

ABSTRACT

Title of Document: THE INTERACTION OF RACE AND SOCIAL STATUS IN DETERMINING DISCRIMINATION

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This research examines the interaction of race and social status in determining stereotypes and discrimination. Through six experiments, I demonstrate that because High Status Blacks are stereotyped positively and similarly to High Status Whites in domains related to economic resources (Pilot Study), they are perceived as competitors when economic resources are scarce. As such, they face increased discrimination (relative to Low Status Blacks) in economic-resource relevant domains (Study 1b), particularly when these resources are scarce (Study 1a). I demonstrate that this discrimination is driven by Zero-Sum Beliefs about the social status hierarchy and competition for resources (Study 2 and Study 3b). I also present novel evidence of the ironic effect of having strong Zero-Sum Beliefs for those who are internally motivated to control prejudice (IMS; Plant & Devine, 1998; Study 3b). I discuss these findings in the context of the Instrumental Model of Group Conflict (Esses, Jackson, and Armstrong, 1998) and research on racial prejudice and

discrimination, and also apply these findings to broader issues regarding the social mobility of Black Americans.

THE INTERACTION OF RACE AND SOCIAL STATUS IN DETERMINING
DISCRIMINATION

By

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Dedication

I dedicate this dissertation to my wonderfully loving and supportive husband, Matt
Russell.

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Chapter 1: Introduction

Social psychologists have paid enormous attention to racial stereotyping, prejudice, and discrimination by Whites towards Blacks (e.g. Jones, 1997; Dovidio, Glick, & Rudman, 2005; Henry & Sears, 2002). This research has consistently shown that Whites have negative attitudes toward Blacks (Dovidio, Kawakami, Johnson, Johnson, & Howard, 1997; Dasgupta, McGhee, Greenwald, & Banaji, 2000), experience anxiety when interacting with Blacks (Toosi, Babbitt, Ambady, & Sommers, 2012; Trawalter & Richeson, 2008), and hold very negative stereotypes about Blacks (e.g. Fiske, Cuddy, Glick, & Xu, 2002; Czopp & Monteith, 2006). In particular, researchers have demonstrated that much of the prejudice against blacks is due to their negative stereotypes (Wittenbrink, Judd, & Park, 2001; Stephan, et al., 2002).

Although these findings are very consistent across studies the research has largely ignored the substantial heterogeneity among Blacks (see Celious & Oyserman, 2001; Czopp & Monteith, 2006), as well as how stereotypes, prejudice, and discrimination are differentially applied to Black subgroups. Specifically, prior research has confounded race and social status, leading to conclusions that are potentially limited or inappropriate. The goal of the present research is to demonstrate that the distinct and positive stereotypes associated with High Status Blacks leads to discrimination in contexts in which Low Status Blacks are perceived as less threatening.

In the current research, I examine race and social status as two independent social categories that interact to predict stereotypes and discrimination. Although the term ‘status’ is often broadly defined, or is used to mean positions of relative power (e.g. Richeson & Ambady, 2003) or performance level (e.g. Scheepers & Ellemers, 2005), I

use the term ‘status’ to imply a relatively higher socioeconomic status in terms of income, education, and occupation, as it has been defined by Adler, Epel, Castellazzo, and Ickovics (2000). I argue that although Blacks who are high (vs. low) in status may be viewed more positively overall, these positive stereotypes may make them threatening to Whites in certain contexts. When economic resources are scarce and competition over resources is characterized by zero-sum outcomes, high (vs. low) status Blacks may face increased discrimination. I focus specifically on discrimination in the workplace and present data from six experiments to support my arguments.

This research makes several important contributions to the existent literature. First, I demonstrate that race and social status interact in some contexts to predict discrimination. This is theoretically important given the current lack of research on the influence of social status in racial stereotyping and discrimination. Second, I specify certain threats that cause (positively-stereotyped) High Status Blacks to be discriminated against to a greater degree than (negatively-stereotyped) Low Status Blacks. Neither this effect, nor the psychological mechanisms driving the effect, has been tested within the existing literature on stereotyping and discrimination towards Blacks.

In addition to the theoretical contributions, my research makes broader contributions as well. On average, compared to Whites, Blacks have lower incomes (United States Census Bureau, 2011b), lower education attainment levels (United States Census Bureau, 2012), and are less likely to own their homes (United States Census Bureau, 2011a). Thus, it is clear that social mobility is particularly difficult for Blacks (Cole & Omari, 2003). My research offers an explanation for these findings: Once Blacks improve their social status, they may face increased discrimination in employment

or academic settings because they signal a potential threat to the status of Whites. This discrimination may prevent them from maintaining or improving their higher social status over longer periods of time. If this hypothesis is correct, it may shed light on the difficulty that Black Americans face in improving their livelihoods and gaining opportunities.

In this Introduction I will first provide an overview of the literature demonstrating the distinct stereotypes associated with high (vs. low) status Blacks, and then discuss the specific role that social status plays in determining responses to competition for scarce resources. I summarize the Instrumental Model of Group Conflict (IMGC; Esses, Jackson, & Armstrong, 1998), which proposes specific conditions under which outgroups are perceived as competitors for scarce resources and the functionality of discriminating against these outgroup competitors. I then summarize evidence supporting this model, and specify my predictions regarding instances of discrimination towards High Status Blacks.

Racial Stereotyping and the Interaction of Status

Humans have an extremely strong tendency to categorize (e.g. Billig & Tajfel, 1973; Tajfel, Billig, Bundy, & Flament, 1971). Because race is a social category that is immediately salient when we perceive others (e.g. Stangor, Lynch, Duann, & Glass, 1992), it certainly plays an important role in judgments. Whites tend to display a high degree of prejudice and discrimination against Blacks (Crosby, Bromley, & Saxe, 1980; Greenwald, McGhee, & Schwartz, 1998; McConnell & Leibold, 2001), and many of the specific stereotypes that Whites hold about Blacks are related to undesirable qualities (e.g. Fiske, Cuddy, Glick, & Xu, 2002). Two highly salient stereotypes associated with

Blacks are criminality and laziness (Devine & Baker, 1991; Devine, 1989; McCabe & Brannon, 2004). The laziness stereotype is used as an explanation for the low social status of Blacks (Kaplowitz, Broman, & Fisher, 2006), and may explain why Blacks are less likely to be expected to fulfill leadership positions compared to Whites (Rosette, Leonardelli, & Phillips, 2008).

Criminality traits are so strongly associated with Blacks that Whites show a stronger tendency to erroneously decide to shoot unarmed Black targets compared to unarmed White targets (Correll, Park, Judd, & Wittenbrink, 2002; Correll, Urland, & Ito, 2006). Furthermore, being primed with Black (vs. White) faces increases the speed with which individuals are able to identify degraded images of weapons (Eberhardt, Goff, Purdue, & Davies, 2004). And the relationship between criminality and the category Blacks is bidirectional. Being exposed to constructs related to violence causes the social category of Blacks to become more accessible (Eberhardt, Goff, Purdie, & Davies, 2004) for White perceivers.

The criminality stereotype also directly impacts the outcomes of Blacks in domains related to crime. For instance, Black defendants with prototypically Black faces are significantly more likely to be given the death penalty as punishment for murdering Whites as compared to Blacks with less prototypic features (Eberhardt, Davies, Purdie-Vaughns, & Johnson, 2006).

Despite the strong association between negative stereotypes and Blacks overall, there is also evidence that these stereotypes are not associated with High Status Blacks (Devine & Baker, 1991; McCabe & Brannon, 2004). The general stereotypes of Blacks are significantly more similar in content to those of “Blacks on welfare” and “Poor

Blacks” than they are to “Black businessmen” or “Black professionals.” On the other hand, the overall stereotype of Whites is more similar in content to that of “White businessman” than to “Whites on welfare” (Devine, 1989; McCabe & Brannon, 2004). In their research on the Stereotype Content Model, Fiske and colleagues (2002) found that although poor Blacks are perceived as low in competence and warmth, High Status Black professionals are perceived as higher in competence, which suggests they may not be stereotyped as lazy. It follows that when thinking about the racial group Blacks, White perceivers are likely thinking of Low Status Blacks, whereas when thinking about the racial group Whites they are likely thinking of High Status Whites.

High Status Blacks are also evaluated more positively in general compared to Low Status Blacks. Whereas Black prisoners were automatically associated with negative words, Black lawyers were automatically associated with more positive words (Barden, Maddux, Petty, & Brewer, 2004). Richeson and Ambady (2003) found similar positive automatic evaluations of Blacks by participants who were expecting to interact with a Black partner who was high in status. This finding was attributed to the effect of exposure to atypical exemplars, such that being exposed to (usually High Status) positive Black exemplars reduced negative automatic prejudice towards Blacks (Dasgupta & Greenwald, 2001). Thus, being reminded of these more positive group members (i.e. High Status Blacks) improves Whites’ evaluations of the superordinate category (Blacks).

Given the research suggesting that High Status Blacks are more likely to be ascribed positive stereotypes, and less likely to be ascribed negative stereotypes involving criminality and laziness, one might assume that they are not as likely to be targets of

discrimination. However, negative stereotypes are only one predictor of prejudice and discrimination (e.g. Stephan, et al., 2002; Cuddy, Fiske, & Glick, 2007). In the absence of negative stereotypes, outgroups may still be discriminated against for other reasons, including the threat they pose to the ingroup. For instance, minority groups may face increased discrimination in the domains in which they are positively stereotyped because their positive stereotypes threaten the ingroup's success in those domains (e.g. Butz & Yogeeswaran, 2011; Maddux, Galinsky, Cuddy, & Polifroni, 2008).

There is some evidence that Blacks with higher status do face increased discrimination in some contexts. Dovidio and Gaertner (1981) found that White participants were less helpful towards a Black confederate when they were told the confederate was higher (vs. lower) in status than they were. Similarly, Weeks, Weeks, and Frost (2007) found that on a simulated compensation task, Low Status Black employees were compensated more than High Status Black employees.

It is unclear from these studies what mechanism was responsible for the greater discrimination against high (vs. low) status Blacks. These findings are also puzzling given the numerous findings showing that High Status Blacks are often associated with more positive stereotypes. One possible explanation that has not yet been explored involves the perceived threat posed by High Status Black targets. Specifically, White participants may have discriminated against the High Status Blacks in these studies because they felt that the High Status Blacks threatened the status of Whites in the social hierarchy. My research tests the prediction that under conditions signaling threat related to a status-maintaining resource (e.g. jobs), High Status Blacks face discrimination

because they are strong competitors for the resource and thus signal the possibility that Whites would have decreased access to the resource.

Resource Scarcity, Zero-Sum Competition, and Discrimination

Status, independent of race, has received a large amount of attention in recent years, particularly as it relates to competition over scarce economic resources. A growing body of evidence demonstrates that perceived threats related to social status are quite influential in determining intergroup relations. Research on IMGIC (Esses, et al., 1998) is particularly informative as it elucidates the specific contexts that lead to social status threats, and subsequent responses to these threats.

According to the IMGIC, (Esses, et al., 1998; Esses, Dovidio, Jackson, & Armstrong, 2001) group conflict arises under conditions of ‘resource stress’, which come from either the real or perceived scarcity of economic or power resources. According to their approach, resource stress also increases when there is an unequal distribution of resources. Under conditions of resource stress, individuals belonging to groups who hold a majority of resources and who feel that this inequality is acceptable should be motivated to maintain their status and access to the resources. Members of groups with access to relatively fewer resources should be motivated to gain access to more resources.

When resources are stressed, groups will perceive competition if there is a relevant outgroup that is judged to be a serious competitor for the scarce resource (Esses et al., 1998). The outgroup should be distinct enough from the ingroup such that their success would not be confused as somehow benefiting the ingroup. However, the outgroup should also be similar to the ingroup on specific resource-related dimensions. Outgroups that share similar qualities related to the scarce resource are expected to pose

more of a threat to the ingroup because they are stronger competitors for the scarce resource (Esses et al., 1998). For example, if one considers high-paying jobs to be scarce, Whites may view High Status Blacks as relevant outgroup competitors if they are perceived as being similar in terms of their qualifications for the job (e.g. due to their similar status), but otherwise distinct from Whites (e.g. due to their race).

IMGC further specifies that the outgroup must be sufficiently large such that successfully gaining resources would reduce the amount of resources available to the ingroup, thus causing the ingroup to lose status. Again, if one considers high-paying jobs to be a scarce resource, then large numbers of High Status Blacks gaining high-paying jobs might cause Whites to feel that fewer high-paying jobs are available for them, thus reducing the overall status of Whites.

When the above conditions are met (i.e. resource stresses arise and a relevant outgroup competitor is salient), then groups should perceive competition for the resource (Esses et al., 1998). This perception of group competition is characterized by negative affect and by Zero-Sum Beliefs that outgroup gains necessarily result in ingroup losses (and vice versa). This perception of a Zero-Sum Competition subsequently leads to strategies directed towards the relevant outgroup to reduce their competitiveness. Such strategies include prejudice and discrimination directed towards the outgroup that specifically undermine the outgroup's potential for success in the relevant domain.

A growing body of evidence stemming from the IMCG and other theoretical approaches supports the notion that perceived threats to ingroup status are particularly motivating. When High Status groups perceive a threat from an outgroup, they show greater preferences for inequality (for instance higher scores on Social Dominance

Orientation; Morrison, Fast, & Ybarra, 2009) and greater physiological threat responses (Scheepers & Ellemers, 2005; Scheepers, Ellemers, & Sintemaartensdijk, 2009).

Research demonstrates these threats to ingroup status further result in specific prejudice and discrimination targeted towards relevant outgroup competitors. For instance, in a South African sample, participants belonging to High Status groups showed more prejudice towards other High Status outgroups, or outgroups who posed as a likely competitor to ingroup status (Dambrun, Taylor, McDonald, Crush, & Méot, 2006), just as Americans' support for affirmative action programs is negatively predicted by perceptions of realistic economic threats (Renfro, Duran, Stephan, & Clason, 2006). Similarly, Maddux and colleagues (2008) found that when primed with realistic threats for which Asians were a relevant outgroup competitor, participants showed greater prejudice towards Asians. Likewise, when primed to think about scarce employment opportunities, participants showed higher levels of prejudice towards Asian Americans (Butz & Yogeeswaren, 2011).

Zarató and colleagues (Zarató, Garcia, Garza, & Hitlan, 2004) provide experimental evidence demonstrating the effect of perceived similarity in resource-related domains on prejudice. Participants were asked to either compare or contrast work-related skills of their ingroup with those of an immigrant outgroup. When asked to compare (vs. contrast) work-related skills, participants showed increased hostility towards immigrant groups. Thus, the reaction towards immigrants depended on whether the immigrant group was considered a competitor, just as Whites' reactions towards a Black target may depend on whether or not they are considered a competitor in the given

context. Under conditions of scarce economic resources, a High Status Black target may be considered a threat whereas a Low Status Black target may not be.

Research also demonstrates the development of Zero-Sum Beliefs and their effect on bias. Esses and colleagues (1998) found that group competition primes produced Zero-Sum Beliefs that increased immigration would lead to fewer jobs for non-immigrants, suggesting that Zero-Sum Beliefs are not independent of perceived competition. Similarly, Whites who have Zero-Sum Beliefs about the relationship between the success of Whites and the success of Blacks are less likely to express interest in having contact with Blacks (Esses, et al., 2001).

Chapter 2: Overview of Research

The present research is designed to apply the principles specified by the IMGC model to Black-White relations. My goal is to demonstrate instances in which high (vs. low) status Blacks are perceived as particularly threatening to Whites, and thus face increased discrimination. In line with the IMGC requirements for a relevant outgroup competitor, High Status Blacks are different on a resource-irrelevant dimension (i.e. race), but are similar on a resource-relevant dimension (i.e. social status). Compared to Low Status Blacks, High Status Blacks are likely to be well educated and to possess qualities that are desired by employers. Moreover, High Status Blacks are not generally associated with the same negative stereotypes as are lower class Blacks (Deveine & Baker, 1991; Fiske et al., 2002), so employers may have more positive feelings towards them. Thus, if one considers economic and power resources as scarce, for instance during an economic recession or in the context of a highly competitive job, then High Status Blacks may be viewed by Whites as a relevant outgroup competitor.

