike the other outcomes in the framework developed for this paper, is not specific to the academic domain. However, I felt that it was important to include as a variable because it would help bridge

the gap between the applied literature on perceptions of employee selection procedures with social psychological literature on group interaction. Furthermore, well-being is often viewed as one of the major consequences of the process of stigmatization (Crocker, 1999). The findings from this study provide some evidence that the process of stigmatization underlies the perception of beneficiary status as life satisfaction was found to be an antecedent of self-perceptions of preferential selection. Details of the relationships found in this study between preferential selection and life satisfaction are discussed below.

Much research has looked at the degree to which members of in-groups and out-groups differ in terms of well-being in stigmatized situations (Pyszczynski, Greenberg, Solomon, Arndt, & Schimel, 2004). Despite the fact that it would be expected that stigmatized individuals have lower levels of self-esteem, findings show that mean level self-esteem scores, do not differ by group (Pyszczynski, et al., 2004). However, variables such as self-regulatory processes (Pyszczynski, et al., 2004) may explain these group differences. To understand whether self-perceptions of preferential selection could be a correlate of lowered well-being for out group members, I examined the extent to which life satisfaction was related to self-perceptions of preferential selection and found no relationship between the two constructs. However, I did find that a significant portion of the variance in life satisfaction was explained by the interaction of academic self-efficacy and self-perceptions of preferential selection. For individuals low in academic self-efficacy, perceptions of preferential selection were positively related to life satisfaction. Conversely, high self-efficacy individuals had lower levels of life satisfaction when they believed they were preferentially selected. This finding lends support to the notion that

self-efficacy drives the extent to which an individual perceives a situation as threatening or challenging (e.g., Lazarus & Folkman, 1983). It is likely that the assumption that one was preferentially selected was seen as a challenge by individuals high in academic self-efficacy and a threat to those individuals low in academic self-efficacy, thus affecting levels of reported life satisfaction.

There was no evidence that the moderators of attitudes towards AAPs and academic domain identification served to influence the relationship between self-perceptions of preferential selection and life satisfaction. For domain identification, the psychometric properties of the measure likely contributed to the lack of significant findings for hypotheses with regard to this construct. The limited variance in scores and the high mean score for domain identification in the sample seems to indicate that the scale used was not sensitive enough to detect actual differences across individuals. In terms of attitudes towards AAPs not being found to moderate perceptions of preferential selection and life satisfaction, it may be the case that an individual's overall life satisfaction is resilient enough that attitudes towards AAPs, at least in the specific domain of academia, were not central enough to the self-concept of students to affect their overall well-being in life.

Performance as an outcome. The final outcome variable considered was college performance which was operationalized as the current GPA of the students in my study. I found that self-perceptions of preferential selection were significantly related to performance. Individuals higher in perceptions of preferential selection had lower GPAs. These results were further explained by the examination of related moderators. Attitudes towards AAPs interacted with self-perceptions of preferential selection such that

individuals with more positive attitudes towards AAPs had a weaker negative relationship than those who reported less support for AAPs. In other words, the relationship between performance and self-perceptions of preferential selection, while negative across all levels of attitudes towards AAPs, was weaker for individuals who reported more support for the policies.

This finding supports Greenberg's (1977) work related to the interaction of PWE on the relationship between task feedback and subsequent task performance. High PWE participants performed significantly better on a lab task than low PWE participants when told that their past performance was poor (Greenberg, 1977). Individuals in my study who were high in self-perceptions of preferential selection may have been more apt to put greater effort into schoolwork in an attempt to overcome self-perceptions of preferential selection when they did not support AAPs. In other words, individuals who subscribe to the world view ideology that hard work leads to fair outcomes (i.e., high PWE & negative attitudes towards AAPs) may have had a less negative relationship with GPA because these individuals attempted to compensate for presumed beneficiary status by working harder in school.

While attitudes towards AAPs did help to clarify the relationship between self-perceptions of preferential selection and performance as an outcome, there was not support for domain identification or academic self-efficacy serving as moderators. It is hard to speculate a theoretical rationale for the lack of support for the hypothesis related to domain identification due to the highly skewed scores on the measure. However, the finding that self-efficacy did not serve as a moderator may have important implications for the framework tested in this study. First, it is plausible that perceptions of preferential

selection may actually be caused by academic self-efficacy rather than the opposite direction as proposed in the current study. The high correlation between CSE (which predicted self-perceptions of preferential selection in this study) and self-efficacy (r = .73) is supportive of such a relationship. In regard to performance, it would then be reasonable to suggest that self-perceptions of preferential selection may actually mediate, in part, the relationship between self-efficacy and performance.

Self-efficacy as a moderator. As mentioned at the onset of this paper, one of the contributions that this study hoped to achieve was an identification of variables that might help lead to a better understanding of the relationships between self-perceptions of preferential selection and related outcomes. While no causal statements can be made with regard to academic self-efficacy as a moderator of preferential selection and performance, attitudes, and life satisfaction, the pattern of relationships with regard to low- versus high- self-efficacy individuals are noteworthy.

It was hypothesized that self-efficacy would serve as a moderator between self-perceptions of preferential selection and all of the outcomes examined such that only individuals low in self-efficacy would demonstrate the negative consequences associated with preferential selection beliefs. This supposition concerning low academic self-efficacy individuals was inline with the study's findings for the relationships between preferential selection and academic satisfaction as well as preferential selection and life satisfaction. Furthermore, for these two outcomes only those with *low* self-efficacy were found to have the expected negative relationships with self-perceptions of preferential selection. This is a major contribution to the preferential selection research as it clarifies the current notion that individuals who believe they were preferentially selected

experience negative consequences. While this theory holds true for out-group members who have low expectations concerning their ability to succeed in the academic domain, for high self-efficacy individuals, there was *no* relationship between perceptions of preferential selection and academic satisfaction and a *positive* relationship between preferential selection and life satisfaction.

To my knowledge, no studies have examined domain-specific (e.g., academia) self-efficacy as it relates to the experience of targets of stigmatization. Not only do the findings related to self-efficacy as a moderator further our knowledge on self-perceptions of preferential selection, but that also have important implications for the literature on social identity theory. The premises of self-efficacy theory is that individuals high in self-efficacy have the ability to perceive "challenges" rather than "threats" (Lazarus & Folkman, 1984) and the skill to adopt strategies that would help turn disadvantageous conditions into situations that they can cope with (Bandura, 1997). The findings of this study suggest that self-regulatory processes may lead more self-efficacious out-group members to adopt strategies that enable them to maintain a positive view towards school specifically and their general life satisfaction. For example, low self-efficacy may feel burdened by the stigma associated with preferential selection, whereas high self-efficacy individuals would be more likely to view race-based beneficiary status as an opportunity to prove to the self and others that they can be successful, ultimately having a positive effect on school and life satisfaction.

Future research directions.

One of the main contributions of this study was the finding that self-perceptions of preferential selection are held in real world settings, furthering the generalization of

Heilman and her colleagues (Heilman & Alcott, 2001; Blaine, et al., 1995; Major, Feinstein, & Crocker, 1994; Heilman, et al., 1991; Heilman, at al., 1990; Heilman, et al., 1987) who have conducted numerous lab-based studies related to this phenomenon. To extend the external validity of self-perceptions of preferential selection, applied researchers should determine situations where stigmatization may take place including conditions where females, individuals with disabilities, and older employees also adopt lower status due to their perceived beneficiary status. If self-perceptions of preferential selection are also held by these groups, the framework tested here could be used to broaden our understanding of being a member of these understudied groups within the context of the work.

While the model developed for the present study is focused specifically on self-perceptions of preferential selection to the hiring process, it is plausible that the theoretical framework could be used to explain reactions to other selection decisions such as leadership training programs. Kraiger, Ford, and Salas (1993) contend that successful training efforts should show marked behavior changes contributable to cognitive, skill-based, and affective learning. Goldstein and Ford (2001) posit that one of the most important factors in determining the effectiveness of organizational training is the assessment that individuals make related to organizational conditions prior to training. Researchers could use the theories presented in this paper to examine how reasons why individuals believe they were chosen to participate in leadership development programs (for example, females and minorities maybe more apt to hold the belief that they were chosen due to group membership) contribute to the learning of leadership skills. For example, this study demonstrated that attitudes were lesser for individuals low in

academic self-efficacy when they believed they were preferentially selectected. In so much as researchers could determine the reasons why individuals believe they were selected to participate in the leadership training program, the inclusion of training initiatives that heighten work self-efficacy could have a positive influence on the reactions that individuals have towards the training program.

Other selection determinations are made within organizations including the assignment of who should receive a promotion. Research examining leadership success of out group members including women and ethnic minorities could benefit from an understanding of how perceptions of preferential treatment influence attitudes and behaviors towards minorities and women promoted to leadership roles. The present study provided evidence for the importance that environmental factors play in leading to the acceptance of the belief of beneficiary status. It would be of value to expand the research in the area of climates for diversity to determine organizational policies that would dissuade the view that preferential treatment has occurred.

In relation to organizationally-relevant outcomes and variables which may affect the extent to which self-perceptions of preferential selection relates to these outcomes, there are a number of directions that future researchers could pursue. First, this study aimed at creating a framework that could be used to better understand perceptions of preferential selection. As such, causal statements that can be offered from the results are few. However, the findings do offer both antecedents and outcomes that are correlates of preferential selection in a real world setting. A logical next step would be to conduct experimental designs that could begin to test the causal statements that can be made about the correlations in this study. For example, a researcher could simulate a setting where

the environment is framed as being either high or low in a climate for diversity to see whether the climate is leading to self-perceptions of preferential selection or the other way around.

In addition to testing the causal relationships provided in the framework tested in the current study, it would also be beneficial for researchers to determine other outcomes that should be considered in relation to self-perceptions of preferential selection. For example, while the current study looked at overall GPA as a measure of performance, it did not consider other potentially relevant effects such as time spent studying, absenteeism, or participation in non-academic activities.

Practical implications of the current study.

The results from this study highlight the importance of understanding how self-perceptions of preferential selection come about. While the limited nature of the sample of schools prevented a thorough examination of the effect that institutional factors had on self-perceptions of preferential selection, there was evidence that contextual factors did play a key role. Suggestive of this is that organizational policies could be enacted to potentially minimize out-group members from concluding that they were beneficiaries of a selection process related to AAPs.

Research on applicant reactions to the selection process has noted a shortage of studies which examine post-hire outcomes of hiring perceptions (Chan & Schmitt, 2004). This study answered that call for research by looking at the extent to which perceptions of fairness to the application process is associated with self-perceptions of preferential selection. While fairness perceptions, when modeled with CSE did not significantly predict self-perceptions of preferential selection, this study did find that individuals who

believed the selection process was unfair were more likely to report perceptions of preferential selection (r= -.17, p<.05). Such a finding provides yet another organizational concern for the need to focus attention on creating selection procedures that are perceived as fair, especially given that individuals who were more likely to believe that they were selected for reasons other than merit also showed lower performance and academic satisfaction. Of even greater concern is that perceptions of preferential selection were found to be unrelated to actual qualifications. There was no correlation between either HSGPA or standardized test scores and self-perceptions of preferential selection. In other words, perceptions of race-based selection decisions may occur, regardless of the actual qualifications of out-group members.