If Blacks are perceived as a relevant outgroup competitor, and Whites view competition for jobs and economic opportunities as a Zero-Sum competition, then Whites are likely to engage in strategies to undermine the competitiveness of High Status Blacks. These strategies should not be directed towards Low Status Blacks because they are not a relevant outgroup competitor under conditions of economic resource scarcity. Furthermore, Whites should not engage in discrimination against High Status Blacks in domains that are unrelated to the scarce resource. That is, if discrimination is functional, then Whites should only discriminate when it serves the specific purpose of making High Status Blacks less competitive in the resource domain.

Research Predictions

I have argued that, relative to Low Status Blacks, High Status Blacks will face increased discrimination in academic and employment settings because they are a relevant outgroup competitor for scarce academic and employment resources. Blacks should be a relevant outgroup competitor because High Status Whites perceive them as possessing traits that would make them successful, and therefore competitive, in academic and employment settings. These traits make High Status Blacks appear similar to Whites in the resource-related domain, as they are also likely to be traits that Whites perceive themselves as possessing. Low Status Blacks should be less likely to be perceived as a relevant outgroup competitor because they are not associated with these successful traits but rather are associated with aggression- and criminality-related traits. Therefore, I expect the following:

Hypothesis 1: High (versus Low) Status Blacks are more likely to be characterized by stereotypes related to academic and employment success, whereas Low (versus High) Status Blacks are more likely to be characterized by stereotypes related to physical aggression and crime. In comparison to Low Status Blacks, High Status Blacks, High Status Whites, and Whites in general are expected to be more highly, and equally, associated with stereotypes related to academic and employment success.

In line with Esses et al.'s (1998) model, an important determinant of resource stress is scarcity of resources. When economic resources (i.e. jobs, education opportunities) are scarce, one's economic well-being is more threatened, thus leading to competition with a relevant outgroup for resources. This competition leads to discrimination against outgroups in a domain that is related to the resources. Therefore, I expect the following:

Hypothesis 2: Under conditions of scarce economic resources, High Status Blacks will be discriminated against more than Low Status Blacks, but under conditions in which economic resources are not scarce High Status Blacks will be discriminated against less than Low Status Blacks.

Hypothesis 3: Under conditions of scarce economic resources, High Status Blacks will be discriminated against more in domains related to the economic resource than in domains unrelated to the economic resource. However, under conditions of scarce economic resources, the evaluations of Low Status Blacks should be equivalent in both threat-related and threat-unrelated domains.

I have argued that the underlying motivation driving discrimination against High Status Blacks under conditions of economic threat is a fear that the success of Blacks in competition for a scarce resource would cause Whites to feel that their status is threatened. Whites should be especially motivated to discriminate against members of

groups who threaten the stability of their status. However, if competition for resources and potential status gains by an outgroup are viewed as benefiting both groups, then the competition should produce improved evaluations of the group that is gaining status.

Therefore, I expect the following:

Hypothesis 4: Under conditions of scarce economic resources, High Status Blacks will face increased discrimination relative to Low Status Blacks because they signal a shifting status hierarchy characterized by zero-sum outcomes. Therefore, expressed Zero-Sum Beliefs should mediate the relationship between resource threats and discrimination against High Status Blacks.

Hypothesis 5a: When competition over scarce resources is characterized by zero-sum outcomes, High (vs. Low) Status Blacks should face increased discrimination compared to non-competitive contexts.

Hypothesis 5b: When competition over scarce resources is characterized by non-zero-sum outcomes, High (vs. Low) Status Blacks should face decreased discrimination compared to non-competitive contexts.

Overview of Studies

I tested my predictions in a series of six experiments. I focused specifically on employer and customer discrimination because both status and race may be particularly salient in the workplace. Specifically, status may be salient as one's job is often a direct

indication of status. Race is also highly salient in the workplace, not only because it is a salient social category (Stangor, et al., 1992), but also because of many companies' growing efforts to promote workplace diversity (Wentling & Palma-Rivas, 2000). A substantial body of research has shown that minorities consistently face discrimination in the workplace from employers and coworkers (Brief, Dietz, Cohen, Pugh, & Vaslow, 2000; Schneider, Hitlan, & Radhakrishnan, 2000; Bergman, Palmieri, Drasgow, & Ormerod, 2012), and also from consumers with whom they interact (Hekman, et al., 2010; Lynn, et al., 2008). However, this literature has not yet considered race and social status together.

It is important to understand how employee race and status influences judgments from the perspectives of both company managers and customers. A manager's hiring, promotion, and salary decisions have a substantial impact on the career trajectory of an employee; however these decisions may be influenced by race and status biases. Furthermore, in many work settings (e.g. restaurants, hospitals, banks), employees are highly visible and have frequent interactions with customers. As customer satisfaction ratings have become important central indicators of individual performance and often determine employees' bonuses and rewards (Wilson, 2002), customers' race and social class biases may also directly impact an employee's career trajectory. Thus, the work domain lends itself well to studying race and class discrimination.

Pilot Study 1 tests Hypothesis 1 and examines the specific traits associated with Blacks, Whites, Lower Class Blacks, Lower Class Whites, Upper Class Blacks, and Upper Class Whites. Study 1a and Study 1b test Hypothesis 2 through a hiring task where participants are asked to evaluate a resume that belongs to a high or Low Status

Black applicant. As a manipulation of scarce economic resources, some participants are lead to believe that the resume belongs to one of either three or 287 applicants who are applying for three open positions. Therefore, Studies 1a and 1b test discrimination from the employer's perspective.

Study 2 tests Hypothesis 3 and Hypothesis 4. In Study 2, participants are asked to evaluate a high or Low Status Black employee from the customer's perspective. As a further test of Hypothesis 2, some participants are asked to read about an economic threat, whereas others are asked to read about a climate change threat. This study served to demonstrate that any effects observed in Study 1a were not due to threats in general, but rather specifically to resource-relevant threats. Study 2 also measured participants' expressed Zero-Sum Beliefs, to test its role as a mediator. Finally, Study 2 measured Ethnic Identity (Phinney, 1992), to rule out the possibility that effects are due to general ingroup favoritism rather than specific responses to competition over scarce resources.

Study 3a and Study 3b test Hypothesis 5a and 5b by priming either Zero-Sum Competition over scarce resources or Non-Zero-Sum Competition. These studies also ask participants to evaluate a high or Low Status employee from the perspective of a customer. Both Study 3a and Study 3b measure Zero-Sum Beliefs, and Study 3a measures Ethnic Identity (Phinney, 1992). Both studies also measure Internal and External motivations to control prejudice (IMS/EMS; Plant & Devine, 1998), again to rule out the possibility that any observed effects are due to general prejudice or motivations to control prejudice, rather than specific responses to competition over scarce resources.

Chapter 3: Pilot Study 1

The purpose of Pilot Study 1 was to test Hypothesis 1 and therefore demonstrate that High Status Blacks are a relevant outgroup competitor for scarce economic resources. High Status Blacks should not be associated with the criminality stereotypes that have been demonstrated in the literature as being associated with Blacks in general. In demonstrating the association between upper class Blacks and education-related traits, Pilot Study 1 serves to support my argument that High Status Blacks are a relevant outgroup in times of scarce economic resources. Because they are associated with positive education-related traits, Whites should see them as having the traits necessary to compete for scarce jobs or educational opportunities. As Low Status Blacks are more strongly associated with criminality and aggression-related traits than education-related traits, they should not be perceived as a relevant outgroup competitor.

Furthermore, Pilot Study 1 compares the traits associated with High Status Blacks, Whites, and High Status Whites to demonstrate that High Status Blacks are matched to High Status Whites and Whites, in that they possess similar education-related traits. This finding would further support the notion that they should become a relevant outgroup competitor under conditions of scarce economic resources.

Methods

Participants and Design

Participants were 66 White University of Maryland undergraduate students (28 Male, 38 Female) who completed the study online in exchange for course credit. The study employed a 2(Group Race: White, Black) x 3(Group Label: Group Only, Lower

Class, upper class) x 2(Traits: Crime-related, Education-related) mixed design with repeated measures on the Traits variable.

Procedure and Materials

After agreeing to participate in the study, participants were told that they would be asked to think about one social group (Whites, Blacks, upper class Blacks, upper class Whites, Lower Class Blacks, or Lower Class Whites). Participants were then presented with a series of traits and were asked to rate the extent to which the trait was stereotypical of the group they were evaluating (on a scale of 1 to 6, with a higher number indicating greater perceived stereotypicality). Participants were presented with 179 traits in total. Of those traits, nine were related to criminality and nine were related to education. The criminality traits were: Aggressive, Criminal, Honest (reverse-coded), Likely to smoke marijuana, Likely to spend time in jail, Straight-laced (reverse-coded), Likely to use drugs, Likely to own weapons, and Violent ($\alpha = .92$). The education-related traits were: Over-achiever, Unmotivated (reverse-coded), College graduate, high school drop-out (reverse-coded), Educated, Goal-oriented, hardworking, Intelligent, Lazy (reverse-coded; $\alpha = .97$). The remaining traits were filler traits to disguise the true purpose of the study. After making a judgment about each trait, participants completed a demographics questionnaire and were then debriefed.

Results

The criminality-related trait ratings were averaged together to make one indicator of criminality stereotypes, and the education-related trait ratings were also averaged together to make one indicator of education stereotypes. To test my hypotheses, I

conducted a 2(Group Race: White, Black) x 3(Group Label: Group Only, Lower Class, upper class) x 2(Traits: Crime-related, Education-related) x 2(Gender) repeated measures ANOVA with repeated measures on the Traits variable. The three-way Group Race x Group Label x Traits was significant, $F(2,54) = 11.11, p < .001, \text{partial } \eta^2 = .29$ (see Figure 1). In support of Hypothesis 1, planned comparison revealed that participants judged education-related traits to be significantly more stereotypical of upper class Blacks ($M = 3.82, SD = .89$) than crime-related traits ($M = 1.86, SD = 1.07$), $F(1,54) = 37.16, p < .001, \text{partial } \eta^2 = .41$. Similarly, participants judged education-related traits to be significantly more stereotypical of upper class Whites ($M = 3.82, SD = .73$) than crime-related traits ($M = 1.68, SD = .37$), $F(1,54) = 9.01, p < .001, \text{partial } \eta^2 = .14$. Importantly, planned comparisons revealed the levels of association of education-related traits and crime-related traits with upper class Blacks was not significantly different than the levels of association of these traits with upper class Whites, $ps > .05$.

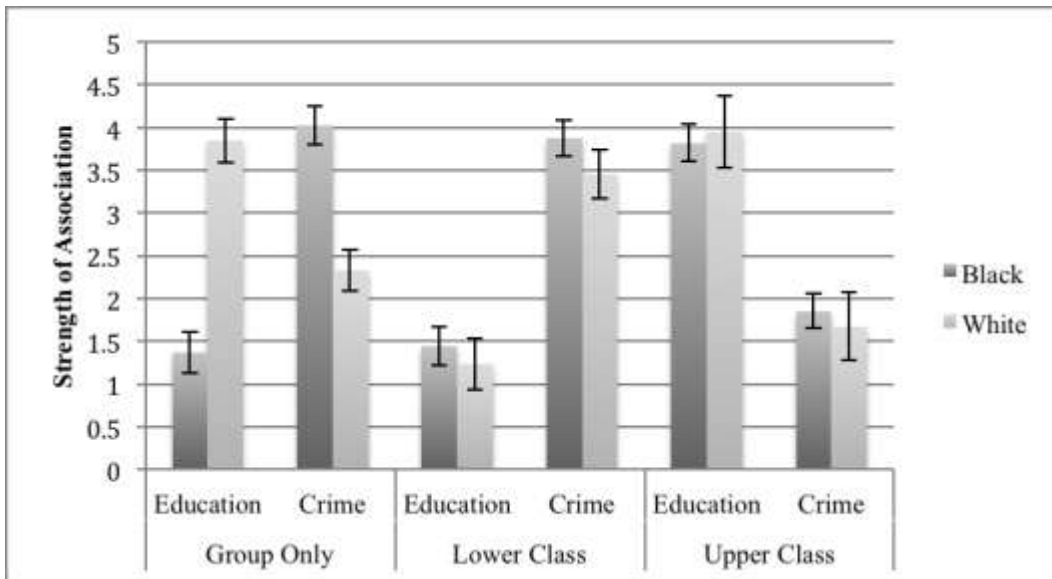


Figure 1: Target Race x Label Type x Trait Interaction (Pilot Study). Upper Class Blacks had a significantly stronger association with education-related traits than crime-related traits, whereas Lower Class Blacks and Blacks in general had a significantly stronger association with crime-related stereotypes

than education-related stereotypes. The patterns of association for Upper Class Whites and Lower Class Whites was similar to the patterns of Upper Class Blacks and Lower Class Blacks, however Whites in general had significantly stronger associations with education-related traits (vs. crime-related traits).

The opposite pattern of association was found for the association of these traits with Lower Class Blacks and Lower Class Whites. Participants judged crime-related traits to be significantly more stereotypical of Lower Class Blacks ($M = 3.88$, $SD = .54$) than education-related traits ($M = 1.44$, $SD = .72$), $F(1,54) = 35.37$, $p < .001$, partial $\eta^2 = .40$. Participants also judged crime-related traits to be significantly more stereotypical of Lower Class Whites ($M = 3.45$, $SD = .81$) than education-related traits ($M = 1.24$, $SD = 1.11$), $F(1,54) = 16.31$, $p < .001$, partial $\eta^2 = .23$. Again the different levels of association of these traits did not significantly differ for the Black (vs. White) Lower Class group, $ps > .05$.

Importantly, crime- and education-related traits were differentially associated with the general group 'Black' and the general group 'White'. Participants evaluating stereotypes of Blacks in general rated crime-related traits as significantly more stereotypical ($M = 4.02$, $SD = .50$) than education-related traits ($M = 1.37$, $SD = .67$), $F(1,54) = 37.16$, $p < .001$, partial $\eta^2 = .41$. Participants evaluating stereotypes of Whites in general showed the opposite pattern and rated education-related traits as significantly more stereotypical ($M = 3.84$, $SD = .59$) than crime-related traits ($M = 2.33$, $SD = .71$), $F(1,54) = 10.68$, $p < .01$, partial $\eta^2 = .17$.

It is important to note that the difference in association between education-related traits and Whites was not significantly different ($p > .05$), just as the association between crime-related traits and Blacks was not significantly different ($p > .05$).

There were several other significant lower-order main effects and interactions. There was a significant main effect for the Group Label ($F(2,54) = 9.17, p < .001$, partial $\eta^2 = .25$) such that groups with a 'lower class' label were less strongly associated with either type of trait ($M = 2.51, SD = .76$) compared to Groups with no social class label ($M = 2.89, SD = 1.25$) and groups with a high class label ($M = 2.83, SD = .84$). There was also a significant main effect for the participant gender ($F(1,54) = 5.57, p < .05$, partial $\eta^2 = .09$), such that female participants assigned higher association ratings ($M = 2.84, SD = 1.30$) compared to male participants ($M = 2.64, SD = 1.41$).

There was a significant Group Race X Group Label interaction, $F(2,54) = 7.11, p < .01$, partial $\eta^2 = .21$. Across both traits, participants had stronger associations for Whites in general ($M = 3.08, SD = .65$) and Upper Class Whites ($M = 2.81, SD = .55$) than for Lower Class Whites ($M = 2.35, SD = .76$). The strength of associations were similar for Blacks ($M = 2.70, SD = .59$), lower class Blacks ($M = 2.66, SD = .63$), and upper class Blacks ($M = 2.84, SD = .98$).

There was also a significant Group Label X Traits interaction, $F(2,54) = 33.01, p < .001$, partial $\eta^2 = .55$, such that participants showed stronger associations between crime-related traits and Lower Class groups ($M = 3.67, SD = .65$) and groups in general ($M = 4.17, SD = 1.03$) compared to upper class groups ($M = 1.77, SD = .85$). Participants showed stronger associations between education-related traits and upper class groups ($M = 3.89, SD = .82$) than groups in general ($M = 2.61, SD = 1.39$) and showed weaker associations between lower class groups ($M = 1.34, SD = .86$) and groups in general. Finally, as one might expect, there was a significant Group Race X Traits interaction, $F(2,54) = 13.76, p < .001$, partial $\eta^2 = .20$. Participants showed strong associations

between education-related traits and Whites ($M = 3.01$, $SD = 1.46$) compared to Blacks ($M = 2.21$, $SD = 1.39$), and showed stronger associations between crime-related traits and Blacks ($M = 3.25$, $SD = 1.31$) compared to Whites ($M = 2.45$, $SD = .92$).