Support was found for the negative relationship between self-perceptions of preferential selection with performance. Additionally, individuals low in academic self-efficacy reported less satisfaction with the university and lower levels of life satisfaction. These findings indicate that there are approaches that could be taken by organizational and educational institutions to lessen the negative outcomes associated with the belief that you have been selected for reasons other than merit alone. First, academic self-efficacy acted as a buffer between self-perceptions of preferential selection and academic satisfaction. Only individuals low in academic self-efficacy reported lower levels of satisfaction in regard to both the school and their lives. In fact, academic self-efficacy not only interacted with self-perceptions of preferential selection and self-efficacy so that individuals who questioned their abilities had lower life satisfaction, but in addition, individuals high in self-efficacy had greater life satisfaction for when they believed they were preferentially selected. These results provide a sound argument for the

implementation of programs in academia and organizations that aim at increasing the self-efficacy of individuals within. For example, feedback, training programs, and/or mentoring relationships focused on enhancing self-efficacy may mitigate the negative relationships between self-perceptions of preferential selection and overall well-being as well as attitudes specific to the institution.

Another way in which admissions officers and human resource professionals might be able to reduce the negative relationship that perceptions of preferential-selection has with performance is to increase the attitudes that students and employees have related to AAPs. This study demonstrated that positive opinions in regard to AAPs decreased the negative association that self-perceptions of preferential selection had on performance. Organizations and academic institutions could benefit from educating individuals on the positive aspects of using AAPs to increase diversity and frame them as being fair rather than threatening.

Recent findings related to tokenism, defined as the perception that an out-group member is the sole representative of his or her group within a specific setting, show that minority faculty members who work with others of their group are more likely to focus their attention on their work because they do not feel the weight of their groups' negative stereotypes, thus increasing their performance (Niemann & Dividio, 1998). Theory specific to the psychological experience of being a solo out-group members offers that because the differences between a token employee and others within the organization are highly visible, tokens experience greater work stress as a function of the pressure to perform well so as to represent their group in a positive manner (Kanter, 1977). In support of Kanter's propositions, Jackson, Thoits, and Taylor (1995) found that out-group

leaders who worked in diverse environments reported fewer harmful issues associated with token stress than those in settings with a high representation of out-group members. Given the negative relationship that perceptions of preferential selection had with performance in the current study, it is likely that increasing the representation of stigmatized groups within academic and organizational settings will decrease the negative relationship that these perceptions have with domain-relevant outcomes.

The results from this study, however, do not necessarily support the relationship between actual diversity and self-perceptions of preferential selection. While this finding may be an artifact of the small sample of schools and individuals used to test this relationship, it is critical for researchers, university officials, and human resource managers to identify precisely the degree to which the composition of the workforce may influence self-perceptions of preferential selection and/or the degree to which they contribute to outcomes of concern.

Implications for AAPs. In addition to implications offered organizational stakeholders in the preceding section, the findings of this study should be considered by government officials. Policymakers should carefully consider the content of AAPs and the way that these policies are perceived by the public. First, this study found that minorities who supported AAPs had a weaker negative relationship between preferential selection perceptions and performance. In other words, individuals who perceived AAPs as constructive social policies had only a slight negative relationship with perceptions of preferential selection and performance; conversely, individuals who did not report that they supported AAPs had a strong negative association between perceptions of preferential selection and performance.

The goal of the current study was to understand the psychological process related to self-perceptions of preferential selection and avoid politically-laden considerations about the utility of AAPs. However, it could be suggested that the findings support a ban on AAPs as they potentially drive the acceptance of beneficiary status for minorities within the academic domain. While the results of this study *did* provide evidence that self-perceptions of preferential selection exist in academic settings, the correlation between self-perceptions of preferential selection and opinions towards AAPs was near zero. Furthermore, there was no significant relationship between support for AAPs and perceived fairness of the selection process.

While these correlations oversimplify the relationships between the constructs due to the likelihood of moderating factors, they do indicate that the mere use of AAPs by an institution could be unrelated to self-perceptions of preferential selection. Moreover, even if AAPS were to be abolished across all states, it is unreasonable to assume that out-group members would discount demographic characteristics as being factored into selection decisions, especially given the push for diversity-enhancing strategies within most academic and organizational institutions. For instance, the inclusion of minorities and women in organizations has been shown to be related to other important outcomes including workgroup creativity, (O'Reilly, Williams, & Barsade, 1998), the number of ideas produced by a team (Cady & Valentine, 1999), and the quality and effectiveness of performance (McLoed, Lobel, & Cox, 1996).

Rather than focus on the debate as to whether AAPs should be eliminated or not, a more productive route from a policymaking perspective would be to understand how the framing of AAPs could relate to the fairness perceptions of such policies. The findings of

this study echo such a perspective given that justice perceptions and self-perceptions of preferential selection had a significant, negative correlation. A widely held belief in American society is one of meritocracy (Renfro, et al., 2006). Americans in general support the objective of equal opportunity for all (Kinder & Sanders, 1996; Oawa, Crosby, & Crosby, 1996). However, Kravitz and Platonia (1993) found little support for AAPS from majority-group members. Policymakers could potentially derive support for AAPs by educating individuals about the importance for AAPs to promote fairness for all demographic-based groups, and attempt to eliminate the current perspective that AAPs are unjust for ingroup members. For example, Veilleux and Tougas (1989) found that AAPs that are framed as being beneficial to all, rather than stressing preferential treatment, are perceived more positively.

Limitations of the Current Study.

There are a number of contributions in terms of practical applications and theory development that stem from the present study. However, the results from this study should be interpreted in light of several weaknesses that exist.

One shortcoming of the present study involves the sample of schools studied and the nature of the respondents from each. One of the major contributions of the present study is that it focused on out-group members in naturally occurring settings -- college campuses across the country. However, the institutions in the sample were not randomly selected, and in many cases the samples within each college or university were not necessarily representative of the population of students within. As the data used to test the proposed framework was collected in conjunction with a larger study, I had limited control over the nature of the sample. As the principal study was aimed at validating

selection tests for the College Board with the specific goal of capturing as many minority students as possible, two of the schools sampled were HBCs. I conducted initial analyses to determine whether the construct of race-based self-perceptions of preferential selection were equivalent for these two schools as compared to schools where being a minority student was not a requisite for admission. I concluded, based on the mean level of self-perceptions of preferential selection as well as the pattern of correlations with similar variables, that this measure did not capture the same construct for the HBCs. These two schools were dropped from all further analyses, decreasing the power to find significant effects.

As mentioned above, many of the samples within each school were not randomly selected as we relied on the staff from each school to select individuals to participate. As such, some of the institutions utilized special groups including first generation college students and/or students identified as being at-risk for dropping out before degree completion. However, it is not believed that the severity of this concern invalidates the findings for this study. One purpose was simply to identify whether Blacks and Hispanic students held the belief that they were selected into their school for reasons other than merit alone. This study found a high degree of variability in responses to this scale and the scores within the sample were normally distributed, increasing the likelihood that they represent the population of minority college and university students.

A second concern related to the degree to which the present sample is representative is highlighted by the low response rate of individuals who responded to this wave of data collection. Only 16% of the original Black and Hispanic students in our study responded to this wave of data collection. Additionally, analyses comparing these

two groups indicated differences in responders versus non-responders. The individuals who did not participate in data collection used for these analyses had significantly lower high school grade point averages (HSGPA). However, it would be expected that students more qualified for college (i.e., those with higher HSGPA) would be *less* likely to have the perception that they were preferentially selected for college. While the correlation between HSGPA and preferential selection beliefs was close to zero for the sample used, more variability in HSGPA (as a function of a high response rate), may have resulted in a significant relationship between qualifications and perceptions of preferential selection. It is plausible that students with lower HSGPA would have been even more likely to believe that their race contributed to their acceptance into school. Therefore, it is plausible that the results from this study, while perhaps not representative, are an under-estimate of the average level of self-perceptions of preferential selection in Black and Hispanic students.

Another possible shortcoming of this study is the framing of the attitudes towards AAPs measure. I chose the Kravitz and Platonia (1993) scale as it is, to my knowledge, the only measure related to support of AAPs that has been validated. To protect the integrity of the scale, I made the decision not to alter the wording of the original items. As such, most of the items reflect AAPs in the workplace rather than a university setting. For example, one item stated, "Employees should be actively involved in attempts to improve the affirmative action conditions at their place of employment." While the measure may capture attitudes towards AAPs in organizations, it likely does not provide an accurate indication of the support that college students hold towards AAPs used for academic admissions. Selection decisions for college and the workplace are based on

different criteria. It would have been useful for the current study to use both an academic- and organizational-framed AAP measure to understand if the differences in selection criteria affect the attitudes towards AAPs. Further, as this measure was included in the model as a proxy for discerning how an individual's world view ideology relates to outcomes of perceptions of preferential selection, a better appreciation for the contrast between attitudes towards AAPs in the workplace versus attitudes in academia may have been gained by including a scale that measured the broader construct such as BJW or PWE. Future research should focus on trying to parse out the relationship between attitudes towards AAPs in different contexts and the extent to which the construct of attitudes towards AAPs is analogous to other operationalizations of world view ideology.

A final limitation that should be noted is that all of the results for this study were based on self-report measures. A number of concerns can stem from this type of data collection. First, the casual nature of the relationships found can likely not be determined. Not only do concerns of response bias exist as a function of the data collection, but all of the data analyzed here were collected during the second year of school, which lends credence to the conclusion that factors *after* the students began school led to self-perceptions of preferential selection. For example, students have the opportunity to compare themselves with others at their school and already have knowledge about how well they are performing. However, the possibility that perceptions of why they were selected into school being only representative of post-hire factors are likely negated due to the fact that college admissions procedures are widely

publicized. Students, regardless of how far along they are in college, likely still have very concrete conceptions about factors that relate to selection decisions.

In addition to the problematic nature of making causal statements about factors which lead to self-perceptions of preferential selection, it may be difficult to determine whether self-perceptions of preferential *cause* the outcomes of interest, or whether the causal paths should be reversed. In light of the parallel results between self-perceptions of preferential selection and outcomes in this study and studies where selection decisions were manipulated (e.g., Heilman & Alcott, 2001) it is reasonable to conclude that self-perceptions of preferential selection *do* lead to the outcomes of interest. Furthermore, the mere fact that the findings for this study support related lab-based theory suggests that the increase of external validity derived from the design of this study, should be viewed as a significant contribution, despite possible shortcomings related to the internal validity.

Finally, the single-source nature of the data analyzed in this study makes it open to the possibility of common method bias. Potsakoff, MacKenzie, Potsakoff, and Lee (2003) provide a review of a number of potential shortcomings of survey research. While the extent to which these issues could affect the results for the present study can not be determined, provided is a useful set of boundary-conditions to be used when interpreting findings. First, of particular concern in this study is the fact that responses to both the predictor and criterion measures were collected in the same survey instrument. However, given that the main purpose of the study was to test the generalization of the proposed framework to an academic setting, the results, albeit potentially biased, provided evidence for the theory being tested. Finally, I did assess the extent to which individual reports of GPA, one of the major outcomes of this study, correlated with more objective

records of GPA obtained through the registrars' office at the participating schools. The correlation were close to one (r =.88, p<.01), suggesting that the data for this study, while self-report, were likely free of inflation by the respondents.

Concluding remarks.

The present study opened with a quote by Crosby et al., (2003) highlighting the need to support AAPs through the development of strategies that allow all individuals, regardless of group status, to excel in the academic domain. As such, this study attempted to further our understanding of self-perceptions of preferential selection. In so doing this, the ultimate goal was to offer strategies that might give all groups an equal opportunity to succeed. By determining potential reasons why out-group members may attribute selection to AAPs and unraveling the process by which such perceptions lead to academically-relevant outcomes, this study has been able to make a step, albeit small in scope, towards increasing the "awareness of how-- at the level of groups-- merit and diversity are inextricably linked" (Crosby et al., 2003; pp. 109).

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TABLES.

Table 1.

Demographic Statistics of Respondents to Three Previous Data Collection Efforts

	Time 1 *N*	%	Time 2 *N*	%	Time 3 *N*	%
Ethnic Status						
Hispanic	161	5.8	67	5.5	51	4.9
Asian	210	7.6	139	11.3	115	11.0
African American	683	25.0	134	10.9	99	9.5
Caucasian	1530	55.3	787	64.2	682	65.5
Other	183	6.6	98	8.0	94	9.0
Gender						
Male	991	35.9	410	34.0	347	34.1
Female	1771	64.1	795	66.0	670	65.9

Table 2.

Ethnic and Gender Composition Statistics for each Academic Institution at Time 1 Data Collection.

School	*N*	*% Caucasian*	*% Black*	*% Hispanic*	*% Asian*	*% Other*	*% Female*
School A	229	1	90	1	1	7	80
School B	223	34	11	30	12	13	68
School C	170	47	39	5	2	7	75
School D	546	71	16	4	4	5	59
School E	304	81	3	3	8	5	56
School F	254	~	95	~	~	5	100
School G	355	91	2	1	2	4	79
School H	168	16	10	17	42	15	61
School I	297	71	7	6	14	2	18
School J	237	84	2	3	~	11	14

Table 3.
Information on Recruiting Techniques Used by Each Institution

	School A	School B	School C	School D	School D (special program)
Description of Recruiting Techniques	(no information obtained from this school)	Through the Summer Bridge Program, University 100 course, and by posting flyers in resident halls.	E-mail sent to all students attending orientation.	Students attending orientation were sent a flyer.	E-mail sent to all freshman CAP students.
Number of students who received a recruiting message	–	500	700	–	519
Special populations that were recruited	–	Guardian Scholars all participated (orphans and emancipated youths).	Minority groups received recruiting messages first.	no	Only CAP students
What date(s) was the session(s) held	–	7/25/04, 6 dates in September. 2004	2 on 6/24/04, 8/15/04	–	9/14/04, 9/15/04, 9/16/04,
Type of room the session was held in.	–	residence hall and classrooms	large classroom	large lecture hall	classrooms
For each session, how many proctors attended?	–	1-2	2 and a police officer	7	2

Table 3 (cont.).

	School E	School F	School G	School H	School I	School J
Description of Recruiting Techniques	An e-mail was sent.	(No information available)	All 1st year students were mailed a letter from the admissions office.	(No information available)	1000 randomly selected freshmen received a letter of invitation in the mail.	All incoming first year cadets were administered the survey as part of their first week orientation.
Number of students who received a recruiting message	5800	(No information available)	All 1st year students	(No information available)	1000	all cadets who participated in first year orientation
Special populations that were recruited	No	(No information available)	no	(No information available)	no	only the military branch
What date(s) was the session(s) held	2 on 10/5/04	(No information available)	9/14/2004	(No information available)	9/12/04, 9/14/04	8/15/2004
Type of room the session was held in	large lecture hall	(No information available)	large lecture hall	(No information available)	auditorium, ballroom	auditorium
The number of proctors in attendance at each session	5	(No information available)	4	(No information available)	4-6	6

Table 4.

Descriptive statistics and intercorrelations for all variables

Only the two HBCs[a] included.

Variables	Mean	SD	N	alpha	1	2	3	4	5	6	7
1. Sex[a]	1.93	.26	29	~							
2. SAT/ACT test score	.15	.84	20	~	.30						
3.High School GPA	3.31	.50	21	~	.32	.56**					
4. Self Perceptions of PS	2.64	.88	29	.89	-.01	-.22	-.20				
5. Core Self-Evaluations	3.47	.69	29	.86	.14	-.11	.31	.35			
6. Sensitivity towards Stereotypes	2.71	.61	29	.95	-.16	-.32	-.24	-.15	-.28		
7. Fairness of the App. Process.	3.62	.44	29	.73	.12	-.29	-.32	.02	.04	.13	
8. Current GPA[†]	2.70	.66	28	~	-.33	-.63**	-.66**	-.01	.06	.45*	.26
9. Academic Satisfaction	4.06	.57	29	.84	.32	.15	.27	-.09	.08	-.24	.31
10. Institutional Commitment	3.71	.49	29	.82	.33	.09	.10	-.22	-.40*	.06	-.18
11. Life Satisfaction	3.41	.87	29	.86	.19	.00	.01	.06	.43*	-.07	.43*
12. Attitudes towards AAPs	3.61	.61	29	.86	.28	.43	.30	-.14	.0	-.33	-.21
13. Academic Self-Efficacy	4.28	.57	29	.78	-.11	.00	.21	.23	.73**	-.24	.17
14. Domain Identification	4.54	.47	28	.85	.12	-.12	-.14	.03	.16	-.18	.17
15. Ind. Climate Perceptions	3.95	.49	29		.14	-.02	-.13	.26	-.27	-.15	-.14

Note: *p < .05 (one-tailed). **p < .01 (one-tailed). HBC[a] = School A and School F. Sex[a]: 1 = Male, 2 = Female. *N* = 29.

(cont.)

Table 4. (cont.)

Variables	8	9	10	11	12	13	14
1. Sex							
2. SAT/ACT test score							
3.High School GPA							
4. Self Perceptions of PS							
5. Core Self-Evaluations							
6. Sensitivity towards Stereotypes							
7. Fairness of the App. Process.							
8. Current GPA[†]							
9. Academic Satisfaction	-.27						
10. Institutional Commitment	-.32	.25					
11. Life Satisfaction	-.06	.10	-.15				
12. Attitudes towards AAPs	-.60**	.37*	.21	.01			
13. Academic Self-Efficacy	.14	.16	-.32	.32	-.06		
14. Domain Identification	.08	.41*	.06	.08	.34	.17	
15. Ind. Perceptions of Climate	-.15	.07	.38*	-.20	.08	-.39*	.01

Table 5.

Descriptive statistics and intercorrelations for all variables
Two HBCa schools not included.

Variables	SD	N	alpha	1	2	3	4	5	6	7	
1. Sex[b]	1.72	.45	108	~							
2. SAT/ACT test score	.43	.85	100	~	-.27**						
3.High School GPA	3.49	.40	98	~	-.18	.58**					
4. Self Perceptions of PS	3.16	.87	108	.89	-.02	-.01	.02				
5. Core Self-Evaluations	3.38	.54	108	.83	.04	-.18	-.15	-.25**			
6. Sensitivity towards Stereotypes	2.43	.80	105	.96	.12	-.28**	-.15	.07	-.10		
7. Fairness of the App. Process.	3.43	.49	108	.71	.06	-.01	-.04	-.17*	.17*	.02	
8. Current GPA	2.81	.67	100	~	.07	.20**	.14	-.40**	.15*	-.04	-.02
9. Academic Satisfaction	4.03	.59	107	.86	-.05	.14	.07	-.14*	.32**	-.24**	.23*
10. Institutional Commitment	3.49	.54	108	.81	-.07	.03	.08	-.01	.10	-.15*	.31**
11. Life Satisfaction	3.48	.84	108	.86	.02	.02	.07	-.08	.47**	-.12	.25**
12. Attitudes towards AAPs	3.72	.71	106	.85	.21	.04	.11	.12	-.06	.28**	.04
13. Academic Self-Efficacy	3.95	.66	108	.79	.07	-.24**	-.06	-.34**	.73**	.01	.17*
14. Domain Identification	4.31	.66	107	.85	.07	.00	.10	-.05	.22*	-.07	.22*
15. Ind. Climate Perceptions	3.63	.63	105		-.05	-.04	-.20*	.25	.25*	-.34**	.25**

Note: *p < .05 (one-tailed). **p < .01 (one-tailed). HBC[a] = School A and School F. Sex[b]: 1 = Male, 2 = Female. *N* = 108.

(cont.)

Table 5. (cont)

Variables	8	9	10	11	12	13	14
1. Sex							
2. SAT/ACT test score							
3.High School GPA							
4. Self Perceptions of PS							
5. Core Self-Evaluations							
6. Sensitivity towards Stereotypes							
7. Fairness of the App. Process.							
8. Current GPA[†]							
9. Academic Satisfaction	.20*						
10. Institutional Commitment	.03	.56*v					
11. Life Satisfaction	.06	.43**	.30**				
12. Attitudes towards AAPs	.08	-.02	.07	.01			
13. Academic Self-Efficacy	.21*	.27	.13	.42**	.09		
14. Domain Identification	.17*	.48	.46*	.29*	.15	.32**	
15. Ind. Climate Perceptions	.13	.40**	.29**	.17*	-.11	.10	.20*

Table 6.
*Diversity Values for each Institution**

	School A	School B	School C	School D	School E	School F	School G	School H	School I	School J
% of Hispanics/Blacks	96%	27%	10%	12%	12%	100 %	4%	12%	12%	6%

*Note: These values were obtained from the College Board website (2005).

Table 7.
Climate for Diversity Scale information by School

School	*N*	*Mean*	*SD*	*rwg(j)*	*alpha*
School A	40	3.66	.79	.99	.90
School B	182	3.74	.76	.99	.90
School C	110	3.62	.85	.99	.92
School D	14	3.87	.85	.96	.92
School E	17	3.85	1.00	.92	.92
School F	126	3.70	.73	.99	.91
School G	54	3.83	.83	.99	.94
School H	160	4.06	.76	.99	.90
School I	127	3.90	.78	.99	.89
School J	29	3.48	1.03	.98	.94

Table 8.
Descriptive Statistics for Self-Perceptions of Preferential Selection by School

School	*N*	*Min*	*Max.*	*Mean*	*SD*	*Skew*	*Kurtosis*
School A	11	2.50	3.60	3.05	.30	.33	1.13
School B	22	1.00	4.00	2.79	.88	-.98	.43
School C	28	2.17	5.00	3.69	.77	-.16	-.58
School D	13	1.33	4.17	2.76	.67	-.02	1.70
School E	16	1.00	4.00	2.55	1.03	-.05	-1.54
School F	5	2.00	4.67	3.33	1.03	.09	-.66
School G	18	1.00	4.17	2.81	.86	-.69	.31
School H	11	2.00	5.00	3.16	.86	.85	.65
School I	9	1.00	4.33	3.07	1.13	-.70	-.37
School J	3	3.00	3.67	3.39	.35	NA	NA

Table 9.

Summary of All Hypothesis Tests.