Discussion

Pilot Study 1 demonstrates that both upper class Blacks and upper class Whites (vs. Lower Class Blacks and Lower Class Whites) are more strongly associated with education-related traits than crime-related traits. This preliminary finding suggests that High Status Blacks may be perceived as a relevant outgroup competitor for scarce economic resources. Moreover, Whites should perceive High Status Blacks as particularly threatening relative to Low Status Blacks (or the superordinate group “Blacks”) because they are stereotyped as having the traits necessary to succeed in High Status jobs.

Esses et al. (1998) argue that an outgroup is likely to be perceived as a competitor for a scarce resource to the extent that the outgroup is similar to the ingroup on the resource-relevant domain. Pilot Study 1 showed that although Blacks in general are not perceived as being associated with education-related traits, upper class Blacks are associated with these traits to the same degree as upper class Whites and Whites in general. This finding demonstrates that High Status Blacks are similar to Whites (and High Status Whites) in economic-resource-relevant domains. Therefore, High Status Blacks should face greater discrimination compared to Low Status Blacks in academic and workplace contexts.

Chapter 4: Study 1a

Pilot Study 1 demonstrates the associations between Low Status Blacks and crime-related traits, and between High Status Blacks and education-related traits. This makes High Status Blacks, but not Low Status Blacks, a relevant outgroup competitor for scarce economic resources. Although the education-related stereotype associated with High Status Blacks is generally positive, these positive stereotypes may not necessarily translate into decreased discrimination against High Status Blacks. The purpose of Study 1a is to demonstrate that under conditions of economic resource scarcity, High Status Blacks are discriminated against to a greater degree than are Low Status Blacks (Hypothesis 2). To rule out the possibility that any potential competitors (and not just outgroup competitors, or High Status Blacks) are evaluated poorly when resources are scarce, I also measured evaluations of High Status Whites. In Study 1a, participants completed a job selection task in which they reviewed an application for either a high or Low Status job that was either highly competitive (to signal the job scarcity) or not competitive.

Participants were instructed that some information was missing from each application. Providing incomplete application information allows for ambiguity regarding the applicant's qualifications without actually lowering the applicants' qualifications. Because individuals are more likely to discriminate in ambiguous contexts (in line with aversive racism; Gaertner & Dovidio, 1986), the missing information was designed to provide participants with the opportunity to discriminate if they were inclined to do so.

In line with Hypothesis 2, I expected a 3-way interaction between the applicant's race, the applicant status, and the job scarcity. Under conditions of high job scarcity, I expected participants to judge the high (vs. low) status applicant more harshly when the applicant was Black. I further expected participants to display discrimination against the High Status applicant when he was presented as Black relative to when he was presented as White.

Under conditions of low job scarcity, not characterized by economic threat, I expected participants to judge the Low Status applicant more harshly when he was Black (vs. White). As Esses et al., (1998) have argued, resource scarcity should produce discrimination against an outgroup target but not an ingroup target because an ingroup target is not perceived as a competitor. Thus, I did not expect judgments of White applicants to vary between scarcity conditions. However, I did expect that across both scarcity conditions, Low Status White applicants would be judged more harshly than High Status White applicants simply because Low Status targets are evaluated more negatively in general (Darley & Gross, 1986).

Methods

Participants and Design

Two-hundred fifty-six participants completed Study 1a. Seventy-nine participants were recruited through the University of Maryland psychology subject pool and 177 participants were recruited through Amazon Mechanical Turk (MTurk). Student participants were compensated with either course credit or \$5.00. MTurk participants were required to be located in the US and were compensated \$0.20. Ninety-one participants were excluded for incorrectly guessing the applicant's race, and 16 were

excluded for incorrectly guessing the applicant's gender. Of the remaining sample, 22 participants were excluded for guessing that the hypothesis related to the interaction of race and social status, or because they failed to follow instructions. This resulted in 127 participants (76 male and 51 female; 49 student participants and 78 MTurk participants). Gender produced no significant main effects or interactions, so it will not be mentioned further.

Study 1a employed a 2(Target Race: Black, White) x 2(Target Status: High, Low) x 2(Job Scarcity: High, Low) between-subjects design.

Procedures

Participants from UMD completed the study in the lab on a computer in a small room. The only interaction they had with the researcher was when they were asked to sign a consent form. Participants recruited through Amazon Mechanical Turk gave consent online and completed the study from remote locations. After consent was gained, the study proceeded on the computer through an online survey.

Participants were introduced to the experiment as a 'Management Simulation' Study that would involve completing several different management tasks, in a random order, for a hypothetical company. UMD participants completed several neutral filler management tasks (e.g. ordering supplies) and then completed the hiring task. Mechanical Turk participants did not complete these filler tasks, and began the study with the hiring task.

As part of the hiring task, participants were first told that the purpose of the task was to examine decisions based on limited information. The instructions explained that managers often focus on certain information and overlook other pieces of information,

and that to examine the impact this has on decisions, participants would evaluate 3 resumes that were either complete or that had certain information Blacked out.

Participants in fact only evaluated one resume, but were told they would evaluate three so that they would not think the sole purpose of the study was the first resume with which they were presented.

After reading about the purpose of the task, participants were introduced to the company as a large professional services company based in Maryland that had three open positions for either senior consultant roles or for a cafeteria aide worker roles.

Participants were then randomly assigned to either the high scarcity or the low scarcity condition. Participants in the high scarcity condition were told that the company had received 287 applications, whereas participants in the low scarcity condition were told that the company had received three applications. Next, participants were randomly assigned to the High Status condition or the Low Status condition, and participants were asked to thoroughly review the job description that applied to their condition. After gaining a thorough understanding of the position, participants were presented with a resume from a supposed applicant. At this point participants were randomly assigned to view a resume belonging to an applicant whose name either represented a White person or a Black person. Participants were not allowed to navigate back to see the job description again at this point. They were again instructed to thoroughly review the resume, and then to move on to the evaluation.

As a measure of the dependent variable, the resume evaluation consisted of three sets of questions assessing the applicant's suitability for the job and the amount the participants would pay the applicant if they were hired for the position. After completing

the evaluation questions, participants completed three questions regarding the perceived competitiveness of the position as a check of the scarcity manipulation. At this point participants were told that the researchers were interested in what information they recalled about the applicant, and were asked several demographics questions about the applicant, including race and gender to check that the race manipulation was effective. Finally participants were asked to complete demographics questions about themselves, were probed for suspicion using a modified funnel debriefing procedure. This procedure allowed participants to type responses to the following questions: “What was the purpose of this study?”, “Did anything seem strange about this study?”, “Suppose you were told that there was something related to the study purpose that you were not told. Can you guess what that would be?”, and finally, “Please try to guess the hypothesis of this study”. After answering these questions, participants were thanked and fully debriefed.

Materials

Scarcity Manipulation. To represent a high degree of job scarcity, participants were told that there were 187 applications for 3 open positions. To represent a low degree of job scarcity, participants were told that there were 3 applications for 3 open positions. A pre-test was conducted to ensure that the scarcity manipulation produced different levels of perceived competition for the job. Twenty-five participants were recruited through Amazon Mechanical Turk and were paid \$0.05 to participate in the study. The participants were first provided with the same description about the company used in the hiring task. Then they were told that the company was hiring and received either 187 applicants for 3 open positions (low scarcity) or 3 applicants for 3 open positions (high scarcity). They were asked to rate (on a 6-point scale from ‘*strongly disagree*’ to

‘*strongly agree*’) with five questions relating to the difficulty of being hired for the position, the demand for the position, the competitiveness of the position, the desirability of the position, and whether the position was a scarce resource. The questions showed high reliability ($\alpha = .93$), so they were averaged together to produce a mean scarcity rating.

An independent samples t-test revealed that there was a significant difference in scarcity ratings between the high and low scarcity conditions, $t(23) = 5.04, p < .001$. The condition where 187 applicants were applying for 3 positions was judged to be more of a scarce resource ($M = 5.02, SD = 0.57$) compared to the condition where 3 applicants were applying for 3 positions ($M = 2.93, SD = 1.22$). Based on this pretest, I manipulated low job scarcity by instructing participants that 3 applicants had applied for 3 open positions. To ensure a high degree of perceived scarcity, I manipulated high job scarcity by instructing participants that 287 applicants (as opposed to the 187 applicants manipulation used in the pretest) had applied for 3 open positions.

Status Manipulation. As a manipulation of applicant status, participants evaluated resumes that had been submitted as an application for either a senior consultant position (High Status) or a cafeteria aide position (Low Status). The Senior Consultant job description listed requirements such as 10 years of relevant experience, an MBA or other advanced degree, and a potential annual salary between \$150,000 and \$220,000. The resume for this position described an applicant who had earned an MBA and met several other job requirements (see Appendix A). The resume listed several career achievements and relevant experience, however much of the information on the resume was blacked out (see Appendix B). Thus it was clear that something was written but

participants were not able to see what the information was. Thus, the applicant appeared to meet the minimum qualifications, however it was not clear if all of the applicant's qualifications were suitable.

The Cafeteria Aide Position represented the Low Status position, and was described as suitable for someone with a high school degree and one-to-two years of experience. This position offered an hourly salary between \$7.00 and \$13.00 (see Appendix C). Like the resume for the High Status position, this resume described an applicant that met the minimum job requirements (e.g. high school degree and experience) and described several skills and work experience. Again, much of the information was blacked out so that it was clear information was provided on the resume but was not visible to participants (see Appendix D).

Race Manipulation. To manipulate the race of the applicant, the resume included the applicant's name in bold at the top of the page. To represent a Black applicant, the name on the resume was "Jamal Howard". To represent a White applicant, the name on the resume was "Peter Allen". Aside from the names, the resumes were identical.

Dependent Measures. After reviewing the applicant's resume, participants were asked to evaluate the applicant. First participants completed a short scale rating the extent to which they agreed or disagreed (on a 6-point scale from '*strongly disagree*' to '*strongly agree*') that the applicant was 'qualified', 'well suited for the job', 'deserving of the job', and 'a high-quality applicant'. Next participants were asked what starting salary they would offer the applicant if they decided to hire them. Participants had to select a salary within the range provided in the job description (\$150,00.00-\$220,000.00 for the

High Status applicant and \$7.00-\$13.00 for the Low Status applicant). Then participants were asked to provide an overall grade for the applicant on a scale of 0 to 100 with zero representing the lowest possible grade.

To create one overall evaluation index, the first four items specifically measuring the extent to which the applicant was qualified for the job, were averaged together to create a measure of qualification, which was then standardized. The salaries provided were also standardized, as was the general grade provided. The three z-score variables showed sufficient reliability ($\alpha = .78$), so they were averaged together to create the Overall Evaluation variable that ranged from -1 to 1.

Results

I first conducted an ANOVA for the effect of the scarcity condition on the perceived job scarcity. The manipulation was successful, $F(1,125) = 5.33, p < .05$, partial $\eta^2 = .04$. Participants in the high scarcity condition judged the job to be more of a scarce resource ($M = 4.64, SD = 1.12$) compared to participants in the low scarcity condition ($M = 4.15, SD = 1.28$).

As a test of Hypothesis 2, I conducted a 2(Target Race) x 2(Target Status) x 2(Job Scarcity) x 2(Sample) ANOVA on the Overall Evaluation variable. In general support of Hypothesis 2, there was a significant three-way interaction, $F(1,111) = 4.39, p < .05$, partial $\eta^2 = .04$ (See Figure 2). As predicted, participants who were told there were 287 applicants (High Job Scarcity) rated the High Status Black applicant significantly lower ($M = -0.66, SD = 1.04$) than the Low Status Black applicant ($M = 0.27, SD = 0.51$), $F(1,111) = 4.02, p < .05$, partial $\eta^2 = .04$. Participants who were told that there were 3 applicants (Low Job Scarcity), however, rated the High Status Black applicant only

slightly higher ($M = 0.34$, $SD = 0.50$) than the Low Status Black applicant ($M = 0.29$, $SD = 0.57$), $p > .05$. A somewhat different pattern emerged for the White applicant. For participants in the condition with 287 applicants (High Job Scarcity), the High Status White applicant was evaluated slightly lower ($M = 0.05$, $SD = 0.78$) compared to the Low Status White applicant ($M = 0.17$, $SD = 0.64$), $p > .05$, whereas in condition with 3 applicants (Low Job Scarcity), the High Status White applicant was evaluated significantly more negatively ($M = -0.36$, $SD = 0.98$) compared to the Low Status applicant ($M = 0.30$, $SD = 0.60$), $F(1,111) = 6.95$, $p < .05$, partial $\eta^2 = .06$.

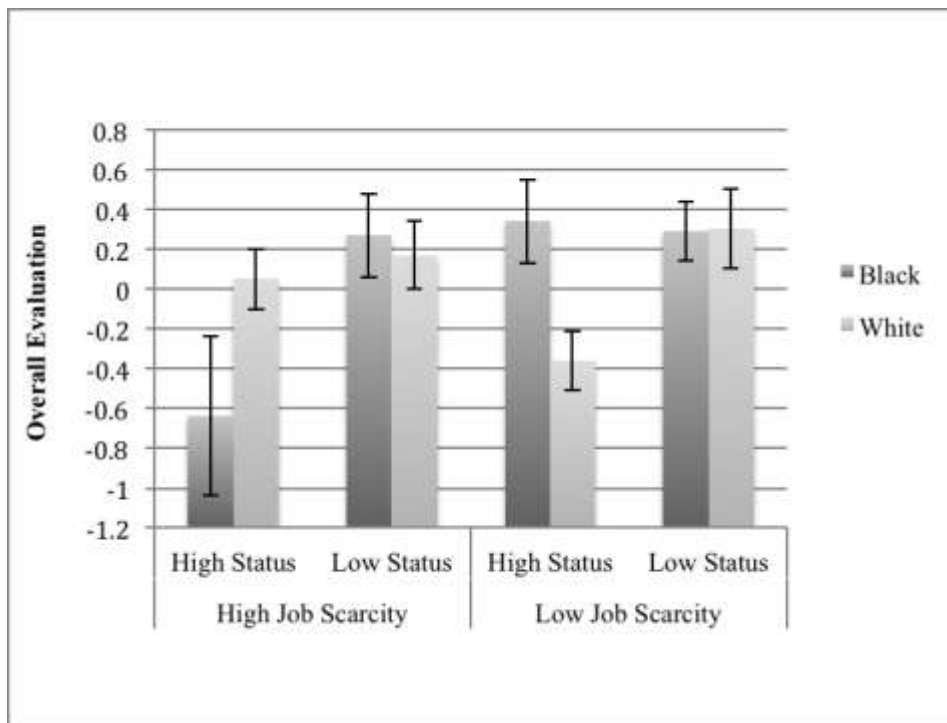


Figure 2. Target Status x Job Scarcity x Target Race Interaction (Study 1a). Overall evaluations of the High Status Black target were significantly lower under conditions of high (vs. low) job scarcity. Under conditions of high job scarcity, overall evaluations were significantly lower for the High (vs. Low) Status Black target.

Further follow-up comparisons revealed that ratings of the High Status Black applicant in the 287 applicant condition (High Job Scarcity) were significantly lower than

ratings of the High Status Black applicant in the 3 applicant condition (Low Job Scarcity), $F(1,111) = 4.64, p < .05$, partial $\eta^2 = .04$. Although the High Status White applicant was evaluated more favorably than the High Status Black applicant in the 287 applicant condition (High Job Scarcity), this difference was only trending toward significance, $F(1,111) = 2.60, p = .11$, partial $\eta^2 = .02$. The relative preference for the High Status Black applicant over the High Status White applicant in the 3 applicant condition (Low Job Scarcity) was significant, $F(1,111) = 7.32, p < .01$, partial $\eta^2 = .04$. All other comparisons were nonsignificant, $ps > .05$.

There was also a significant main effect for Target Status, $F(1,111) = 5.15, p < .05$, partial $\eta^2 = .04$, such that High Status applicants were evaluated more negatively ($M = -0.15, SD = 0.87$) than Low Status applicants ($M = 0.27, SD = 0.58$). There were no other meaningful significant main effects or interactions.¹ These findings lend good support to Hypothesis 2; in the High Job Scarcity condition, High Status Blacks were discriminated against relative to Low Status Blacks, and relative to High Status Whites.