H #	*Actual Hypothesis*	*Test used*	*Results*	*Supported?*
H1	CSE will relate to self-perceptions of preferential selection such that minority students (Blacks and Hispanics) high in CSE will be less likely to perceive that they have been preferentially selected than minority students who are lower in CSE.	correlation regression	r = -.25** B = -.37*	yes
H2	Sensitivity to stereotypes will relate to self-perceptions of preferential selection such that minority students (Blacks and Hispanics) high in sensitivity to stereotypes will be more likely to perceive that they have been preferentially selected than minority students who are lower in sensitivity to stereotypes.	correlation	r = .07	no
H3	Perceptions of the fairness of the selection process will relate to self-perceptions of preferential selection such that minority students (Blacks and Hispanics) who report fair procedures used during the selection process for the institution that they attend will be less likely to perceive they have been preferentially selected than out-group members who perceive less fair selection procedures.	correlation, regression	r = -.17* B = -.23	partially (sig. correlation only)
H4	Institutional diversity (i.e., the percentage of Black and Hispanic students at a given institution) will relate to perceptions of preferential selection such that minorities (Black and Hispanics) from colleges or universities with more institutional diversity will be less likely to perceive they have been preferentially selected than minorities from colleges and universities with less institutional diversity.	HLM	$\gamma_{diversity}$ = -.80	no
H5	Climate for diversity is an institutional level variable (i.e., an aggregate of perceptions of climate across all students at a given school) that will relate to perceptions of preferential selection such that minorities (Blacks and Hispanics students) from colleges or universities with more positive climates	HLM	$\gamma_{climate}$ = -.94	no
H6(a)-H6(f)	Interaction of school and CSE, Sensitivity towards Stereotypes, and Fairness	HLM	NA	~

Table 9 (cont).

H #	*Actual Hypothesis*	*Test used*	*Results*	*Supported?*
H7(a)	Attitudes towards AAPs will moderate the relationship between self-perceptions of preferential selection and performance such that more an individual supports AAPs, the more self-perceptions of preferential selection will be negatively related to performance.	hierarchical regression	$\Delta R^2 = .04$*	yes
H7(b)	Attitudes towards AAPs will moderate the relationship between self-perceptions of preferential selection and affective reactions to school such that more an individual supports AAPs, the more self-perceptions of preferential selection will be positively related to institutional satisfaction and commitment.	hierarchical regression	*Sat.:* $\Delta R^2 = .01$ *Com:* $\Delta R^2 = .03$	no
H7(c)	Attitudes towards AAPs will moderate the relationship between self-perceptions of preferential selection and life satisfaction such that the more an individual supports AAPs, the more self-perceptions of preferential will be positively related to life satisfaction.	hierarchical regression	$\Delta R^2 = .00$	no
H8(a)	Academic self-efficacy will moderate the relationship between self-perceptions of preferential selection and performance such that only individuals low in self-efficacy will demonstrate a negative relationship between self-perceptions of preferential selection and performance.	hierarchical regression	$\Delta R^2 = .01$	no
H8(b)	Academic self-efficacy will moderate the relationship between self-perceptions of preferential selection and performance such that only individuals low in self-efficacy will demonstrate a negative relationship between self-perceptions of preferential selection and institutional satisfaction and commitment.	hierarchical regression	*Sat.:* $\Delta R^2 = .03$* *Com:* $\Delta R^2 = .01$	*Sat.*: yes *Com:* no
H8(c)	Academic self-efficacy will moderate the relationship between self-perceptions of preferential selection and life satisfaction such that the higher an individual is in academic self-efficacy, the more self-perceptions of preferential selection will be positively related to life satisfaction.	hierarchical regression	$\Delta R^2 = .08$**	yes
H9(a)	Domain identification will moderate the relationship between self-perceptions of preferential selection and performance such that the more an individual is identified with the academic domain, the more self-perceptions of preferential selection will be negatively related to performance.	hierarchical regression	$\Delta R^2 = .00$	no
H9(b)	Domain identification will moderate the relationship between self-perceptions of preferential selection and life satisfaction such that the less an individual is identified with the academic domain, the less self-perceptions of preferential selection will be negatively related to life satisfaction.	hierarchical regression	$\Delta R^2 = .00$	no

Table 10.

Fairness of the Selection Process, and CSE Predicting Self-Perceptions of Preferential Selection.

Variable	*b*	*SE*	*β*
Core Self-Evaluations	-.35*	.16	-.21
Fairness of Selection Process	-.20	.18	-.11
R^2		.06*	

Note: n = 105. *p < .05.

Table 11.

HLM analyses for Self Perceptions of Preferential Selection as the Level-1 Outcome

	Fixed			*Random*		*Res. Log Likelihood*[a]	*p*
parameters estimated	*Est. (SE)*	*t-value (DF)*	*p*	*Est. (SE)*	*p*		
Model 1 unconditional						269.41	.11
γ_{00}	3.14 (.13)	3.53 (7)	.00				
σ^2				.67 (.09)	.00		
σ^2_{school}				.08 (.06)	.20		
Model 2 conditional level-2 predictor: diversity						265.8	.12
γ_{00}	3.24 (.32)	10.06 (7)	.00				
$\gamma_{diversity}$	-.80 (2.31)	.345 (6)	.74				
σ^2				.67 (.09)	.00		
σ^2_{school}				.09 (.07)	.21		
Model 3 conditional level-2 predictor: climate						265.9	.06
γ_{00}	6.55 (1.75)	3.75 (7)	.00				
$\gamma_{climate}$	-.94 (0.48)	-1.95 (6)	.08				
σ^2				.67 (.09)	.00		
σ^2_{school}				.04 (.05)	.39		

Note: Res. Log Likelihood[a] between Model 1 and Model 2 and Model 1 and Model 3 were tested for significance using a χ^2 difference test based on the change in DF between the models. Neither Model 2 nor Model 3 fit the data better than Model 1.

Table 12.

Perceptions of Preferential Selection and Attitudes towards AAPs predicting Academic Outcomes

Variable	GPA			Satisfaction			Commitment			Life Satisfaction		
	b	*SE b*	*β*	*b*	*SE b*	*β*	*b*	*SE B*	*β*	*b*	*SE b*	*β*
Step 1												
PS	-.31**	.07	.42	-.10	.07	-.14	-.17	.06	-.03	-.08	.10	-.09
AAP	.13	.09	.13	-.01	.08	-.10	.05	.08	.07	.03	.12	.02
R^2		.18**			.02			.00			.01	
Step 2												
PS	.34	.30	.46	.13	.30	.19	.44	.27	.72	.05	.42	.05
AAP	.71**	.27	.77	.20	.28	.23	.47	.25	.62	.14	.49	.12
PS x AAP	-.18*	.08	-1.17	-.06	.08	-.43	-.13	.07	-.10	-.04	.11	-.18
R^2		.21**			.03			.04			.01	
ΔR^2		.04*			.01			.03			.00	

Note: n = 105. *p < .05. **p < .01.

Table 13.

Perceptions of Preferential Selection and Academic Self-efficacy predicting Academic Outcomes

	GPA			Satisfaction			Commitment			Life Satisfaction		
Variable	*b*	*SE b*	*β*	*b*	*SE b*	*β*	*b*	*SE b*	*β*	*b*	*SE b*	*β*
Step 1												
PS	-.28**	.07	.37	-.03	.07	-.05	.02	.06	.04	.07	.09	.08
ASE	.10	.10	.10	.23*	.09	.23	.11	.08	.14	.57**	.12	.45
R^2		.17**			.08*			.02			.18**	
Step 2												
PS	.14	.44	.19	-.80*	.39	-1.18	-.46	.37	-.75	-1.63**	.51	-1.68
ASE	.42	.34	.41	-.37	.31	-.41	-.26	.29	-.33	-.75	.40	-.59
PS x ASE	-.10	.11	.56	.19*	.10	1.11	.12	.09	.78	.42**	.12	1.73
R^2		.18**			.11**			.03			.26**	
ΔR^2		.01			.03*			.01			.08**	

Note: n = 105. *p < .05. **p < .01.

Table 14.

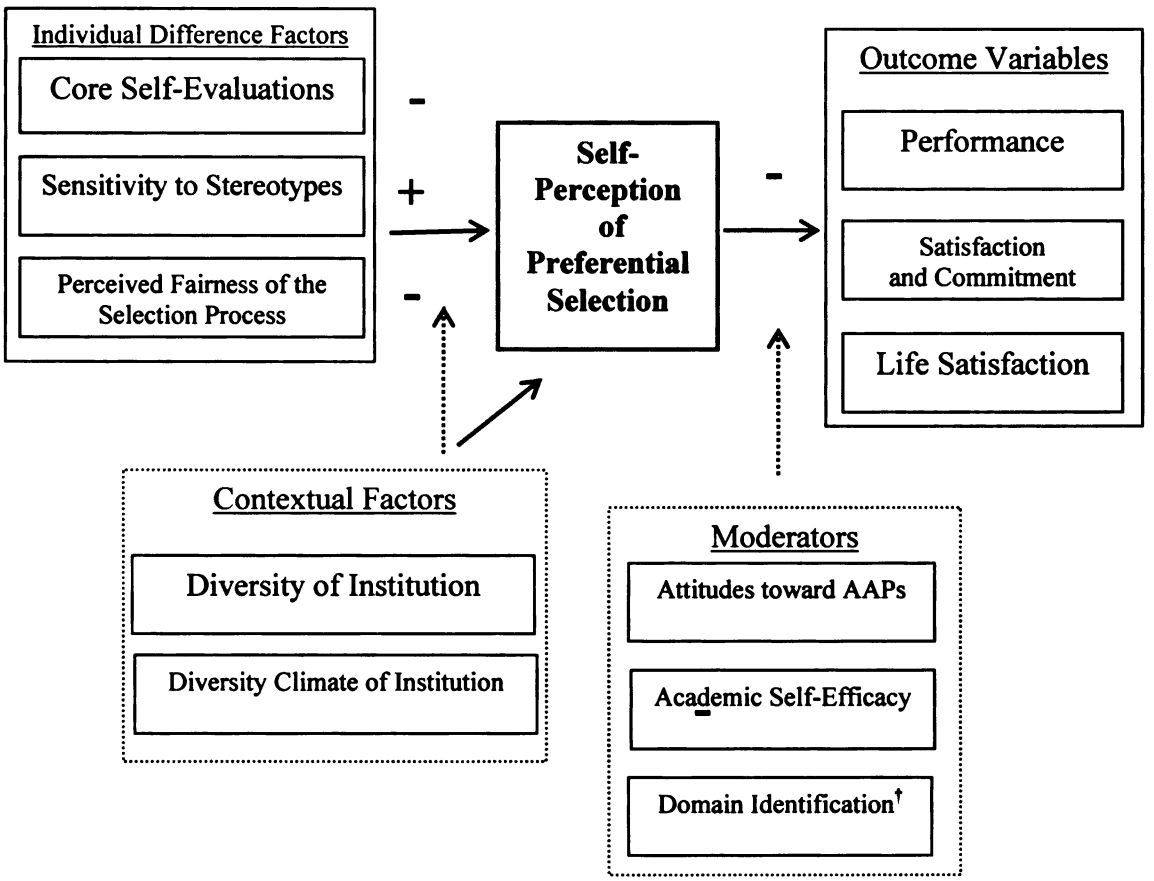
Perceptions of Preferential Selection and Domain Identification predicting Academic Outcomes

	GPA			Life Satisfaction		
Variable	*b*	*SE b*	*β*	*b*	*SE b*	*β*
Step 1						
PS	-.30**	.07	-.39	-.06	.09	-.06
Domain Id.	.14	.10	.14	.37**	.12	.29
R^2		.18**			.09**	
Step 2						
PS	-.15	.54	-.19	-.16	.71	-.17
Domain Id.	.26	.42	.25	.29	.55	.29
PS x Domain Id.	-.03	.12	-.22	.02	.16	.02
R^2		.18**			.09*	
ΔR^2		.00			.00	

Note: n = 105. *p < .05. **p < .01.