Discussion

Study 1a provided partial support for Hypothesis 2. In line with my prediction, under conditions of high job scarcity where participants were told there were 287 applicants applying for 3 positions, participants discriminated against the High Status Black applicant relative to the Low Status Black applicant. Furthermore, evaluations of the High Status Black applicant were significantly less favorable in the high (vs. low)

¹ There was a significant scarcity x sample interaction, $F(1,111) = 4.40, p < .05$, partial $\eta^2 = .04$. University of Maryland participants demonstrated a preference for applicants in the low scarcity condition ($M = 0.17, SD = 0.76$) relative to the high scarcity condition ($M = -0.39, SD = 0.68$), whereas Mechanical Turk participants demonstrated a preference for applicants in the high scarcity condition ($M = 0.31, SD = 0.55$) relative to the low scarcity condition ($M = 0.12, SD = 0.91$).

scarcity condition. Although participants evaluated the High Status Black applicant lower than the High Status White applicant in the high scarcity condition, this difference was only marginally significant. Thus, I cannot conclude that the High Status Black target was discriminated against relative to the High Status White target in this condition.

Although the above patterns were generally consistent with Hypothesis 2, there were some unexpected findings in Study 1a. Contrary to my predictions, participants evaluated the High Status White applicant significantly worse than the High Status Black applicant in the low scarcity condition. This pattern was unexpected, particularly because the evaluation of the High Status White applicant in this condition was lower than the other evaluations in the low scarcity condition (i.e. the High Status Black applicant, the Low Status Black applicant, and the Low Status White applicant), and was at similar level as the High Status Black applicant in the high scarcity condition. Thus, participants appear to have penalized the High Status White applicant who applied for a non-competitive job. This finding may be due to White participants' expectations regarding the types of positions that High Status Whites should fill. That is, participants may have had expectations that Whites should only fill more competitive, or desirable, positions. A White applicant applying for a job that other applicants did not desire may have signaled some level of deficiency in the applicant.

My predictions regarding the evaluations of Low Status Blacks in the low scarcity condition were also incorrect. I expected that Low Status Blacks would be devalued in this non-threatening condition, relative to Low Status Whites, because their negative stereotypes would be salient. However, there was no significant difference between evaluations of the Low Status White and Black applicant in either scarcity condition.

This finding may be better explained by Esses et al.'s (1998) arguments about the relation between threat domain and functionality of discrimination. I demonstrated in Pilot Study 1 that Low Status Blacks are associated with the criminality traits, but are not associated with education-related traits. Participants may not have discriminated against the Low Status Black applicant because it would not have been functional to do so. If Esses et al.'s argument is correct, then Low Status Blacks should only face discrimination in domains in which they pose a specific threat (e.g. a physical safety domain).

Although the results of Study 1a are promising, there are several limitations. For one, although the expected 3-way Target Race x Target Status x Job Scarcity interaction was significant and demonstrated increased discrimination towards the High (vs. Low) Status black applicant under conditions of economic resource threat, the difference in evaluations of the High Status Black and White applicant were only marginally significant. Because it is important to show that High Status Blacks face discrimination in economic resource-threatening contexts relative to both Low Status Blacks and High Status Whites, Study 1b was designed to attempt to replicate the effects observed in Study 1a.

A serious limitation of Study 1a is that participants were selected through two different populations, and were compensated in three different ways. Although the sample did not interact with race, status, or the predicted 3-way interaction, the sample variable did interact with the scarcity variable, such that student participants appeared to devalue applicants in the high scarcity condition.

Finally, a large number of participants were excluded for incorrectly guessing the race and gender of the job applicant in Study 1a. The race manipulation may have been

too subtle thus participants may have overlooked it. Furthermore, there may have been systematic differences between the people who correctly and incorrectly guessed the applicant's race and gender. Study 1b addressed this issue and provided a stronger manipulation of the applicant's race.

Chapter 5: Study 1b

Methods

Participants and Design

Two hundred ninety White participants were recruited through MTurk, and completed the study online in exchange for \$0.20. All participants were located in the US. Of the recruited participants, 13 were excluded for guessing that the hypothesis was examining the interaction of race and status. Thirty-five participants were further excluded for guessing that the incorrect gender of the applicant. In the remaining sample, 54 participants were further excluded for guessing the incorrect race of the applicant they viewed. This resulted in a final sample of 188 participants (115 male and 73 female) ranging in age from 18 to 66 ($M = 30.44$, $SD = 12.21$).

Study 1b employed a 2(Target Race: Black, White) x 2(Target Status: High, Low) x 2(Job Scarcity: High, Low) between-subjects design.

Procedures

All participants completed the study online from remote locations. Consent was gained online as the first page of the survey. The procedures for Study 1b were identical to those in Study 1a for Mechanical Turk participants; the only task that participants completed was the hiring task.

Materials

Race Manipulation. The materials used for Study 1b were identical to those used in Study 1a except for a few minor changes. One of those changes was increasing the salience of the applicant's race. To increase the likelihood that participants would

assume that the applicant designed to appear Black was in fact Black, all resumes included an additional section of the resume labeled “Association Memberships”. In this section, the resume for the High Status White applicant’s resume listed the ‘American Marketing Association’ and the ‘Association for Business Management Professionals’ whereas the High Status Black applicant’s resume listed the ‘American Marketing Association’ and the ‘Association for Black Business Management Professionals’. In the Low Status condition, the White applicant’s resume listed the ‘American Service Association’ and the ‘Association for Restaurant and Food Service Workers’, whereas the Black applicant’s resume listed the ‘American Service Association’ and the ‘Association for Black Restaurant and Food Service Workers’.

To further improve the race manipulation, the names designed to represent the Black and White applicants were pre-tested. Twenty-seven participants were recruited through Amazon Mechanical Turk and were compensated \$.05 for participation. Participants were presented with a list of 12 names, and for each name they were asked to rate, on a scale of 0 to 100, how likely or unlikely it was that the name belonged to a White person. Then for the same name they were asked to rate how likely or unlikely it was that the name belonged to a Black person. The name ‘DeShawn Alexander’ was chosen to represent the Black applicant because this name had the lowest likelihood of belonging to a White person ($M = 13.41$, $SD = 20.61$) and the highest likelihood of belonging to a Black person ($M = 88.11$, $SD = 15.84$). The name ‘Hunter Moore’ was chosen to represent the White applicant because this name had the highest likelihood of belonging to a White person ($M = 82.93$, $SD = 14.83$) and the lowest likelihood of belonging to a Black person ($M = 15.52$, $SD = 17.17$).

Dependent Measure. The dependent measure was computed in the exact same fashion as in Study 1a. The reliability for the three standardized variables was sufficient ($\alpha = .75$). Therefore, the three types of ratings were averaged together to produce the Overall Evaluation variable.

Results

Before testing Hypothesis 2, an ANOVA was conducted to examine the effect of the scarcity manipulation on the perceived job scarcity. The manipulation was successful, $F(1,186) = 14.79, p < .001$, partial $\eta^2 = .07$. Participants in the high scarcity condition judged the job to be more of a scarce resource ($M = 4.65, SD = 1.06$) than did participants in the low scarcity condition ($M = 3.98, SD = 1.28$).

To test Hypothesis 2, I conducted a 2(Target Race: Black, White) x 2(Target Status: High, Low) x 2(Job Scarcity: High, Low) ANOVA with the Overall Evaluation variable as the dependent measure. The predicted 3-way interaction was not significant, $p > .05$. However, in partial support of my hypothesis, there was a significant Target Race x Target Status interaction ($F(1,180) = 5.55, p < .05$, partial $\eta^2 = .03$; see Figure 3), such that participants evaluated the High Status Black applicant significantly less favorably ($M = -0.15, SD = 0.88$) than the Low Status Black applicant ($M = 0.37, SD = 0.78; F(1,180) = 10.37, p > .05$, partial $\eta^2 = .05$), but evaluated the High Status White applicant ($M = 0.17, SD = 0.61$) only slightly more favorably than the Low Status White applicant ($M = 0.14, SD = 0.75$), $p < .05$. Further planned comparisons revealed that participants evaluated the High Status Black applicant significantly less favorably than the High Status White applicant ($F(1,180) = 4.55, p < .05$, partial $\eta^2 = .03$), but evaluated the Low Status Black applicant similarly to the Low Status White applicant, $p > .05$.

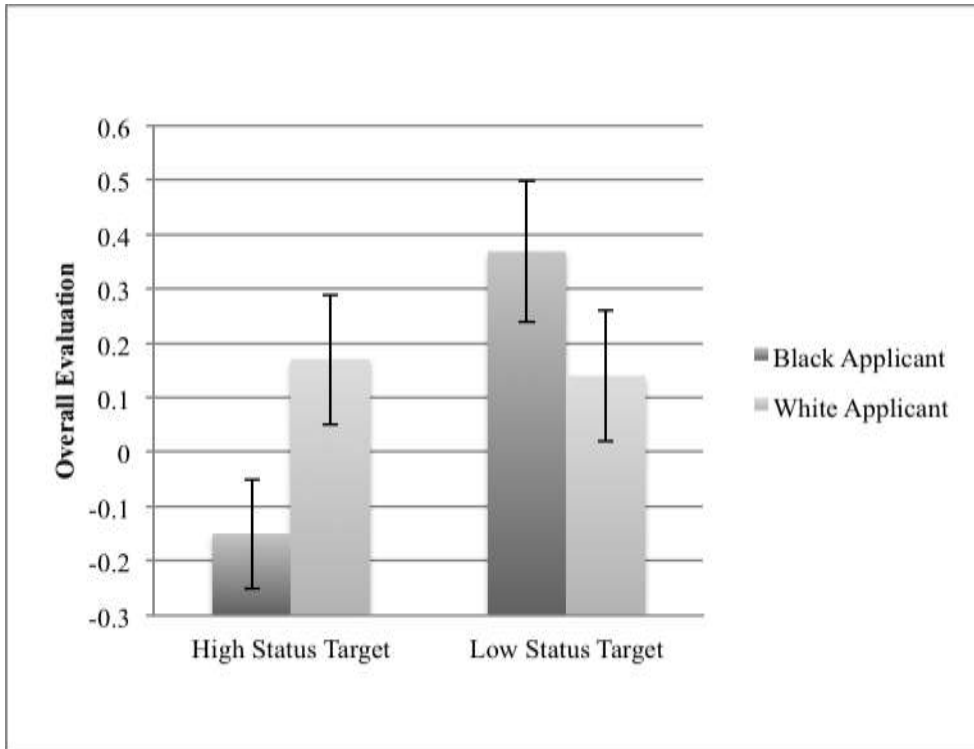


Figure 3. Target Status x Target Race Interaction (Study 1b). Participants rated the High Status Black target significantly lower than the Low Status Black target, but rated the high and Low Status White targets equivalently.

As in Study 1a, there was also a significant main effect for applicant status ($F(1,180) = 4.44, p < .05, \text{partial } \eta^2 = .03$), such that the Low Status applicant was evaluated more favorably ($M = 0.26, SD = 0.77$) than the High Status applicant ($M = 0.01, SD = 0.79$). Thus, these findings do not directly replicate the findings of Study 1a, but do lend general support to my argument that in certain contexts (e.g. job-related contexts), High Status Blacks face increased discrimination relative to Low Status Blacks.

Discussion

Study 1b employed a stronger race manipulation than Study 1a; however Study 1b did not replicate the predicted 3-way Target Race x Target Status x Job Scarcity

interaction. It is unclear why only the 2-way Target Race x Target Status interaction achieved significance, as the sample size was sufficiently large. The scarcity manipulation was effective in altering participants' perceptions of the competitiveness of the job. However, perceptions of job competitiveness may have impacted the participants in Study 1a and Study 1b to different degrees. Study 1a likely had a higher proportion of younger student participants, compared to Study 1b where the mean participant age was around 30. The younger student participants may be on the job market, or thinking about going on the job market, such that cues signaling job scarcity were particularly salient to them. Indeed, there was a significant Job Scarcity x Sample interaction in Study 1a, such that student participants evaluated both applicants in the high scarcity condition less favorably than those in the low job scarcity condition, and less favorably than MTurk participants' evaluations of applicants in both scarcity conditions. Thus, it may be that the high job scarcity cues did not produce greater levels of threat of the MTurk participants. Given the significant Target Race x Target Status interaction in Study 1b, it is possible that MTurk participants felt more threatened by the High Status Black target in general, and that information about a less competitive job did not decrease these feelings of threat.

Although study 1b did not replicate the predicted 3-way Target Race x Target Status x Job Scarcity interaction, it did demonstrate support for my general argument that in job-related contexts, High Status Blacks may face increased discrimination relative to Low Status Blacks. In fact, in Study 1b, as in Study 1a, the High Status Black applicant was the only Black applicant to face discrimination relative to the White applicants, as evaluations of the Low Status Black applicant were not significantly different from

evaluations of Low Status White applicants. Thus, it does appear that High Status Blacks are associated with a particular level of job-related threat that is not present for Low Status Blacks. Again, this finding is consistent with Esses and colleagues' (1998) argument that discrimination often serves the specific purpose of undermining the performance of an outgroup competitor, when the outgroup competitor poses a realistic threat to the resource.

Together, Studies 1a and 1b provide strong evidence that High Status Blacks face higher levels of discrimination in work-related contexts relative to Low Status Blacks or High Status Whites. However, because the scarcity manipulation was only successful in increasing discrimination against High Status Blacks in Study 1a (and not in Study 1b), it is not clear what psychological mechanism lead to this increased discrimination against High Status Blacks in the employment contexts.

Study 2 was designed to replicate this targeted discrimination of High Status Blacks in a different work-related context, and to further explore the underlying psychological mechanism driving this effect. Studies 1a and 1b manipulated target status by using an entirely different job description and resume for the high (vs. low) status target. To rule out the possibility that something specific to the High or Low Status position or resume caused the observed effects, Study 2 manipulated target status by changing perceptions of the target, while the actual target remained the same across conditions. Study 2 also employed a more direct manipulation of economic resource threat, as an additional test of Hypothesis 2, and included a measure of Ethnic Identity to rule out the possibility that the observed effects are due to heightened Ethnic Identities. Finally, Study 2 also provided a test of Hypothesis 3, regarding the specific functionality

of discrimination, and a test of Hypothesis 4, regarding the role of expressed Zero-Sum Beliefs in predicting discrimination.

Chapter 6: Study 2

Study 2 was designed to conceptually replicate the discrimination effect found in Studies 1a and 1b and to test Hypothesis 2 with a more direct manipulation of economic resource scarcity. Study 2 was also designed to rule out the possibility that participants would discriminate against High Status Blacks under any threat conditions, rather than under specifically economic resource-related threat conditions. I also measured Ethnic Identity (Phinney, 1992) in Study 2 as a control variable, to rule out the possibility that the observed effects are simply due to ingroup favoritism.

Study 2 tests Hypothesis 3, which predicts that participants will only discriminate against High Status Blacks when it is functional to do so. Specifically, I expected that under conditions of economic resource threat, participants would be more likely to discriminate against the High Status target if the discrimination provides the opportunity to undermine the target's success in the resource-relevant (i.e. job) domain.

Study 2 further tests Hypothesis 4, which predicts that after viewing a Black employee in a high status position under conditions of economic resource threat, White participants will feel that the social hierarchies are shifting in a manner characterized by zero-sum outcomes, which will subsequently increase discrimination against the employee. That is, I expected Zero-Sum Beliefs about the status hierarchy to mediate the relationship between threats to economic resources and discrimination against High Status Blacks *because* discrimination in this context would be functional. I did not expect Zero-Sum Beliefs to alter evaluations of High Status Blacks under conditions of threat unrelated to economic resources, because if resources are not perceived to be threatened, then Zero-Sum Beliefs should be irrelevant. Similarly, I expected that Zero-

Sum Beliefs would have no impact on evaluations of Low Status Blacks under either threat condition, as these targets should not threaten the social status hierarchy.