Figures

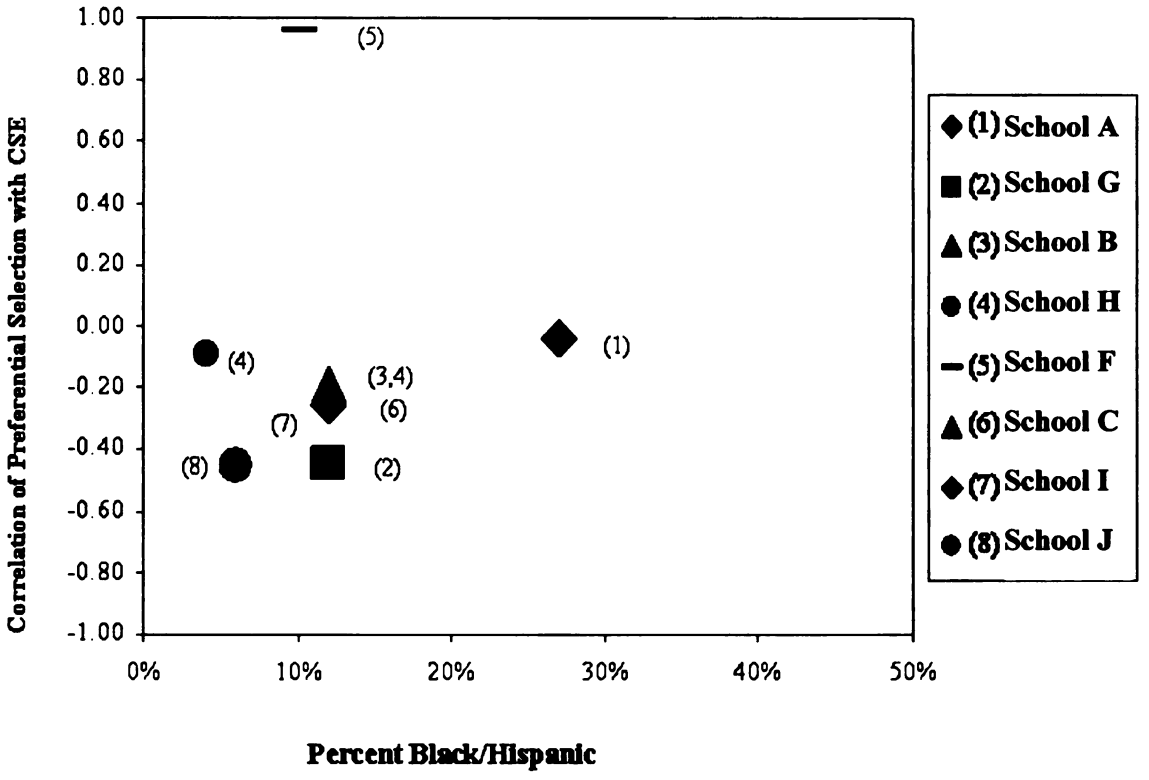
Figure 1.
The Proposed Model.



Note: Domain Identification was only offered as a moderator of the outcomes of performance and life satisfaction.

Figure 2.

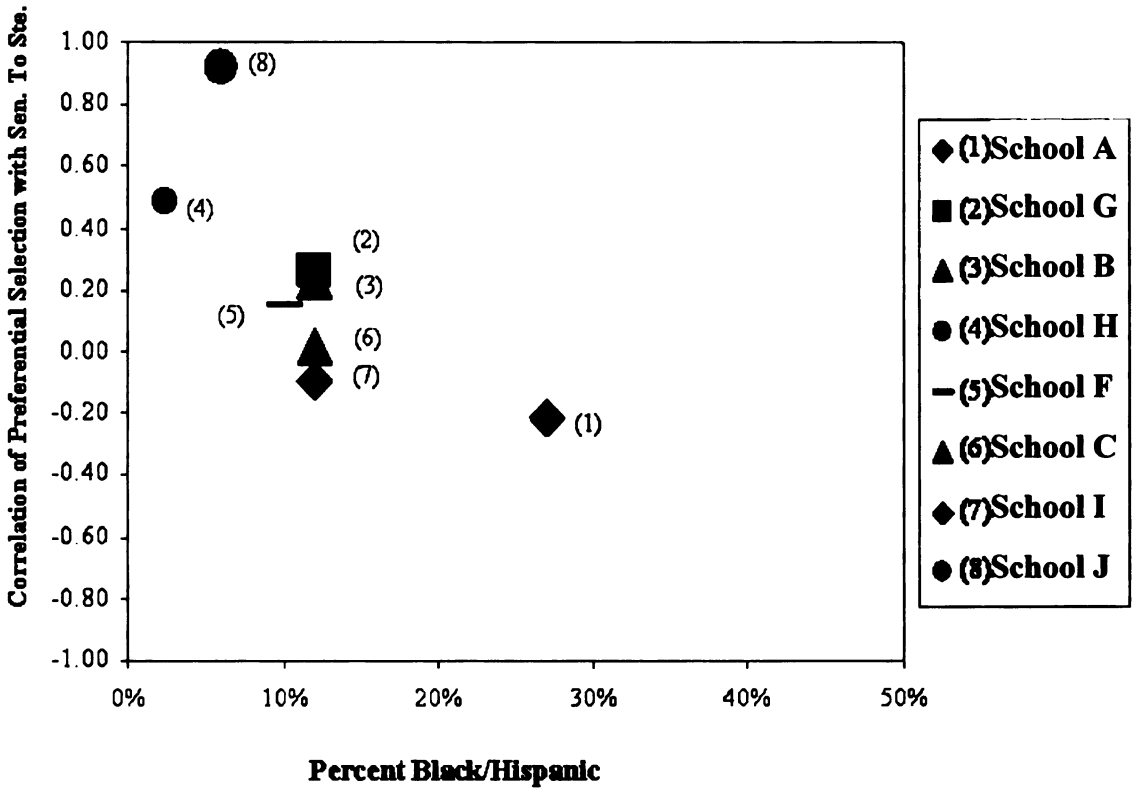
Plot of the interaction between School-level diversity and the Correlation of PS with CSE.



Note. Correlations presented on the y-axis were measured at the individual-level and the diversity score on the x-axis is a school-level variable.

Figure 3.

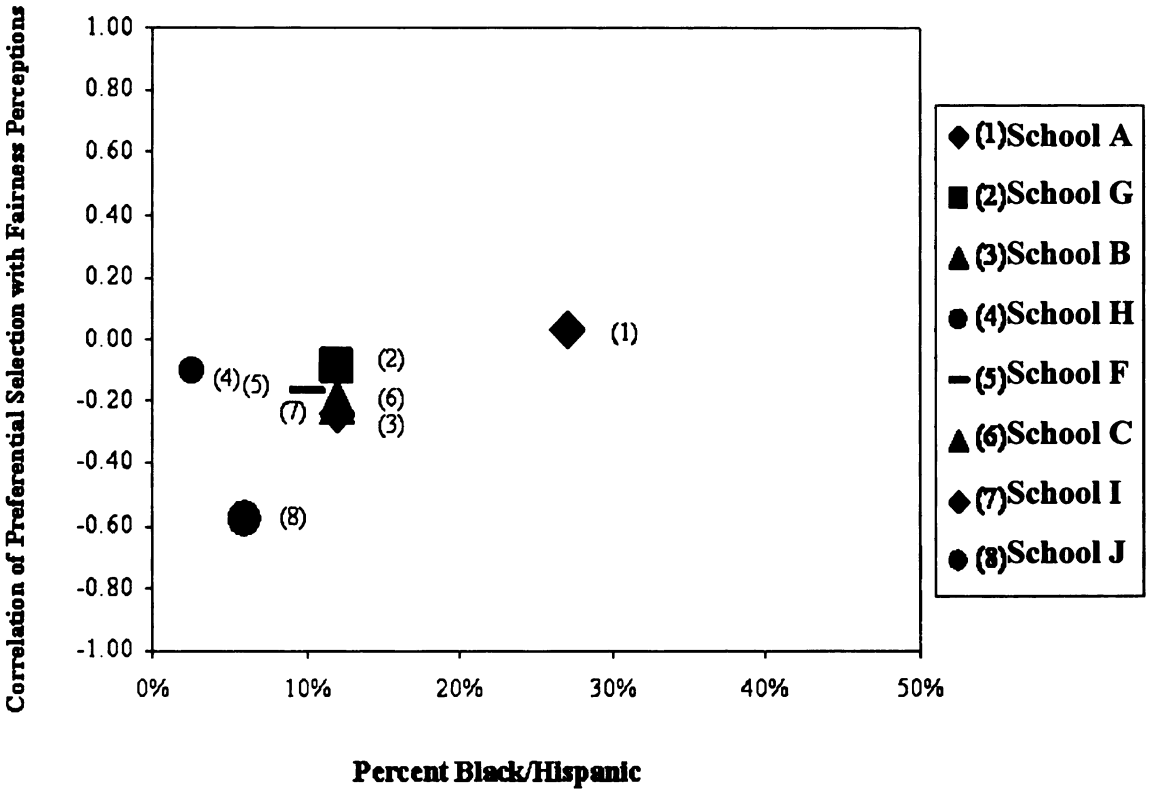
Plot of the interaction between School-level diversity and the Correlation of PS with Sensitivity towards Stereotypes



Note. Correlations presented on the y-axis were measured at the individual-level and the diversity score on the x-axis is a school-level variable.

Figure 4.

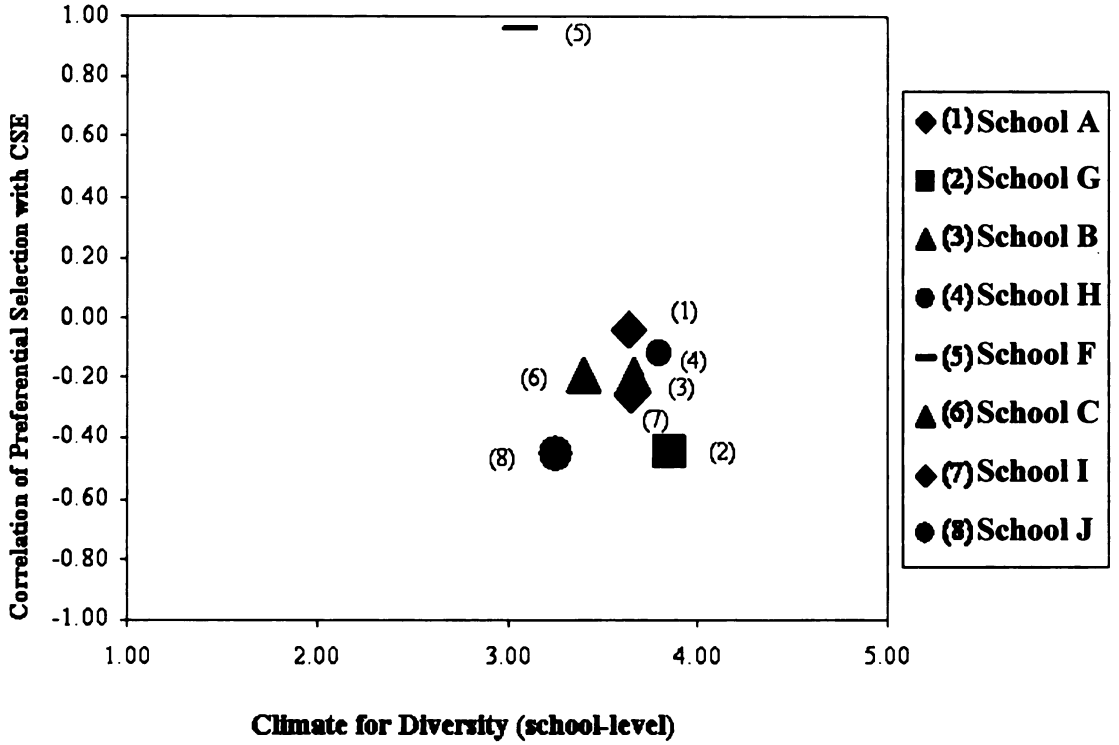
Plot of the interaction between School-level diversity and the Correlation of PS with Fairness Perceptions.