Participants in Study 2 signed up to participate in a customer service study, but upon arriving in the lab, they were asked to participate in an additional study before beginning the one for which they had signed up. In the first part of the study, they were primed with either economic resource-relevant threats or economic resource-irrelevant threats. As part of the second (supposedly unrelated) study, participants watched a video of a hospital employee demonstrating customer service skills. Following the video, participants were asked to provide one evaluation of the employee that the employee's supervisor would see, and then to provide an additional evaluation that only the researchers would have access to. These two types of evaluations served as the manipulation of the discrimination domain. The evaluations to which the employee's supervisor would have access were designed to create a sense that discrimination could be functional if the participant's goal was to undermine the employee's success. Discrimination on the questions that only researchers would have access to would not be functional, as it would not impact outcomes for the employee.

I predicted that in the economic resource-relevant threat condition, the higher (vs. lower) status Black employee would be evaluated more negatively, but that in the resource-irrelevant threat condition, the lower (vs. higher) status Black employee would be evaluated more negatively (Hypothesis 2). I also expected that Zero-Sum Beliefs would mediate the discrimination patterns against the upper status Black employee in the resource-relevant threat condition only (Hypothesis 4). Furthermore, I expected the above pattern to only present in the evaluations for which participants believed the

employee's supervisor would have access to (Hypothesis 3). It should not be functional to discriminate against the higher (vs. lower) status employee on the questions that only researchers would have access too; thus I predicted that there would be no differences across status or threat conditions on these evaluations.

Methods

Participants and Design

Seventy-nine White participants were recruited through the University of Maryland subject pool and participated in exchange for course credit or \$5.00. One participant was excluded for guessing that the study hypothesis related to the interaction of race and social status. None of the participants expressed suspicion about the two parts of the study being related. Thus, the remaining sample was 78 White participants (30 male and 48 female) ranging in age from 18 to 22 ($M = 19.67$, $SD = 1.25$). Gender produced no significant main effects or interactions, so it is not mentioned further.

The study employed a 2(Threat Type: Resource-Relevant, Resource-Irrelevant) x 2(Target Status: High, Low) x 2(Discrimination Functionality: Functional, Not Functional) mixed design with the last variable measured within-subjects. Zero-Sum Beliefs and Ethnic Identity were also included as measured variables, and a Version variable was included to control for order effects. To simplify the design, I chose not to manipulate race in Study 2 because Studies 1a and 1b already demonstrated the relative discrimination of High Status Blacks relative to High Status Whites.

Procedures

Upon arriving at the lab, participants were greeted by an experimenter who took their name and then asked them to wait in the hall while the study was set up. After a few minutes, a second experimenter went to the participant in the hall and casually informed them that the experimenter for the study they signed up for was having technical difficulties that might take a few minutes to resolve. They then casually asked if the participant would mind completing their quick study while they waited.

After agreeing to participate in the second experimenter's study, the participant was brought to a small room labeled 'Current Events Study' in the back of the lab. On the way, they passed the first experimenter who was in a small room working on the internet browser settings. Once in the lab room, participants were given a consent form, and were then told that the study was about current events. They were given a paper packet, and asked to read all instructions carefully. This 'current events' study served as the threat prime manipulation, so participants were told they would be asked a series of questions related to one recent news item. Participants were then prompted to either write about how climate change would impact their lives in the future, or about how the economic recession would impact their lives in the future. When participants had completed the current events survey, the first experimenter arrived and informed them that the technical issues had been resolved. To maintain the cover story, the second experimenter then provided a short debriefing explaining the current events study was simply about college students' impressions of major news events.

The participant was brought to a second room that was labeled 'Customer Service Movies', and asked to sign a second consent form. At this point the researcher explained

that the entire study would be completed on the computer and left the room. Participants were introduced to the study as a collaboration between a hospital and the research team. Participants were told that the hospital was planning to make a promotional video, and that they wanted to feature real employees in the video. They were told that many employees had submitted audition videos, and that their task was to evaluate one of the videos. Participants were further instructed that the employees had to be ‘customer service naturals’ and that they should pay attention to the employee’s demeanor and friendliness.

After watching the video of the employee, participants responded to two sets of questions about the employee’s characteristics. At this point, participants responded to a series of questions relating to their own ‘personality as a consumer’. These questions contained the Zero-Sum Beliefs scale and the Ethnic Identity scale (Phinney, 1992). After completing these scales, participants were asked to provide demographic information. At this point participants were probed for suspicion and then fully debriefed.

Materials

Threat Manipulations. Participants assigned to the Resource-relevant threat condition were asked to respond to several questions about how unemployment and competition for jobs would impact their lives. The specific prompts were adapted from Butz and Yogeeswaran (2010) who showed that it produced discrimination against Asians.

The US is currently in the middle of an economic downturn. Please describe how this economic downturn has impacted the availability of jobs. In what ways has the downturn made unemployment worse? How has the current economic climate made it more difficult for recent college graduates to find employment?

Economic analysts have recently found that there is much more competition for jobs today than there was several years ago. How does this competition impact the future for college students like you?

Participants assigned to the resource-unrelated threat condition were asked to respond to several questions about how climate change would impact their lives. This specific prompt was also adapted from Butz and Yogeewaran (2010), who showed that it was not associated with discrimination against Asians.

In the last several years, scientists have reached a consensus about climate change and the future of our planet. Climate change will impact most aspects of life as we know it. How will climate change lower the quality of your life in future? Climate change is increasing the number of severe weather patterns, so in the future we will experience many more floods, tornados, and hurricanes. How might these severe and damaging storms impact your life in the future?

Status Manipulations. Participants watched a three minute and 20 second video of a Black man reading a script about hospital services. In the video, the employee provided general information about the hospital and its services. The demeanor and attitude of the employee was neutral. The man was dressed in hospital scrubs and was standing outside of a hospital. To manipulate the employee's status, participants were informed that the employee was either a Radiologist or a member of the hospital cleaning staff. A banner with the employee's name and position appeared at the bottom of the screen during the entire video. In the High Status condition, the banner read "Dr. Darryl Howard, Radiology" whereas in the Low Status condition, the banner read "Darryl Howard, Cleaning Staff". Aside from the banners, the videos were identical.

Measures of Discrimination. To manipulate the functionality of discrimination, participants provided two sets of evaluations of the employee's performance and characteristics. To provide an opportunity for functional discrimination, participants

were instructed that the employee's supervisor would have access to their responses on the first set of questions. To provide an opportunity for non-functional discrimination, participants were instructed that the employee's supervisor would not have access to their responses on the second set of questions.

The two sets of questions were quite similar to allow for comparisons. The first set of questions (Functional Discrimination) contained five items related to the employee's personality and demeanor, to which participants rated the extent to which they agreed or disagreed (on a 6-point scale from '*strongly disagree*' to '*strongly agree*') that the characteristics described the employee. The first set of questions also contained a general customer service evaluation where participants were asked to assign the employee a grade between 0 and 100 where 100 would represent fantastic customer service (Customer Service Grade). The second set of questions (Not Functional Discrimination) simply contained five more items related to the employee's personality and demeanor, to which participants rated the extent to which they agreed or disagreed (on a 6-point scale from '*strongly disagree*' to '*strongly agree*') that the characteristics described the employee.

To control for any differences due to the specific items used in the first and second set, participants were randomly assigned to complete one of two versions of the evaluation. For participants assigned to complete the first version of the survey, the Functional Discrimination questions contained the following adjectives: Welcoming, Friendly, Inattentive (reverse-scored), Hard working, Negative (reverse-scored). The Non-Functional Discrimination questions contained the following adjectives: Bored (reverse-scored), Caring, Enthusiastic, Detail-oriented, and Responsive. For participants

assigned to complete the second version of the survey, the items in the two sets were reversed.

I computed reliability scores for the Functional Discrimination items and the Not Functional Discrimination items separately by version, as the items participants saw in each version as domain-relevant or domain-irrelevant were different. For participants assigned to Version 1, the Functional Discrimination items initially had low reliability ($\alpha = .63$). The fourth scale item (Hard Working) was removed and reliability was greatly improved ($\alpha = .89$). The four remaining items were averaged together to create the Functional Discrimination variable for these participants. The Not Functional Discrimination scale items achieved acceptable reliability ($\alpha = .88$), so all five items were averaged together to create the Not Functional Discrimination variable for these participants. For participants assigned to Version 2, the domain-relevant items showed adequate reliability ($\alpha = .72$), however the third scale item (Enthusiastic) was removed to improve reliability ($\alpha = .78$). The four remaining scale items were averaged together to create the domain-relevant evaluation variable for these participants. The domain-irrelevant items showed good reliability ($\alpha = .84$) and were averaged together to create the domain-irrelevant evaluation variable.

Zero-Sum Beliefs. To measure participants' Zero-Sum Beliefs regarding a shifting status hierarchy, participants completed a scale that was adapted from Esses, et al.'s (1998) scale measuring perceptions of Zero-Sum Beliefs regarding immigrants in Canada (see Appendix E). The original scale included items such as "More immigrants in positions of power means fewer opportunities for Canadians already living here". These items were adapted to measure Zero-Sum Beliefs about Black-White relations (e.g.

“More Blacks in positions of power means fewer opportunities for Whites”). The scale contained 11 items. Participants were asked to rate the extent to which they agreed or disagreed (on a 6-point scale from ‘*strongly disagree*’ to ‘*strongly agree*’) with each item. The adapted scale showed good reliability ($\alpha = .85$).

Ethnic Identity. Ethnic Identity was assessed using the Multigroup Ethnic Identity Measure (Phinney, 1992). Participants were asked to rate their agreement with 12 statements on a 6-point scale from ‘*strongly disagree*’ to ‘*strongly agree*’. The scale showed good reliability ($\alpha = .90$).

Results

Threat Type

As an additional test of Hypothesis 2, I computed a 2(Threat Type) x 2(Target Status) ANOVA on the Customer Service Grade variable. The predicted Threat Type x Target Status interaction was nonsignificant, $p > .05$, however there was a significant main effect for Target Status, $F(1,74) = 8.48$, $p < .01$, partial $\eta^2 = .10$. The employee presented as a physician was evaluated significantly more negatively across both threat conditions ($M = 54.47$, $SD = 25.01$) than the employee presented as a cleaning staff person ($M = 69.93$, $SD = 19.30$).

Threat Type and Discrimination Functionality

To test Hypothesis 3, I conducted a 2(Threat Type) x 2(Target Status) x 2(Discrimination Functionality) x 2(Version) repeated-measures ANOVA with repeated measures on the Discrimination Functionality factor. The predicted Threat Type x Target Status x Discrimination Functionality interaction was not significant, $p > .05$. However,

there was a significant Target Status x Threat Type interaction, $F(1,70) = 4.64, p < .05$, partial $\eta^2 = .06$. Contrary to my predictions, planned comparisons revealed that participants in the Economic (Resource-Relevant) threat condition evaluated the target presented as a physician only slightly more negatively ($M = 3.69, SD = 1.00$) than the target presented as a cleaning staff member ($M = 3.76, SD = 0.86$), $p > .05$, whereas participants in the Climate Change (Resource-Irrelevant) threat condition evaluated the target framed as a physician significantly more negatively ($M = 3.48, SD = 1.04$) than the target framed as a cleaning staff member ($M = 4.47, SD = 0.84$), $F(1,70) = 9.48, p < .05$, partial $\eta^2 = .12$. Furthermore, participants evaluated the High Status target similarly across both threat conditions ($ps > .05$), but evaluated the Low Status Target significantly less favorably in the Economic (Resource-Relevant) threat condition compared to the Climate Change (Resource-Irrelevant), $F(1,70) = 3.69, p < .05$, partial $\eta^2 = .06$.

Again there was a significant main effect for Target Status, $F(1,70) = 6.30, p < .05$, partial $\eta^2 = .08$, such that participants who were told the target was a physician evaluated his customer service skills more negatively ($M = 3.59, SD = 1.02$) compared to participants who were told the target was a member of the cleaning staff ($M = 4.12, SD = 0.89$). There was also a significant main effect for the Discrimination Functionality, such that evaluations that were supposedly visible to supervisors were more positive ($M = 4.03, SD = 0.97$) compared to evaluations supervisors would not have access to ($M = 3.68, SD = 0.97$). There were no other meaningful significant interactions or main effects.² Thus, Hypothesis 3 was not supported, and was in fact in the opposite direction.

² There was a significant Discrimination Functionality X Version interaction, $F(1,70) = 22.71, p < .001$, partial $\eta^2 = .25$, but this effect is a nuisance effect and didn't interact with the status or prime variables. Participants assigned to Version 1 rated the target higher on the Functional Discrimination questions ($M = 4.24, SD = 1.12$) compared to the Non-Functional Discrimination questions, ($M = 3.54, SD = 1.07$),

Zero-Sum Beliefs

In Hypothesis 4 I predicted that Zero-Sum Beliefs would mediate the relationship between Threat Type and Target Status, and overall evaluation ratings. However, neither the main effects of Threat Type nor target status, nor the Threat Type x Target Status interaction on Zero-Sum Beliefs were significant, $ps > .05$. Therefore, I explored the possibility that Zero-Sum Beliefs operated independently of Target Status or Threat Type and tested its effect as a moderator. A moderating effect of Zero-Sum Beliefs would also qualify the unexpected Threat Type x Target Status found in the previous analysis.

I tested the effect of the 3-way Threat Type x Target Status x Zero-Sum Beliefs interaction on the same dependent measure for which I found a significant Threat Type x Target Status interaction above (the combined Functional and Not Functional Discrimination items). This variable was created by averaging together all Functional and Not Functional Discrimination items included in the above analysis. Again, reliability was first conducted separately for participants assigned to Version 1 and Version 2. For participants assigned to Version 1, the combined evaluation items included to create both variables showed good reliability as part of one scale ($\alpha = .93$). Similarly, for participants assigned to Version 2, the combined evaluation items included to create both variables showed good reliability as part of one scale ($\alpha = .89$).

To examine the potential moderating effect of Zero-Sum Beliefs on discrimination, I conducted a hierarchical multiple regression on the Combined Evaluation variable. The first model contained only main effects: Threat Type (effects coded; economic threat coded 1, climate change threat coded -1), Target Status (effects

whereas participants assigned to Version 2 rated the target the same on the Functional Discrimination questions ($M = 3.81, SD = .82$) and the Non-Functional Discrimination questions ($M = 3.81, SD = .83$).

coded; High Status target coded 1, Low Status target coded -1), and average Zero-Sum Beliefs (centered), controlling for the survey Version (effects coded; version 1 coded 1, version 2 coded -1). I added the 2-way interaction terms for Threat Type, Target Status, and Zero-Sum Beliefs in the second model. I added the 3-way interaction term for these variables in the third model. The third model containing the 3-way interaction term was significant, $R^2 = .20$, $F(8,69) = 2.21$, $p < .05$, and was the only significant model (Model 1 and Model 2 $ps > .05$). Model 3 also significantly improved prediction of evaluations beyond Model 2, $\Delta R^2 = .07$, $F(1,69) = 5.60$, $p < .05$ (All other effects are reported in Table 1).

Table 1

Summary of Hierarchical Regression Analysis of Threat Type x Target Status x ZSB on Overall Evaluation (Study 2; N = 78)

Variable	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
Threat Type	-0.05	0.10	-0.06	-0.08	0.10	-0.09	-0.10	0.10	-0.11
Status	0.23*	0.11	-0.25	-0.25*	0.11	-0.27	-0.25*	0.10	-0.27
ZSB	-0.26	0.16	-0.19	-0.22	0.16	-0.15	-0.33*	0.17	-0.23
Version	-0.08	0.10	-0.09	-0.06	0.10	-0.06	-0.10	0.10	-0.11
Threat Type x ZSB				-0.18	0.17	-0.13	-0.11	0.16	-0.07
Threat Type x Status				0.16	0.11	0.18	0.16	0.10	0.17
Status x ZSB				-0.06	0.17	-0.04	0.02	0.17	0.01
Threat Type x Status x ZSB							-0.39*	0.17	-0.28
R ²	.09			.14			.20		
R ² _{adj}	.04			.05			.11		
R ² _{change}	.09			.05			.07*		
Overall F	1.82			1.62			2.21*		
<i>df</i>	73			70			69		

Note: ZSB was centered at the mean.