Note. Correlations presented on the y-axis were measured at the individual-level and the diversity score on the x-axis is a school-level variable.

Figure 5.

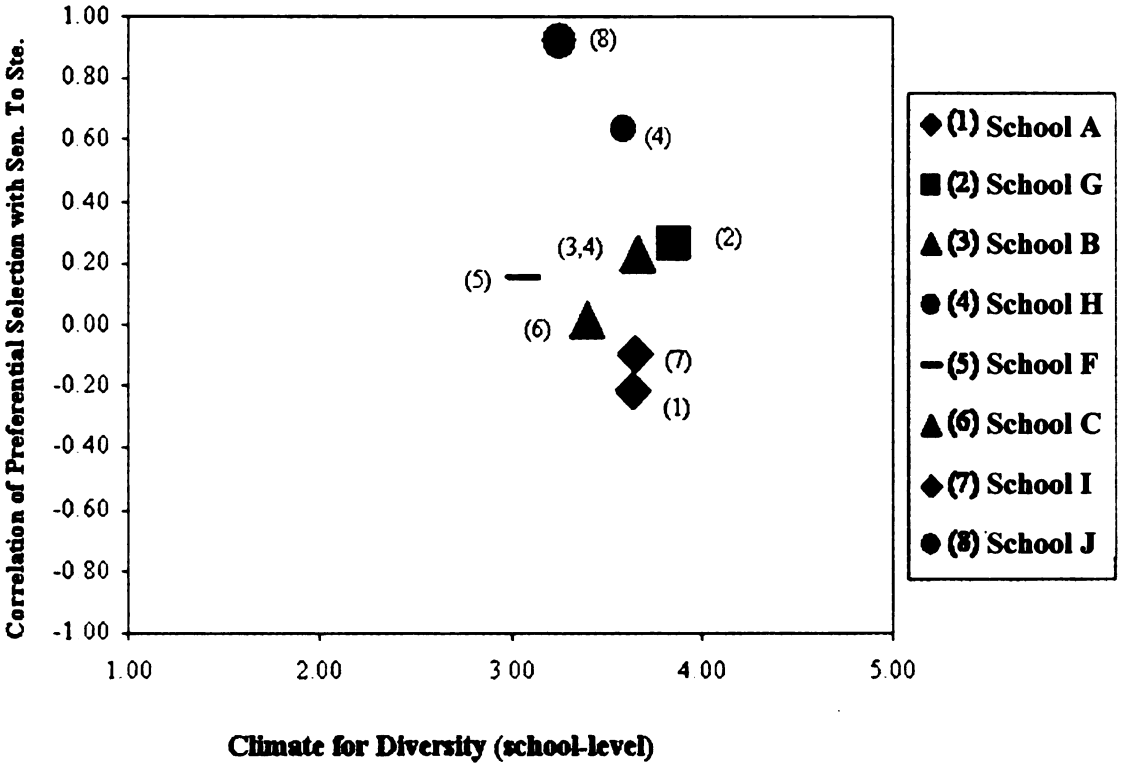
Plot of the interaction between School-level Climate for Diversity and the Correlation of PS with CSE.



Note. Correlations presented on the y-axis were measured at the individual-level and the diversity score on the x-axis is a school-level variable.

Figure 6.

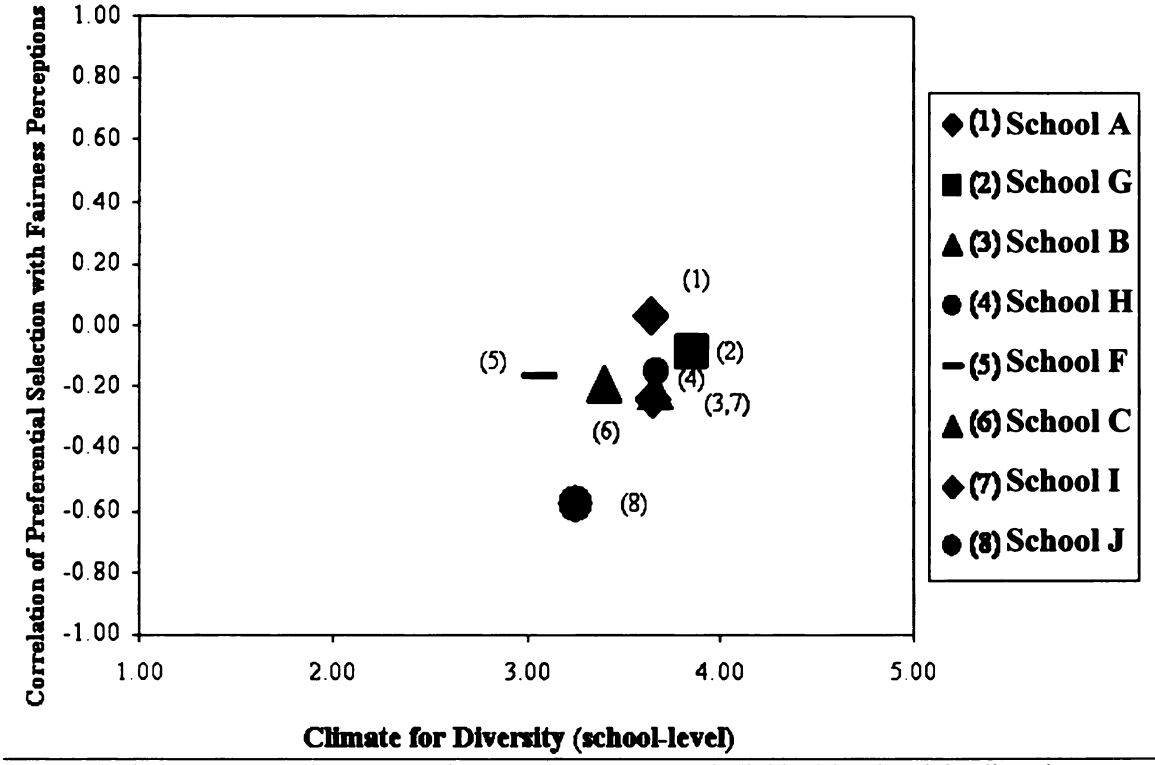
Plot of the interaction between School-level Climate for Diversity and the Correlation of PS with Sensitivity towards Stereotypes.



Note. Correlations presented on the y-axis were measured at the individual-level and the diversity score on the x-axis is a school-level variable.

Figure 7.

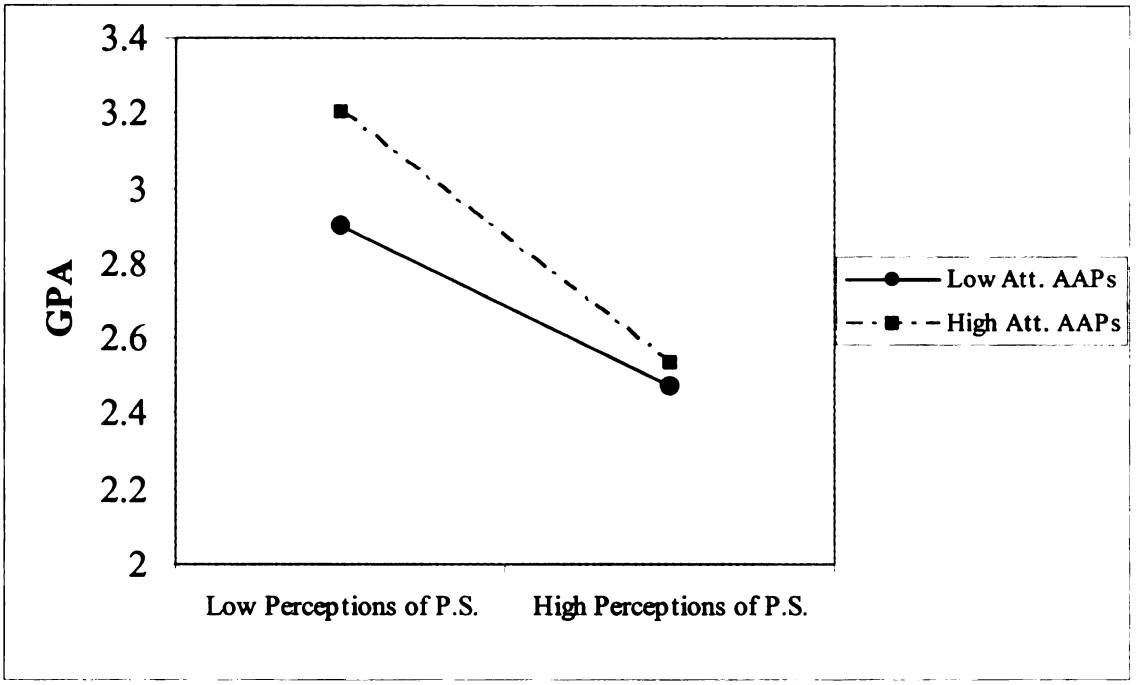
Plot of the interaction between School-level Climate for Diversity and the Correlation of PS with Fairness Perceptions.



Note. Correlations presented on the y-axis were measured at the individual-level and the diversity score on the x-axis is a school-level variable.

Figure 8.

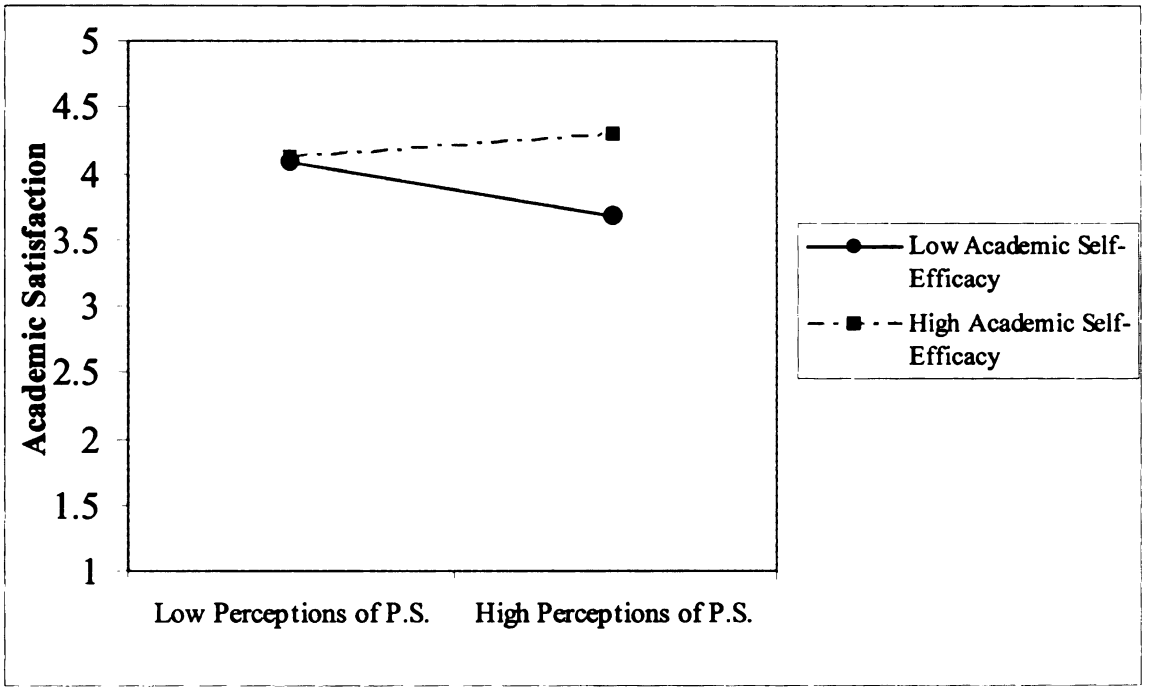
The Interaction of Self-Perceptions of Preferential Selection and Attitudes towards AAPs on Current GPA



Note: Regression lines were drawn based on +/- 1 SD of the mean on both IVs.

Figure 9.

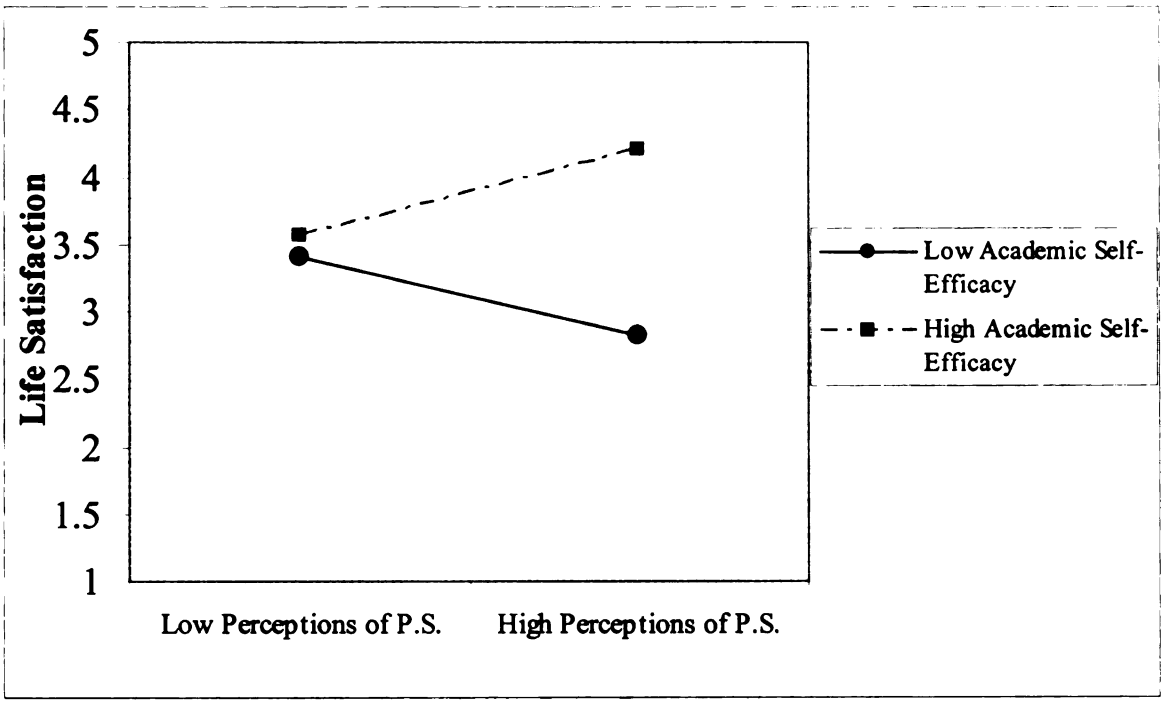
The Interaction of Self-Perceptions of Preferential Selection and Academic Self-efficacy on Academic Satisfaction



Note: Regression lines were drawn based on +/- 1 SD of the mean on bothIVs.

Figure 10.

The Interaction of Self-Perceptions of Preferential Selection and Academic Self-efficacy on Life Satisfaction



Note: Regression lines were drawn based on +/- 1 SD of the mean on both IVs

Appendices

Appendix A.

Pre-notice Recruiting E-mail.

Subject: Follow-up Study: College Student Potential – Earn $20

Hello,

At the beginning of this school year, you participated in a paid research survey on college student experiences. We would like to thank you again for your participation and let you know about an opportunity to earn another $20 by participating in a follow-up survey we are conducting. This follow-up survey is very important to our research, and we hope that you will be able to participate.

The survey will be conducted through our website and will take about 30-45 minutes to complete. In return for participating, you will receive a gift certificate for $20 redeemable at Amazon.com®. You will also get a free entry into a drawing for an additional $100 prize.

Within the next few days, you'll receive an invitation to complete our follow-up survey. We hope that you will continue to participate in our research. Thanks for your help!

Sincerely,
Group for Research and Assessment of Student Potential
Michigan State University
E-mail: cbstudy@msu.edu
Web Site: www.io.psy.msu.edu/cbstudy

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Appendix B.
Recruiting Research Invitation.

Subject: Follow-up Study: College Student Potential - Now $20

Hello from the Group for Research and Assessment of Student Potential (GRASP). At the beginning of the current school year, you participated in our paid research study on college student experiences. We'd like to thank you again for your time and invite you to participate in a follow-up survey. The information you provided earlier will be much more beneficial if you are able to complete this follow-up survey, so we hope you will be able to participate.

QUICK DETAILS:

- Format: Internet-based
- Length: About 30-45 minutes to take
- Eligibility: You must have participated in our earlier data collection
- Compensation: $20 gift certificate* redeemable at Amazon.com® plus an entry into a drawing for an additional $100 prize
- Deadline: 12:00 am on <TO BE DECIDED>

TO PARTICIPATE:

- Go to our survey web address: https://psychology.msu.edu/success
- Sign in using this Access ID: GRASP
- If you have any problems or questions regarding this web survey, visit our survey help website: http://www.io.psy.msu.edu/cbstudy/help

* The electronic $20 gift certificate will be delivered to your e-mail address within 1 week of the survey deadline. The certificate is subject to Amazon.com's rules and regulations. Visit **http://tinyurl.com/4osux** (links to Amazon.com) to view the fine print.

Sincerely,
Group for Research and Assessment of Student Potential
Michigan State University
E-mail: cbstudy@msu.edu
Web Site: www.io.psy.msu.edu/cbstudy

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Appendix C.
Recruiting Research Reminder.

Subject: Reminder: Paid Research Opportunity - $20

Hello. On <TO BE DECIDED>, we sent you an e-mail inviting you to participate in our follow-up Internet survey on college student experiences. **We'd just like to remind you that the opportunity to participate is still available.** We are sending this reminder e-mail because your responses are very important to this research, which helps understand college student life, so we hope that you will be able to participate in our survey.

QUICK DETAILS:

- Format: Internet-based
- Length: About 30-45 minutes
- Eligibility: You must have participated in our summer/fall 2004 data collection at your school
- Compensation: $20 gift certificate* redeemable at Amazon.com® plus an entry into a drawing for an additional $100 prize
- Deadline: <TO BE DECIDED>

TO PARTICIPATE:

- Go to our survey web address: https://psychology.msu.edu/success
- Sign in using this Access ID: GRASP
- If you have any problems or questions regarding this web survey, visit our survey help website: http://www.io.psy.msu.edu/cbstudy/help

* The electronic $20 gift certificate will be delivered to your e-mail address within 1 week of the survey deadline. The certificate is subject to Amazon.com's rules and regulations. Visit **http://tinyurl.com/4osux** (links to Amazon.com) to view the fine print.

Sincerely,
Group for Research and Assessment of Student Potential
Michigan State University
E-mail: cbstudy@msu.edu
Web Site: www.io.psy.msu.edu/cbstudy

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Appendix D.
Recruiting Minorities Invitation

Dear <insert name>:

Would you like to help colleges better understand the experiences of students from ethnic and racial groups that are underrepresented in colleges and universities today? I will tell you about a rare opportunity to bring about positive change in the college admissions process. I am a student and a member of a research team from Michigan State University, and our research group needs your help. By taking the time to complete our online survey, you can make a difference to minority college applicants in the future!

We received a grant from the College Board, a non-profit organization that works to give all students the opportunity for success. Some programs that have been designed by the College Board include Advanced Placement (AP) tests and the SAT, and they continue to invest time, effort and money to develop and improve college admissions tests so they do not show racial and gender differences. To do this, one of the main goals of our research group, in working with the College Board, is to understand the diverse array of experiences and backgrounds of college students.

Our research team began surveying college students at the start of their freshman year. You were one of the students who participated in our research efforts at that time. In order to understand the experience of being a college student, it is very important that we have a large sample of ethnic/racial minorities. This study is a unique opportunity that can have a huge impact on how future selection decisions are made for all applicants, including minorities, at colleges and universities nationwide.

Thank you for taking the time to read this email and consider participating in this study. If you have any questions about our research or the online survey, please don't hesitate to contact me. In a few days, we will send you a second e-mail that gives you the information needed to participate in our web-based study. We expect that it will take you about 30 minutes to finish the survey. To express our gratitude, we will send you a $20 gift card from Amazon.com within 4-6 weeks after you complete the survey.

APPENDIX E.

Informed Consent

Please read the following information carefully:

Study Purpose and Description

In this study, we will be asking you to complete an online survey regarding college student dropout. The major purpose of this study is to identify and explore the relationships among factors relating to college student dissatisfaction, withdrawal, and dropout. The average student takes about <*insert time*> minutes to complete this survey.

Confidentiality

All information you provide will be confidential to the extent that the law permits. When we report the results of this study, we will only discuss results across large groups of people so that no individual person's responses can be identified. In addition, only the project team (two faculty members, five graduate students, two undergraduate students, and the project secretary) will have access to the data file containing identifying information. Data shared with other researchers will remove any identifying information so that your individual responses will be completely anonymous.

Compensation

NOTE: You must complete the survey before 12:00 am on <TO BE DECIDED>**in order to be eligible to receive the gift certificate.**

In return for your participation, you will receive an electronic gift certificate for ***<insert amount>*****.** This gift certificate will be e-mailed to you within 6 weeks of the survey deadline and may be redeemed toward merchandise from the Amazon.com online store. This certificate should be used within 18 months and is subject to amazon.com's rules and regulations regarding its use. Click here for further details regarding the gift certificate.

In addition, if you participate, you will also be entered into our lottery for a $100 prize. The lottery winner will be selected randomly after the survey deadline and will be contacted via e-mail. The lottery winner will receive a check for the prize amount via mail within 2-4 weeks of the survey deadline.

Other Information

By consenting below you indicate that you are free to refuse to participate in this project or any part of the project. You may refuse to answer some of the questions and may discontinue your participation at any time without penalty.

If you have any questions or concerns about your participation in this project, you can contact Neal Schmitt (517-355-8305, Schmitt@msu.edu). If you have any questions or Appendix O (cont.)

Appendix E (cont).
concerns regarding your rights as a study participant, or are dissatisfied at any time with any aspect of this study, you may contact - anonymously, if you wish - Peter Vasilenko, Ph.D., Chair of the Michigan State University Committee on Research Involving Human Subjects (UCRIHS) by phone: (517) 355-2180, fax: (517) 432-4503, email address: ucrihs@msu.edu, or regular mail: 202 Olds Hall, East Lansing, MI 48824.