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

In partial support of Hypothesis 4, the Threat Type x Target Status x Zero-Sum Beliefs interaction was significant, $\beta = -0.28$, $t(69) = -2.37$, $p < .05$ (see Figure 4). In line with my general expectations regarding the effect of Zero-Sum Beliefs, in the economic (Resource-Relevant) threat condition, stronger Zero-Sum Beliefs lead to more negative evaluations of the target presented as a physician, $B = -.82$, $t(69) = -2.60$, $p < .05$, but had no impact on evaluations of the target presented as a member of the cleaning staff, $p > .05$. Furthermore, in the climate change (Resource-Irrelevant) threat condition, Zero-Sum Beliefs had no impact on evaluations of the target presented as either physician or a cleaning staff member, $ps > .05$. Thus, although Zero-Sum Beliefs did not operate as a mediator, they did predict discrimination against the High Status target in the economic (Resource-Relevant) threat condition (and only in this condition), as I predicted in Hypothesis 4.

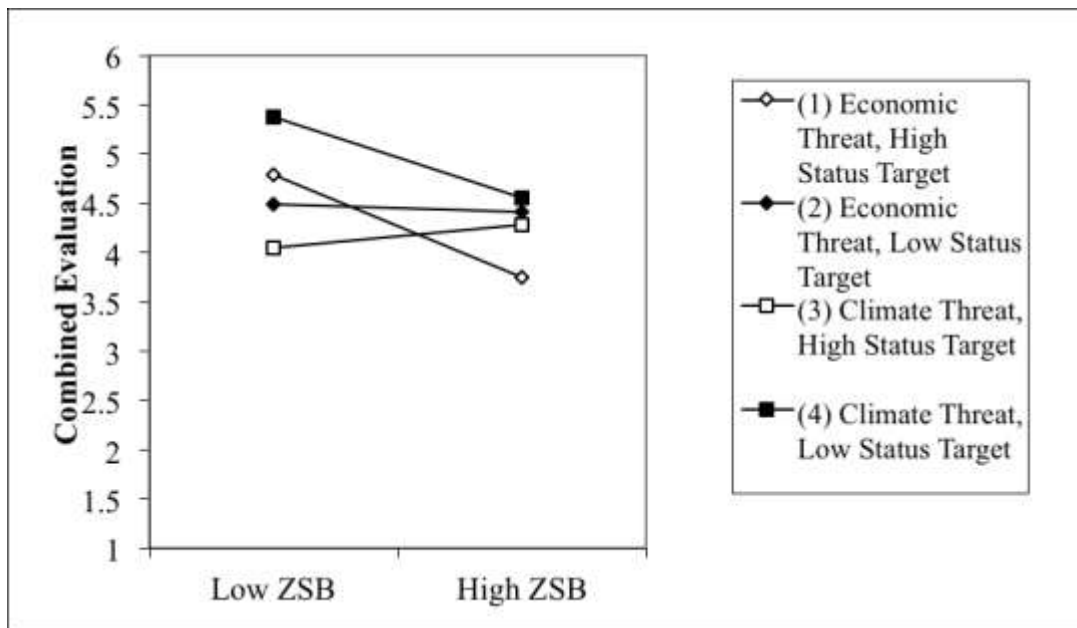


Figure 4. Zero-Sum Beliefs x Target Status x Threat Type Interaction on Combined Evaluation Scores (Study 2). Stronger Zero-Sum Beliefs lead to lower evaluations of the High Status target in the economic threat condition only. Stronger Zero-Sum Beliefs had no impact on evaluation scores of the Low Status

target in either condition, or the High Status target in the climate threat condition. ZSB is plotted one SD above and below the mean.

Further consistent with my predictions about the contexts in which High Status Blacks should face discrimination, slope difference tests revealed that the effect of zero-sum beliefs on evaluations of the High Status target in economic (Resource-Relevant) threat condition were significantly different from evaluations of the High Status Target in the climate change (Resource-Irrelevant) threat condition, $t(69) = -2.45, p < .05$. However, the effect of zero-sum beliefs on evaluations of the High Status target in the economic (Resource-Relevant) threat condition were only marginally significantly different from evaluations of the Low Status target in the same condition ($t(69) = -1.85, p = .07$), and were not significantly different from evaluations of the Low Status target in the climate change (Resource-Irrelevant) threat condition. All other slope differences were nonsignificant, $ps > .05$.

This hierarchical multiple regression analysis was repeated to examine the moderating effects of Zero-Sum Beliefs on the Customer Service Grade variable. Only the first model achieved significance, $R^2 = .13, F(4,77) = 2.71, p < .05$. The three-way Threat Type x Target Status x Zero-Sum Beliefs was not significant, $p > .05$. Only the main effect for target status was significant ($\beta = -.33, t(77) = -2.97, p < .05$), demonstrating that participants gave higher grades to the low (vs. high) status employee. Thus, although I did not find direct support for my prediction that discrimination against High Status Blacks is Functional (Hypothesis 3), I did partially support Hypothesis 4 in that participants with stronger Zero-Sum Beliefs only discriminated against High Status Blacks in the Economic (Resource-Relevant) Threat condition. All effects are reported in Table 2.

Table 2

Summary of Hierarchical Regression Analysis of Threat Type x Target Status x ZSB on Customer Service Grade (Study 2; N = 78)

Variable	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
Threat Type	1.28	2.63	0.05	0.92	2.69	0.04	0.93	2.72	0.04
Status	-7.93**	2.67	-0.33	-7.95**	2.71	-0.33	-7.95**	2.73	-0.34
ZSB	-5.28	4.12	-0.14	-5.12	4.24	-0.14	-5.06	4.48	-0.14
Version	-0.30	2.61	-0.01	0.28	2.67	0.01	0.31	2.74	0.01
Threat Type x ZSB				4.09	4.30	0.11	4.05	4.41	0.11
Threat Type x Status				2.16	2.73	0.09	2.16	2.75	0.09
Status x ZSB				-2.20	4.33	-0.06	-2.24	4.45	-0.06
Threat Type x Status x ZSB							0.22	4.49	0.01
R^2	.13			.15			.15		
R^2_{adj}	.08			.07			.05		
R^2_{change}	.13*			.02			.00		
Overall F	2.71*			1.80			1.55		
<i>df</i>	73			70			69		

Note: ZSB was centered at the mean.

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

Ethnic Identity

To determine whether Ethnic Identity influenced participants' levels of discrimination, I conducted three bivariate correlations between Ethnic Identity and each of the three dependent measures. All correlations were nonsignificant, $ps > .05$.

Discussion

Although Study 2 did not directly support my hypotheses, the findings were promising and somewhat consistent with my general conceptualizations of the effects of economic threat and Zero-Sum Beliefs on discrimination towards High Status Blacks. The test of Hypothesis 3, regarding the functionality of discrimination, was not supported, as there was no interaction between Target Status, Threat Type, and whether the supervisor would have access to the evaluation. This finding may be due to participants' motivations for consistency between their responses on the first set of questions and the second set of questions. A better test of this hypothesis would have asked for responses to questions that were different enough to allow participants to feel that an inconsistency among the sets of questions would be justifiable or expected. This could have been achieved by asking questions regarding two different aspects of performance (one job-related and one not job-related), or by using a different type of rating scale for each type of evaluation.

Study 2 did not find the predicted Threat Type x Target Status interaction on the general Customer Service Grade variable, however there was a significant Threat Type x Target Status x Zero-Sum Beliefs interaction on the Combined Evaluation variable. This three-way interaction with Zero-Sum Beliefs was particularly interesting, and can be thought of as qualifying the two-way Threat Type x Target Status interaction that was not

in the predicted direction. The three-way interaction provided partial support to Hypothesis 4. Although I predicted that Zero-Sum Beliefs would operate as a mediator, they in fact operated as a moderator. Expressed Zero-Sum Beliefs lead to less favorable evaluations of the target when participants were primed with a resource-relevant threat, and when the target was presented as high in status.

In Hypothesis 4, I predicted that under conditions of economic resource threat, participants exposed to a High Status Black target would have stronger Zero-Sum Beliefs, and that these Zero-Sum Beliefs would lead to increased discrimination against High Status Blacks. Participants' Zero-Sum Beliefs were not impacted by the threat type and the status of the target; however, as I expected, they did lead to discrimination against the High Status target when there was an economic threat. In line with my expectations, Zero-Sum Beliefs did not alter evaluations of High Status Blacks under conditions of threat unrelated to economic resources. If resources are not perceived as scarce or threatened, then Zero-Sum Beliefs should be irrelevant and should not predict discrimination (e.g. high Zero-Sum Beliefs may either create the perception that Blacks gain as Whites lose, or that Whites gain as Blacks lose).

Although these findings were promising, some patterns emerged that were not expected. The slope of the line indicating the effect of Zero-Sum Beliefs on evaluations of the Low Status Target in the climate change condition was not significantly different from zero; however this line was also not significantly different from the slope indicating the effect of Zero-Sum Beliefs on evaluations of the High Status Target in the economic threat condition. This finding indicates that Zero-Sum Beliefs operated similarly in the High Status-economic threat condition and the Low Status-climate change threat

condition. I did not make predictions regarding the effect of Zero-Sum Beliefs on evaluations of a Low Status Target under conditions of low economic resource scarcity, nor is this type of threat condition relevant to the components of IMGIC (Esses, et al., 1998). The specific scenario used in the climate change threat prime may shed light on this finding, and may have led participants to perceive other (non-economic) resources to be threatened, such that Low Status Blacks (or all Blacks) would be more of a threat to these resources if competition for resources was perceived in terms of Zero-Sum Outcomes.

The prime used in the climate change threat condition describes a potential increase in floods, tornados, and hurricanes in the future. It is possible that this prime signaled the scarcity of physical resources, or government aid resources. If participants perceived these types of resources to be scarce, and also were inclined to perceive competition over resources in terms of zero-sum outcomes, then Low Status Blacks may have been perceived as a threatening outgroup because it is a larger outgroup, and could therefore take up more resources. Future research should investigate the extent to which Zero-Sum Beliefs about competition over scarce resources predicts evaluations of Low Status Blacks under conditions of non-economic resource scarcity.

One potential limitation of Study 2 regards the use of a two-separate-studies paradigm. As all participants were Psychology students, it is possible that they were familiar with this type of procedure. Extra measures were taken to reduce any suspicion (e.g. using two different experimenters, two consent forms, a debriefing mid-way through the study, and two separate lab rooms), and no participants expressed suspicion when they were probed at the end of the study. Given that the primes used in the first part of

the study were not obviously related to the content of the second study, it is unlikely that participants figured out that the two parts of the study were related. However the probing took place verbally, so it is possible that participants did have suspicions but did not want to express them verbally to the researcher. Study 3a addressed this issue and used a written funnel debriefing procedure to probe for suspicion.

All evaluation measures used in Studies 1a, 1b, and 2 were all direct measures. It is possible that these measures were subject to social desirability concerns, and that the actual discrimination targeted at High Status Blacks would be stronger with a more indirect measure. Therefore, Study 3a included an indirect measure of discrimination. Study 3a also tested Hypothesis 5a and 5b, that perceived Zero-Sum Competition produces discrimination against high status Blacks (relative to a non-competitive context) whereas perceptions of Non-Zero-Sum Competition decrease discrimination against High Status Blacks (relative to a non-competitive condition).

Chapter 7: Study 3a

The purpose of Study 3a was to replicate the pattern of discrimination against high (vs. low) status Blacks that was demonstrated in Studies 1a, 1b, and 2. Study 3a was also designed to test Hypothesis 5a, that Whites are inclined to discriminate against high (vs. low) status Blacks when they believe competition over scarce resources to be characterized by zero-sum outcomes compared to non-competitive contexts. Study 3a also tested Hypothesis 5b, that Whites are inclined to judge high (vs. low) status Blacks favorably when they perceive competition over scarce resources to be characterized by non-zero-sum outcomes whereby both Blacks and Whites can make progress together, compared to non-competitive contexts. Therefore, Study 3a directly manipulated perceptions of competition for scarce resources as either characterized by zero-sum outcomes or by non-zero-sum outcomes. After being primed (or not) with a particular perception of competition for scarce resources, participants watched the same video used in Study 2 and were asked to evaluate the (High or Low Status) employee seen in the video. In addition to evaluating the employee directly, participants in Study 3a were also asked to provide an overall evaluation of the hospital physicians, and an overall evaluation of the hospital cleaning staff. These questions were designed to provide an indirect measure of discrimination towards the High Status (physician) and Low Status (cleaning staff) targets that would potentially be more sensitive to participants' tendencies to discriminate.

Study 3A also explored any moderating effects of IMS and EMS (Plant & Devine, 1998). These measures were included to demonstrate that any observed effects of increased discrimination towards high (vs. low) status Blacks are not due to general

inclinations towards prejudice against Blacks in general, but instead are in response to situation-specific threats. Again, Study 3A measured Ethnic Identity (Phinney, 1992) as a control, and also measured expressed Zero-Sum Beliefs as a manipulation check.

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Methods

Participants and Design

One hundred forty-one White University of Maryland students participated in the study in exchange for course credit or for \$5.00. Five participants were removed from the sample because they guessed that the study was examining the interaction of race and social status, six participants were removed because they failed to follow instructions, or because they knew one of the research assistants running the study, and 13 participants were removed for guessing that the first part of the study served as a prime for the second part of the study. The remaining 49 participants (18 male, 31 female) ranged in age from 18 to 41 ($M = 20.14$, $SD = 3.40$).

The study employed a 3(Competition Type: None, Zero-Sum, Non-Zero-Sum) x 2(Target Status: High, Low) between-subjects design. Ethnic Identity and IMS/EMS were measured as control variables, and Zero-Sum Beliefs were measured as a manipulation check.

Procedures

The procedures in Study 3a were identical to those in Study 2, except for a few small changes. During the ‘Current Events’ portion of the study, participants were given a newspaper article to read and a short survey of their knowledge of the topic. They were also instructed that they would have to complete a recall test after they completed the ‘Customer Service Videos’ portion of the study to test how their knowledge of the subject influenced their ability to recall the information in the article.

During the second ‘Customer Service Movies’ portion of the study, participants were not instructed that they would be asked to respond to two sets of evaluations, as I did not manipulate the functionality of discrimination in Study 3a. Instead, they were simply told that the supervisor would have access to their evaluation. Six questions were also added to Study 3a, and were framed as general impressions of different hospital services.

Upon completion of the evaluations of the employee and hospital, participants completed the Zero-Sum Beliefs scale, the Ethnic ID scale, and the IMS/EMS scale.

Materials

Manipulation of Competition Type. The manipulation of perceived Zero-Sum Competition, Non-Zero-Sum Competition, and No Competition was carried out through mock newspaper articles that participants were asked to carefully read. Each article was printed to look exactly like an article printed from the Washington Post website. The article designed to prime Zero-Sum Competition was titled “White Americans Lose Status as African Americans Gain Status,” and presented data from several sources indicating that Blacks are increasing their wealth, owning more property, and gaining

greater levels of education, at an increasing rate (see Appendix F). Data was also presented that Whites are losing wealth, less likely to own property, and achieving lower levels of education at the same rate. The article explained that because economic resources are scarce, as one group gains resources the other group necessarily loses resources. A graph accompanied the article that showed projections beyond the current year, such that Blacks would slightly surpass the status of Whites.

The article designed to prime non-Zero-Sum Competition was “White Americans and African Americans Gain Status Together” and was similar to the article priming Zero-Sum Competition, except that data that was presented showed that Blacks and Whites are both gaining status together (see Appendix G). The article explained that as one group gains resources, it helps the other group gain resources as well so that both groups increase in status simultaneously. A graph also accompanied this article with projections beyond the current year. These projections showed both Whites and Blacks increasing in social status, with Whites slightly higher in status than Blacks (so as not to suggest that Blacks would overcome Whites in terms of resources).

In the No Competition condition, the article was titled “Reality Show Domains Expanded” and discussed the different types of reality shows currently aired on television and the types of reality shows that will become popular in the future (see Appendix H). All three articles were similar in length and followed a similar format.

Measure of Discrimination. Participants were instructed that the evaluation ratings would be directly tied to the specific employee they watched in the video, and that the employee’s supervisor would have access to their ratings. Thus, these ratings should be considered as providing an opportunity for functional discrimination. A Direct

Evaluation variable was computed by averaging across the ten scale items presented immediately after participants watched the video. These were the same items used in Study 2 (in both sets of evaluations), and they showed good reliability ($\alpha = .88$). Again, a second variable was also included as a direct measure of the employee: participants were asked to provide an overall Customer Service Grade for the employee's customer service skills on a scale of 0 to 100.

To provide an indirect discrimination measure, after evaluating the employee's customer service skills, participants were asked to evaluate six specific aspects of the hospital itself (See Appendix I). Imbedded within this set of questions, one question related specifically to the quality of the hospital physicians ("I would feel confident about the diagnoses given by Sandline physicians"), and one question related specifically to the quality of the hospital cleaning staff ("The rooms at Sandline are probably clean and comfortable"). The Indirect Evaluation variable was computed from the set of hospital-related items, and was based on the status condition to which the participant was assigned. This variable provided a more indirect method of measuring impressions of the employee in the video, as the set of hospital-related questions were not framed as assessing impressions of the hospital in general rather than the employee specifically. For participants assigned to the High Status Target condition, the indirect evaluation variable was their rating of the hospital physicians. For participants assigned to the Low Status Target condition, the indirect evaluation variable was their rating of the hospital cleanliness.

Zero-Sum Beliefs, Ethnic Identity, and IMS/EMS. Again, participants completed the Ethnic Identity scale (Phinney, 1992), which achieved good reliability ($\alpha =$

.94) and the modified Zero-Sum Beliefs scale used in Study 2 (see Appendix E), which also achieved good reliability ($\alpha = .94$). Study 3a also included the IMS/EMS scale (Plant & Devine, 1998). The EMS and IMS subscales showed adequate reliability ($\alpha_{EMS} = .70$; $\alpha_{IMS} = .79$).

Results

Competition Type

Before testing my hypothesis, I conducted a one-way ANOVA of Competition Type on expressed Zero-Sum Beliefs as a manipulation check. There was a significant main effect for Competition Type on Zero-Sum Beliefs, $F(2,46) = 8.34, p < .001$, partial $\eta^2 = .27$, demonstrating that participants assigned to the Zero-Sum Competition condition had significantly higher Zero-Sum Beliefs ($M = 2.68, SD = 0.96$) compared to participants assigned to the Non-Zero-Sum Competition condition ($M = 1.92, SD = 0.72$; $t(46) = 4.05, p < .001$) condition and the No Competition condition ($M = 1.68, SD = 0.57$; $t(46) = -2.63, p < .05$). Thus, the manipulation of Zero-Sum Competition was successful. However, the manipulation of Non-Zero-Sum Competition was not successful, as participants in this condition did not demonstrate lower Zero-Sum Beliefs compared to the neutral control condition $p > .05$.

To test Hypothesis 5a and 5b, I conducted a 2(Target Status) x 3(Competition Type) x 2(Gender) MANOVA on the three dependent measures (Direct Evaluation, Customer Service Grade, Indirect Evaluation). The expected Target Status x Competition Type interaction was not significant any of the dependent variables ($ps > .05$), thus I was not able to support Hypothesis 5a or 5b. There was an unexpected main effect for Gender on the Indirect Evaluation variable, $F(1,37) = 4.55, p < .05$, partial $\eta^2 = .11$, such

that male participants evaluated the target more favorably ($M = 4.83, SD = 0.62$) compared to female participants ($M = 4.38, SD = 0.79$).

IMS/EMS

To determine whether IMS and EMS influenced participants' levels of discrimination, I conducted six bivariate correlations between IMS scores and each of the three dependent measures, and between EMS scores and the three dependent measures. All correlations were nonsignificant, $ps > .05$.

Ethnic Identity

To determine whether Ethnic Identity influenced participants' levels of discrimination, I conducted three bivariate correlations between Ethnic Identity and each of the three dependent measures. All correlations were nonsignificant, $ps > .05$.

Discussion

The results of Study 3a were inconsistent with the results obtained in Studies 1A, 1B, and 2. I did not find the predicted Target Status x Competition Type interaction, nor did I find a main effect for Target Status. The overall null effects of Study 3a are likely due to several serious limitations. For one, although the manipulation check showed that participants in the Zero-Sum Competition condition had significantly higher measured Zero-Sum Beliefs compared to the other two conditions, the absolute increase in Zero-Sum Beliefs was small (from a mean of 1.68 in the control condition to a mean of 2.68 in the Zero-Sum Beliefs condition), and did not result in any different evaluation patterns for the High or Low Status target across prime conditions. Furthermore the Non-Zero-Sum Competition manipulation did not successfully lower Zero-Sum Beliefs, as Zero-

Sum Beliefs were already very low in the No Competition condition. The control group mean of 1.68 falls between ‘*strongly disagree*’ and ‘*somewhat disagree*’, suggesting that most participants had very low Zero-Sum Beliefs to begin with. Therefore, there was likely a floor effect such that it would not be possible to significantly lower Zero-Sum Beliefs below the baseline level.

The specific articles used to prime Zero-Sum and Non-Zero-Sum Competition in Study 3a poses another serious limitation. Both experimental articles describing shifting status hierarchies involved Blacks increasing in status. However, this information directly contradicts the current economic situation. While this study was being run, several major news sources published articles summarizing recent evidence that Black Americans are currently losing status (e.g. Luhby, 2012). Participants who were aware of these recent stories likely did not believe that the articles in the ‘current events study’ were real. This is a serious flaw in the timing of the study that calls into question the actual effect of the manipulations and the observed effects. The articles may have primed higher or lower Zero-Sum Beliefs, but they may not have been successful in producing feelings of competition over scarce resources.

In addition to the overtly incorrect information presented in the prime articles, the articles explicitly discussed both race and social status. Although the 49 participants included in the final sample did not mention the interaction of race and status as a potential hypothesis, all participants guessed that the study was related to race in some way. It is possible that participants guessed that the study was related to race because of the questions at the end of the study concerning Black-White relations, however this level of suspicion likely due, in part, to the saliency of race in the articles. This may have

caused participants to be especially guarded and cautious in evaluating the Black hospital employee.

Finally, the sample for Study 3a was insufficient. For a medium effect and power of .80, one should have at least 128 participants, whereas I was able to only include 49 in the final sample. Study 3b was conducted to remedy the problems presented by the design of Study 3a, and to improve the sample size. Study 3b also employed a more subtle manipulation of Zero-Sum and Non-Zero-Sum Competition that did not directly relate to race relations or social status hierarchies. Because Ethnic Identity did not have a direct effect on evaluation levels in Study 2 or Study 3a, I did not measure it in Study 3b.

Chapter 8: Study 3b

Study 3b was conducted as a conceptual replication of Study 3a and again tested Hypotheses 5a and 5b. Study 3b was conducted entirely online and did not use a two-separate-studies paradigm. Instead, the concept of Zero-Sum Competition vs. Non-Zero-Sum Competition was manipulated as part of the instructions for the task of evaluating the hospital employee. The use of this more subtle method of operationalizing Competition Type was aimed at reducing participants' suspicion about the true nature of the study.

Methods

Participants and Design

Four hundred forty-one White participants were recruited through Amazon Mechanical Turk and completed the study in exchange for \$.30. Sixteen participants were excluded for guessing that the study hypothesis related to the interaction of race and social status. Fifteen participants were excluded because they reported technical difficulties and were unable to load the video. The remaining 306 participants (187 male, 119 female) ranged in age from 18 to 74 ($M = 30.02$, $SD = 10.63$). Gender produced no significant main effects or interactions, so it is not mentioned further.

The study employed a 3(Competition Type: None, Zero-sum, Non-Zero-Sum) x 2(Target Status: High, Low) between-subjects design. IMS/EMS was measured as a control variable, and Zero-Sum Beliefs were measured as a manipulation check.

Procedures

Participants completed Study 3b entirely online from remote locations around the US. The study proceeded in much the same way as the second part of Study 2 and Study 3b. As in the previous studies, participants were told that the purpose of the study was to help a hospital evaluate videos that had been submitted by employees who wished to be featured in the hospital's promotional video. At this point, perceived Zero-Sum Competition or Non-Zero-Sum Competition was manipulated as part of the instructions to the task. The instructions described the potential outcomes for the employee and the employee's coworkers if the employee was chosen to be featured in the promotional video. Then participants were presented with the same videos used in the previous studies. After watching the videos, participants completed the same evaluations of the employee and the hospital used in Study 3a; however, participants were not told that the employee's supervisor would have access to their evaluations (this statement was simply removed from the instructions). Then participants completed the Zero-Sum Beliefs scale, the IMS/EMS scale, and a demographics questionnaire. At this point participants completed the funneled debriefing procedure used in Studies 1b, 2, and 3a.

Materials

Manipulation of Competition Type. Perceptions of No Competition, Zero-Sum Competition and Non-zero Sum Competition were manipulated as part of the study instructions when the purpose of the task was introduced to participants. In the Zero-Sum Competition condition, participants were provided with the following additional information about the promotional video:

Whichever employee is chosen to be featured in the video will receive a great amount of attention from supervisors, which may lead to opportunities for promotion. *This means that other similar employees will receive less attention from supervisors and may be less likely to receive the same promotion opportunities.* Therefore, please think about whether the employee you see in the trial video deserves to be featured in the final hospital video.

In the Non-Zero-Sum Competition Condition, participants were provided with a slightly different version of this information:

Whichever employee is chosen to be featured in the video will receive a great amount of attention from supervisors, which may lead to opportunities for promotion. *This is a good thing for all hospital employees. They will benefit from the increased attention brought by the employee in the video. All hospital employees should receive more opportunities for promotion as a result of a good hospital video.* Therefore, please think about whether the employee you see in the trial video deserves to be featured in the final hospital video.

In the No Competition condition, participants were simply asked to think about whether the employee in the video deserved to be featured in the final hospital video.

Measures of Discrimination. The same dependent measures used in Study 3a were used in Study 3b; however, ethnic Identity was not measured. Again, the direct evaluation questions achieved good reliability ($\alpha = .90$), as did the Zero-Sum Beliefs scale ($\alpha = .95$).

Zero-Sum Beliefs and Motivations to Control Prejudice. Study 3b employed the same modified Zero-Sum Beliefs scales used in Studies 2 and 3a (see Appendix E). Study 3b also employed the IMS/EMS scale (Plant & Devine, 1998). The EMS and IMS subscales showed adequate reliability ($\alpha_{EMS} = .76$; $\alpha_{IMS} = .88$).

Results

Competition Type

Before testing my hypothesis, I conducted a one-way ANOVA of the Competition Type variable on expressed Zero-Sum Beliefs as a manipulation check. This effect was not significant, $p > .05$, demonstrating that the manipulation did not successfully alter participants' Zero-Sum Beliefs.

Although the manipulation check revealed the Competition Type variable did not produce different levels of expressed Zero-Sum Beliefs, I explored the possibility that the manipulations simply produced different levels of perceived economic resource threat, which could have in turn lead to different amounts of discrimination towards the high (vs. low) status Black target. I conducted a 2(Target Status) x 3(Competition Type) MANOVA on the three dependent measures: Direct Evaluation, Overall Grade, and Indirect Evaluation. The Target Status x Competition Type interaction was not significant for any of the dependent measures (contrary to what one might have expected given the findings of Studies 1a and 2). There was, however, a significant main effect of Target Status on the a) direct evaluation variable ($F(1,300) = 4.78, p < .05, \text{partial } \eta^2 = .02$), b) the Customer Service Grade variable ($F(1,300) = 8.06, p < .05, \text{partial } \eta^2 = .03$), and c) the indirect evaluation variable ($F(1,300) = 20.11, p < .001, \text{partial } \eta^2 = .06$). Across each dependent measure, the target presented as a physician was evaluated less favorably ($M_{High\ Status\ Direct} = 3.46, SD_{High\ Status\ Direct} = 0.82; M_{High\ Status\ Grade} = 52.74, SD_{High\ Status\ Grade} = 20.13; M_{High\ Status\ Indirect} = 4.22, SD_{High\ Status\ Indirect} = 1.15$) than the target presented as a cleaning staff member ($M_{Low\ Status\ Direct} = 3.67, SD_{Low\ Status\ Direct} = 0.84; M_{Low$

$M_{Status\ Grade} = 59.57$, $SD_{Low\ Status\ Grade} = 21.06$; $M_{Low\ Status\ Indirect} = 4.76$, $SD_{Low\ Status\ Indirect} = 0.93$).

IMS/EMS

To determine whether IMS and EMS influenced participants' levels of discrimination, I conducted six bivariate correlations between IMS scores and each of the three dependent measures, and between EMS scores and the three dependent measures. IMS was significantly and positively correlated with the Indirect Evaluation measure ($r = .26$, $p < .05$) and with the Direct Evaluation measure ($r = .11$, $p < .05$). EMS showed a marginally significant negative correlation with the Indirect evaluation measure, $r = -.10$, $p = .07$. All other correlations were nonsignificant, $ps > .05$. Given that Hypothesis 5a and 5b were not supported, I explored the possibility that the expected interaction effects were further moderated by IMS and EMS scores.

I conducted a series of hierarchical multiple regressions examining the three-way interactions between IMS, Target Status, and the Competition Type conditions as well as the interactions between EMS, Target Status, and the Competition Type conditions. The Competition Type variable had three levels (No competition, Zero-Sum Competition, Non-Zero-Sum Competition). Therefore, I created two variables to represent the Competition Type condition participants were placed in. The Zero-Sum Competition variable (effects coded; 'Zero-Sum Competition' condition coded as 1, 'No Competition' condition coded as -1, 'Non-Zero-Sum Competition condition' coded as 0) compared evaluations made by participants in the Zero-Sum Competition condition to those made by participants in the No Competition condition. This variable represents the comparison of interest in Hypothesis 5a.

The Non-Zero-Sum Competition variable (effects coded; ‘Non-Zero-Sum Competition’ condition coded as 1, No Competition coded as -1, ‘Zero-Sum Competition’ condition coded as 0) compared evaluations made by participants in the Non-Zero-Sum Competition condition to those made by participants in the No Competition condition. This variable represents the comparison of interest in Hypothesis 5b.

IMS, EMS, Target Status and Zero-Sum Competition (vs. No Competition)

The comparison of interest in Hypothesis 5a was between discrimination patterns in the Zero-Sum Competition condition vs. the No Competition condition. Therefore, I first explored potential moderation of this expected effect. I conducted three hierarchical multiple regression analyses (one analysis for each of the three dependent variables: Direct Evaluation, Customer Service Grade, Indirect Evaluation) using the same predictors and interaction terms. The first model contained only main effects: IMS (centered), EMS (centered), Target Status (effects coded; High Status target coded as 1, Low Status target coded as -1), and the Zero-Sum Competition condition variable (effects coded). The second model added the two-way interaction terms for IMS, Status, and the Zero-Sum Competition condition variable, and the two-way interaction terms for EMS, Status, and the Zero-Sum Competition condition variable. The third model contained the three-way IMS x Target Status x Zero-Sum Competition condition and the EMS x Target Status x Zero-Sum Competition condition interaction terms.

The first analysis examined effects on the Indirect Evaluation variable. The third model including the three-way interaction terms was significant ($R^2 = .17$, $F(11,294) = 6.46$, $p < .001$), and significantly improved prediction of the Indirect Evaluation variable

beyond the second model, $\Delta R^2 = .03$, $F(2,294) = 4.90$, $p < .01$. The three-way IMS x Target Status x Zero-Sum Competition condition interaction term was significant, $\beta = -0.15$, $t(294) = -2.55$, $p < .05$ (see Figure 5). Tests of simple slopes revealed that stronger internal motivations to control prejudice lead to significantly more favorable indirect evaluations of the Low Status target in the Zero-Sum Competition condition, $B = 0.55$, $t(294) = 4.07$, $p < .001$. Stronger internal motivations to control prejudice also lead to significantly more favorable evaluations of High Status targets in the No Competition condition, $B = 0.46$, $t(294) = 3.61$, $p < .001$. Importantly, stronger internal motivations to control prejudice had no impact on indirect evaluations of the High Status target in the Zero-Sum Competition condition, and had no impact on indirect evaluations of the Low Status target in the No Competition condition, $ps > .05$.