Your name:_____

I AGREE TO GIVE MY CONSENT TO PARTICIPATE

I DO **NOT** WANT TO PARTICIPATE

Appendix F.
Debriefing Form.
Factors Influencing College Student Satisfaction and Dropout

Some educators and the general public have expressed the belief that traditional cognitively based measures (e.g., SAT and ACT) are overused by academic admissions officers in making decisions about which high school students gain access to higher education opportunities. Some, such as Dr. Richard Atkinson, chief academic officer of the University of California system, have made highly publicized statements that the SAT-I should be abandoned as a tool for academic admissions. Fueling these concerns is the fact that affirmative action approaches to the admission of lower scoring minority groups are under legislative and judicial attack in many different states including a well-publicized case at the University of Michigan. In response to these criticisms, the College Board believes it would be useful to be able to develop noncognitive measures that might predict not only traditional academic success measures (e.g., GPA, graduation), but also outcomes that are sought by many institutions in their students but seldom measured or predicted in any systematic way. Two of these outcomes are student satisfaction and student persistence (i.e., not dropping out of school). The project in which you participated is an attempt to determine what factors influence student satisfaction and student dropout.

Much of the research literature on satisfaction and dropout has focused on the context of business organizations. With the information from the surveys that you and others complete, we hope to gain clues about how to "translate" research from the work domain into the academic domain. We also want to understand what unique factors influence satisfaction and dropout in college that do not necessarily operate in a work context, and how those factors relate to one another.

The survey you just completed contains quantitative measures of the processes of withdrawing from college. These measures include the types of things that are discussed in the research literature, like being increasingly absent from class, feeling isolated, and having a sense of belonging at school. We hope that our measure can ultimately be used to identify or predict which students are more likely to persist through graduation and which students are more likely to drop out or transfer prior to graduation.

Further Information.

We appreciate your help on this project. If you want a summary of the results of our project, please send an e-mail message to cbstudy@msu.edu and we will send you a summary – probably next year when our data collection is complete. Please include the words "Results Summary - Withdrawal" in the subject line of your e-mail. If you have more interest in this topic, the references below provide some additional background reading. Thank you again for your help. We wish you great success in college.

Appendix F(cont.)

The survey is now complete.
Thank you for participating!
Your gift certificate will be sent to you via e-mail within the next few weeks.

When you are finished reading this debriefing form, you may close your browser.

References

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Appendix G.

Academic Self-Efficacy Measure (Drzakowski, et al., 2004)

Measurement Scale:
1= not true at all
2= not true
3= somewhat true
4= true
5= very true

1. I am confident in my ability to succeed as a college student
2. I believe I can achieve good grades in college
3. I worry that I won't be successful in college
4. I have the ability to excel in school

Appendix H.
Institutional Satisfaction (Drzakowski, et al., 2004).

Measurement scale:
1 = strongly disagree
2= disagree
3 = neutral
4 = agree
5 = strongly agree

1. Overall, I am satisfied with this university
2. If I could go back, I would choose to attend a different school
3. This university was the right choice for me

I feel like I belong at this university

Appendix I.
Institutional Commitment (Drzakowski, et al., 2004).

Measurement scale:
1 = strongly disagree
2= disagree
3 = neutral
4 = agree
5 = strongly agree

1. I would be very happy to graduate from THIS particular school
2. I enjoy discussing my school with people outside it
3. I really feel as if this school's problems are also my own
4. I think that I could easily become as attached to another school as I am to this one
5. I do not feel "emotionally attached" to this school
6. This school has a great deal of personal meaning for me
7. I do not feel a strong sense of belonging to my school
8. I am afraid of what might happen if I dropped out of this school without being accepted somewhere else first
9. It would be very hard for me to leave this school right now, even if I wanted to
10. Too much in my life would be disrupted if I decided I wanted to leave this school right now
11. I would not lose many credits or money if I left this school now
12. I feel that I have too few options to consider leaving this school
13. I do not believe that a person must always be loyal to his or her school
14. I believe in the value of remaining loyal to one school
15. I think alumni should remain actively involved in their school's activities
16. I believe alumni should continue to contribute financially to their school

Appendix J.
Life Satisfaction Measure (Drzakowski, et al., 2004).

Measurement scale:
1 = strongly disagree
2= disagree
3 = neutral
4 = agree
5 = strongly agree

1. In most ways my life is close to ideal
2. The conditions of my life are excellent
3. I am satisfied with my life
4. So far I have gotten the important things I want in life
5. If I could live my life over, I would change almost nothing

Appendix K.
Self-perception of Preferential Selection.(Developed for the current study, based on the single item used by Brown, et al., 2000).

Instructions:
Read each sentence carefully and using the measurement scale below, indicate how much you agree that these statements reflect the admission procedures used by the college or university that you attend.

Measurement scale:
1 = strongly disagree
2= disagree
3 = neutral
4 = agree
5 = strongly agree

Self-perceptions

1. I believe that my race/ethnicity may have helped me to get admitted into this college/university.
2. I was selected into this college/university only because of my abilities. In other words, my race/ethnicity did **not** affect the admission decision.
3. One reason why I might have been admitted into this institution was my race/ethnicity.
4. Due to my race/ethnicity, I may have been admitted into this college or university over other non-minority applicants.
5. My race/ethnicity likely contributed to my acceptance into this college or university.
6. The **only** reason why I was admitted into this college or university is because of my abilities. The admissions office did not consider my race/ethnicty at all when they decided to admit me.

Appendix L.
Attitudes towards AAPs (Kravitz & Platonia, 1993).

Measurement scale:
1 = strongly disagree
2= disagree
3 = neutral
4 = agree
5 = strongly agree

1. Affirmative action is a good policy.
2. I would not like to work at an organization with an affirmative action plan.
3. The goals of affirmative action are good.
4. Employees should be actively involved in attempts to improve the affirmative action conditions at their place of employment.
5. I would be willing to work at an organization with an affirmative action plan.
6. All in all, I oppose affirmative action plans for minorities.

Appendix M.
Sensitivity to Stereotypes (Mendoza-Denton, et al., 2002).

Instructions:
Carefully read each scenario that relates to situations that most people face. Following each scenario, you will find two related statements. Using the rating scale given below, respond according to how much you would agree with it if you were in that situation.

Measurement scale:
1 = strongly disagree
2= disagree
3 = neutral
4 = agree
5 = strongly agree

Imagine that you are in class one day, and the professor asks a particularly difficult question. A few people, including yourself, raise their hands to answer the question.

1. I would be anxious or concerned that the professor would not call on me because of my race/ethnicity.
2. It is likely that the professor would not call on me because of my race/ethnicity.

Imagine that you are in a pharmacy, trying to pick out a few items. While you're looking at the different brands, you notice one of the store clerks glancing your way.

3. I would be anxious or concerned that the clerk is watching me because of my race/ethnicity.
4. It is likely that the clerk is watching me because of my race/ethnicity.

Imagine you have just completed a job interview over the phone. You are in good spirits because the interviewer seemed enthusiastic about your applications. Several days later you complete a second interview in person. Your interviewer informs you that they will let you know about their situation.

5. It would concern me that I might not get the job due to my race/ethnicity.
6. It is likely that I will get the job, based on my race/ethnicity.

It's late at night and you are driving down a country road you're not familiar with. Luckily, there is a 24-hour gas station just ahead, so you stop there and head up to the counter to ask the young lady for directions.

7. I would be anxious and concerned that the lady would not give me directions because of my race/ethnicity,.
8. It is likely that I will not be given directions because of my race/ethnicity.

Appendix M (cont.).

Imagine that a new school counselor is selecting students for a summer scholarship fund that you really want. He has only one scholarship left and you are one of several students that are eligible for this scholarship.

I would be concerned that my race/ethnicity might keep me from getting the scholarship.

9. It is likely that I will not receive the scholarship, given my race/ethnicity.

Imagine you have finished shopping, and you are leaving the store carrying several bags. It's closing time, and several people are filing out of the store at once. Suddenly, the alarm begins to sound, and a security guard comes over to investigate.

10. I would be concerned that the security guard will stop me, given my race/ethnicity.
11. It is likely that the security guard would approach me, given my race/ethnicity.

Imagine you are riding the bus one day. The bus is full except for two seats, one of which is next to you. As the bus comes to the next stop, you notice a woman getting on the bus.

12. I would be concerned that the women would not want to sit next to me because of my race/ethnicity.
13. It is likely the women will decide not to choose the seat next to me, given my race/ethnicity.

Imagine that you are in a restaurant, trying to get the attention of your waitress. A lot of other people are trying to get her attention as well.

14. I would be concerned that the waitress would help the other customers first, given my race/ethnicity.
15. It is likely that the waitress would assist other customers in the restaurant before me because of my race/ethnicity.

Imagine you're driving down the street, and there is a police barricade just ahead. The police officers are randomly pulling people over to check drivers' licenses and registrations.

16. I would be anxious that the officers would automatically pull me over, given my race/ethnicity.
17. It is likely the police would pull me over because of my race/ethnicity.

Imagine that it's the second day of your new class. The teacher assigned a writing sample yesterday and today the teacher announces that she has finished correcting the papers. You wait for your paper to be returned.

18. , I'd be concerned that the teacher will give me a poor grade, given my race/ethnicity.
19. It is likely that I'll get a poor grade on the paper because of my race/ethnicity.

Appendix M (cont.)

Imagine that you are standing in line for the ATM machine, and you notice the woman at the machine glances back while she's getting her money.

20. I would be concerned that she thinks I might rob her, given my race/ethnicity.
21. It is likely that the lady thinks that I will take her money, given my race/ethnicity.

Imagine you're at a pay phone on a street corner. You have to make a call, but you don't have change. You decide to go into a store and ask for change for your bill.

22. I would be anxious that the clerk in the stork would not make change for me because of my race/ethnicity.
23. It is likely I would be unable to get change for my bill due to my race/ethnicity.

Appendix N.
Perceptions of fairness of the selection process (Colquitt, 2001).

Instructions:
Below are a series of statements that refer to the admission process used by the college or university that you attend. Read each sentence carefully and using the measurement scale below, indicate how much you agree that these statements reflect the admission procedures used by your institution.

Measurement scale:
1 = strongly disagree
2= disagree
3 = neutral
4 = agree
5 = strongly agree

1. The procedures used to select students allowed me to express my views and feelings.
2. I feel that I was able to influence the results reached by the procedures used to select me into this school.
3. The admission process is applied consistently across all applicants.
4. The admission process is free of bias.
5. Admission decisions are based on accurate information.
6. If you were not selected into this school, you would have had adequate opportunity to appeal the decision.
7. The admission procedures uphold ethical and moral standards.

Appendix O.
Core Self-Evaluations Measure (Judge, Erez, Bono & Thoreson, 2003)

Measurement scale:
1 = strongly disagree
2= disagree
3 = neutral
4 = agree
5 = strongly agree

1. I am confident I get the success I deserve in life.
2. Sometimes I feel depressed. (r)
3. When I try, I generally succeed.
4. Sometimes when I fail I feel worthless. (r)
5. I complete tasks successfully.
6. Sometimes, I do not feel in control of my work. (r)
7. Overall, I am satisfied with myself.
8. I am filled with doubts about my competence. (r)
9. I determine what will happen in my life.
10. I do not feel in control of my success in my career. (r)
11. I am capable of coping with most of my problems.
12. There are times when things look pretty bleak and hopeless to me. (r)

Appendix P.
Domain Identification (Smith & White, 2001).

Measurement scale:
1 = strongly disagree
2= disagree
3 = neutral
4 = agree
5 = strongly agree

1. I value being a student a great deal.
2. Academics are an important and/or necessary part of my life.
3. Being a student is important to me.