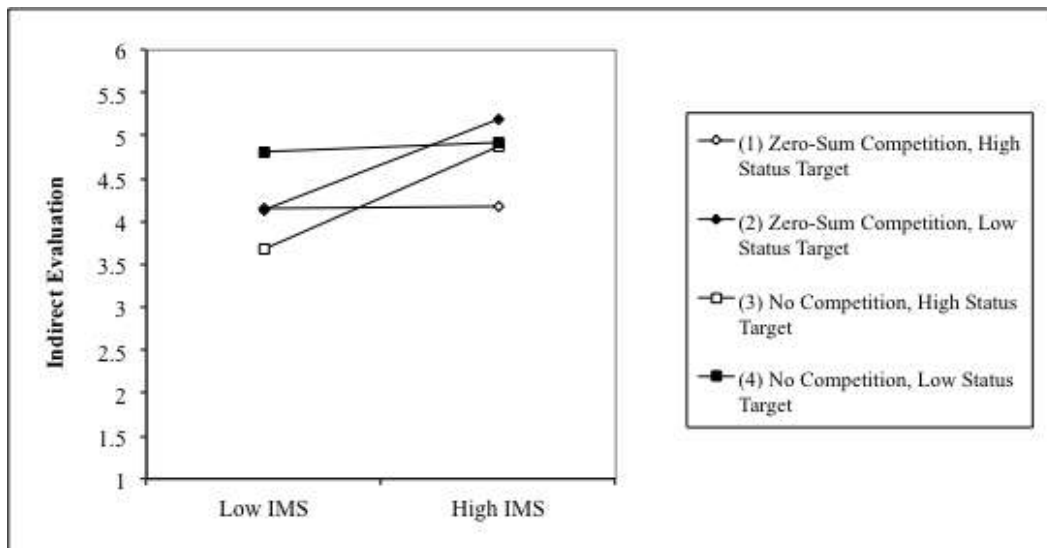


Figure 5. IMS x Target Status x Competition Type Interaction on Indirect Evaluations (Study 3b).

Stronger internal motivations to control prejudice lead to more favorable evaluations of the High Status target in the No Competition condition, but did not improve evaluations of High Status targets in the Zero-Sum Competition condition. Stronger internal motivations to control prejudice lead to more favorable evaluations of the Low Status target in the Zero-Sum Competition condition but had no impact on evaluations in the No Competition condition. IMS is plotted one SD above and below the mean.

This analysis also showed a significant main effect for IMS ($\beta = 0.25$, $t(294) = 4.46$, $p < .001$) and a significant main effect for target status, $\beta = -0.26$, $t(294) = -4.83$. $p < .001$. There were no other significant main effects or interactions, as shown in Table 3.

Table 3

Summary of Hierarchical Regression Analysis for Interactions with Competition Type Condition Variable (Zero-Sum Competition vs. No Competition)
 Predicting Indirect Evaluations
 (Study 3b; $N = 306$)

Variable	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
IMS	0.28**	0.06	0.26	0.27**	0.06	0.26	0.26**	0.06	0.25
EMS	-0.05	0.06	-0.04	-0.05	0.06	-0.04	-0.04	0.06	-0.04
Status	-0.29**	0.06	-0.27	-0.29**	0.06	-0.27	-0.28**	0.06	-0.26
Comp. Type	-0.04	0.07	-0.03	-0.04	0.07	-0.03	-0.04	0.07	-0.03
IMS x Status				0.01	0.06	0.01	0.02	0.06	0.02
EMS x Status				0.04	0.06	0.03	0.04	0.06	0.03
Status x Comp. Type				0.03	0.07	0.02	0.02	0.07	0.02
EMS x Comp. Type				-0.02	0.08	-0.01	0.02	0.08	0.01
IMS x Comp. Type				0.01	0.07	0.01	0.02	0.08	0.01
EMS x Comp. Type x Status							0.08	0.08	0.06
IMS x Comp. Type x Status							-0.19*	0.08	-0.15
R^2	.14			.14			.17		
R^2_{adj}	.13			.12			.14		
R^2_{change}	.14**			.00			.03**		
Overall F	12.31**			5.46**			5.47**		
<i>df</i>	301			296			294		

Note: IMS and EMS were centered at their means.

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

The above hierarchical multiple regression analysis was repeated with the Direct evaluation variable as the dependent measure. The first model (including only main effects) was significant, $R^2 = .03$ $F(4,301) = 2.44$, $p < .05$. There was a significant main effect for IMS ($\beta = 0.12$, $t(301) = 2.13$, $p < .05$), demonstrating that participants with greater internal motivation to control prejudice evaluated the target more favorably across all experimental conditions. There was also a significant main effect for target status ($\beta = -0.14$, $t(301) = -2.38$, $p < .05$), again demonstrating that the High Status target was evaluated less favorably than the Low Status target. All other main effects were nonsignificant ($ps > .05$), as shown in Table 4.

Table 4

Summary of Hierarchical Regression Analysis for Interactions with Competition Type Condition Variable (Zero-Sum Competition vs. No Competition)
 Predicting Direct Evaluations
 (Study 3b; $N = 306$)

Variable	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
IMS	0.10*	0.05	0.12	0.10*	0.05	0.13	0.10*	0.05	0.13
EMS	0.02	0.05	0.03	0.02	0.05	0.03	0.03	0.05	0.03
Status	-0.11*	0.05	-0.14	-0.11*	0.05	-0.13	-0.11*	0.05	-0.13
Comp. Type	0.00	0.06	0.00	0.00	0.06	0.00	0.00	0.06	0.00
IMS x Status				0.00	0.05	0.00	0.00	0.05	0.00
EMS x Status				0.05	0.05	0.06	0.05	0.05	0.05
Status x Comp. Type				0.00	0.06	0.00	0.00	0.06	0.00
EMS x Comp. Type				0.04	0.06	0.03	0.03	0.06	0.03
IMS x Comp. Type				-0.06	0.06	-0.06	-0.07	0.06	-0.07
EMS x Comp. Type x Status							0.04	0.06	0.03
IMS x Comp. Type x Status							0.00	0.06	0.00
R^2	.03			.04			.04		
R^2_{adj}	.02			.01			.01		
R^2_{change}	.03*			.00			.00		
Overall F	2.44*			1.36			1.13		
<i>df</i>	301			296			294		

Note: IMS and EMS were centered at their means.

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

This hierarchical multiple regression analysis was repeated again with the Customer Service Grade variable as the dependent measure. The first model was significant, $R^2 = .04$, $F(4,301) = 2.84$, $p < .05$. Again, IMS scores had a marginally significant main effect on the grade variable ($\beta = .10$, $t(301) = 1.77$, $p = .08$), and Target Status had a significant main effect on the grade variable, $\beta = -.16$, $t(301) = -2.83$, $p < .01$. As in the above analysis, participants with a greater internal motivation to control prejudice evaluated the target more favorably across all experimental conditions, just as participants evaluated the High Status target less favorably than the Low Status target across prime conditions and across all levels of IMS. No other effects were significant, as shown in Table 5.

Table 5

Summary of Hierarchical Regression Analysis for Interactions with Competition Type Condition Variable (Zero-Sum Competition vs. No Competition)
 Predicting Customer Service Grade (Study 3b; $N = 306$)

Variable	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
IMS	2.08*	1.18	0.10	2.04	1.20	0.10	1.99	1.21	0.10
EMS	-0.02	1.22	0.00	0.00	1.24	0.00	0.01	1.26	0.00
Status	-3.36**	1.19	-0.16	-3.36**	1.20	-0.16	-3.33**	1.21	-0.16
Comp. Type	0.62	1.42	0.03	0.67	1.43	0.03	0.65	1.44	0.03
IMS x Status				0.06	1.20	0.00	0.10	1.21	0.01
EMS x Status				1.08	1.24	0.05	1.07	1.26	0.05
Status x Comp. Type				0.02	1.43	0.00	0.01	1.44	0.00
EMS x Comp. Type				-0.20	1.54	-0.01	-0.09	1.58	0.00
IMS x Comp. Type				-0.11	1.52	0.00	-0.09	1.58	0.00
EMS x Comp. Type x Status							0.28	1.58	0.01
IMS x Comp. Type x Status							-0.60	1.58	-0.02
R^2	.04			.04			.04		
R^2_{adj}	.02			.01			.00		
R^2_{change}	.04*			.00			.00		
Overall F	2.84*			1.34			1.11		
<i>df</i>	301			296			294		

Note: IMS and EMS were centered at their means.

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

IMS, EMS, Target Status and Non-Zero-Sum Competition (vs. No Competition)

The comparison of interest in Hypothesis 5b was between discrimination patterns in the Non-Zero-Sum condition vs. the No Competition condition. Therefore, I first explored potential moderation of this expected effect. Again I conducted three hierarchical multiple regression analyses (one analysis for each of the three dependent variables: Direct Evaluation, Customer Service Grade, Indirect Evaluation) using the same predictors and interaction terms for each analysis. The first model contained only main effects: IMS (centered), EMS (centered), Target Status (effects coded; High Status coded as 1, Low Status coded as -1), and the Non-Zero-Sum Competition condition variable (effects coded; 'Non-Zero-Sum Competition' condition coded as 1, No Competition coded as -1, and 'Zero-Sum Competition' condition coded as 0). In the second model I added the two-way interaction terms for IMS, Status, and the Non-Zero-Sum Competition condition variable, and the two-way interaction terms for EMS, Status, and the Non-Zero-Sum Competition condition variable. In the third model I added the three-way IMS x Target Status x Non-Zero-Sum Competition condition and the IMS x Target Status x Non-Zero-Sum Competition condition interaction terms.

The first analysis examined the potential moderating effects of IMS and EMS on Indirect Evaluations. The first model was significant, $R^2 = .08$, $F(4,301) = 6.61$, $p < .001$. There was a significant main effect for IMS ($\beta = 0.25$, $t(301) = 4.48$, $p < .001$), demonstrating that participants with greater internal motivation to control prejudice evaluated the target more favorably across all experimental conditions. All other main effects were nonsignificant ($ps > .05$), as shown in Table 6.

Table 6
Summary of Hierarchical Regression Analysis for Interactions with Competition Type Condition Variable (Non-Zero-Sum Competition vs. No Competition) Predicting Indirect Evaluations (Study 3b; N = 306)

Variable	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
IMS	0.26**	0.06	0.25	0.26**	0.06	0.25	0.29**	0.06	0.27
EMS	-0.06	0.06	-0.05	-0.06	0.06	-0.05	-0.04	0.06	-0.04
Status	-0.23	0.14	-0.18	-0.23	0.15	-0.18	-0.23	0.15	-0.18
Comp. Type	-0.22	0.13	-0.19	-0.23	0.13	-0.20	-0.22	0.13	-0.19
IMS x Status				-0.01	0.06	-0.01	-0.02	0.06	-0.02
EMS x Status				0.04	0.06	0.03	0.03	0.06	0.02
Status x Comp. Type				0.03	0.08	0.02	0.03	0.08	0.02
EMS x Comp. Type				-0.03	0.08	-0.02	-0.04	0.08	-0.03
IMS x Comp. Type				-0.01	0.08	-0.01	-0.02	0.08	-0.01
EMS x Comp. Type x Status							0.10	0.08	0.07
IMS x Comp. Type x Status							0.06	0.08	0.04
R ²	.08			.08			.09		
R ² _{adj}	.07			.05			.05		
R ² _{change}	.08**			.00			.01		
Overall F	6.51**			2.92**			2.54**		
<i>df</i>	301			296			294		

Note: IMS and EMS were centered at their means.

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

The second analysis examined the potential moderating effects of IMS and EMS on Direct Evaluations. None of the overall models were significant, however there was a significant main effect for IMS in the first model, $\beta = 0.12$, $t(301) = 2.02$, $p < .05$. All other main effects were nonsignificant ($ps > .05$), as shown in Table 7.

Table 7

Summary of Hierarchical Regression Analysis for Interactions with Competition Type Condition Variable (Non-Zero-Sum Competition vs. No Competition) Predicting Direct Evaluations (Study 3b; $N = 306$)

Variable	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
IMS	0.10*	0.05	0.12	0.09	0.05	0.11	0.11*	0.05	0.13
EMS	0.02	0.05	0.02	0.02	0.05	0.02	0.03	0.05	0.03
Status	-0.06	0.12	-0.06	-0.05	0.12	-0.05	-0.05	0.12	-0.05
Comp. Type	-0.07	0.11	-0.07	-0.07	0.11	-0.07	-0.06	0.11	-0.07
IMS x Status				0.01	0.05	0.01	0.00	0.05	0.00
EMS x Status				0.05	0.05	0.06	0.04	0.05	0.05
Status x Comp. Type				0.02	0.06	0.02	0.02	0.06	0.02
EMS x Comp. Type				-0.05	0.07	-0.05	-0.06	0.07	-0.05
IMS x Comp. Type				0.05	0.06	0.05	0.05	0.06	0.05
EMS x Comp. Type x Status							0.04	0.07	0.04
IMS x Comp. Type x Status							0.05	0.06	0.05
R^2	.01			.02			.03		
R^2_{adj}	.00			-.01			-.01		
R^2_{change}	.01			.01			.00		
Overall F	1.11			.76			.70		
<i>df</i>	301			296			294		

Note: IMS and EMS were centered at their means.

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

The third analysis examined the potential moderating effects of IMS and EMS on the Customer Service Grade variable. There were no significant main effects or interactions, ($ps > .05$), as shown in Table 8.

Table 8

Summary of Hierarchical Regression Analysis for Interactions with Competition Type Condition Variable (Non-Zero-Sum Competition vs. No Competition) Predicting Customer Service Grade (Study 3b; $N = 306$)

Variable	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
IMS	1.90	1.19	0.09	1.88	1.22	0.09	2.36	1.29	0.12
EMS	-0.30	1.24	-0.01	-0.30	1.26	-0.01	0.06	1.30	0.00
Status	2.65	2.90	0.11	2.81	2.93	0.11	2.99	2.94	0.12
Comp. Type	1.88	2.62	0.08	1.94	2.64	0.09	2.13	2.65	0.09
IMS x Status				0.07	1.27	0.00	-0.18	1.29	-0.01
EMS x Status				1.06	1.28	0.05	0.86	1.30	0.04
Status x Comp. Type				-0.29	1.57	-0.01	-0.29	1.57	-0.01
EMS x Comp. Type				-0.87	1.64	-0.03	-1.05	1.65	-0.04
IMS x Comp. Type				0.32	1.59	0.01	0.28	1.59	0.01
EMS x Comp. Type x Status							1.11	1.64	0.04
IMS x Comp. Type x Status							1.73	1.59	0.07
R^2	.01			.02			.02		
R^2_{adj}	.00			-.01			-.02		
R^2_{change}	.01			.00			.01		
Overall F	.94			.55			.57		
<i>df</i>	301			296			294		

Note: IMS and EMS were centered at their means.

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

IMS, Target Status and Zero-Sum Beliefs

The three-way IMS x Target Status x Zero-Sum Competition condition was unexpected and surprising in that there were certain conditions in which stronger internal motivations to control prejudice lead to more favorable evaluations of the target, as one might expect, but then other conditions where it had no impact on evaluations. It is particularly interesting that IMS had no effect on evaluations of the High Status target in the Zero-Sum Competition condition, as this is the condition I have expected to arouse the most threat to White participants. Therefore, as a final set of exploratory analyses, I conducted two separate hierarchical regressions to examine a potential interaction between IMS, Target Status, and measured Zero-Sum Beliefs for those participants in the Zero-Sum Competition condition, and for those participants in the Non-Zero-Sum Competition and No Competition conditions. I examined these effects on Indirect Evaluations.

The first hierarchical multiple regression examined the IMS x Target Status x Zero-Sum Beliefs interaction for only those participants in the Zero-Sum Competition condition. The first model contained only main effects: Zero-Sum Beliefs (centered), IMS (centered), and Target Status (effects coded; High Status target coded as 1, Low Status target coded as -1), controlling for EMS (centered). In the second model I added the three two-way interaction terms for IMS, Status, and Zero-Sum Beliefs. In the third mode, I added the three-way interaction term.

The third model containing the three-way interaction term was significant, ($R^2 = .28$, $F(8,111) = 4.83$, $p < .001$), and significantly improved prediction of the Indirect Evaluation variable beyond the second model, $\Delta R^2 = .03$, $F(1,111) = 5.16$, $p < .05$. The

three-way IMS x Status x Zero-Sum Beliefs interaction was significant, $\beta = -0.25$, $t(111) = -2.27$, $p < .05$ (see Figure 6). Tests of simple slopes revealed that among participants with low Zero-Sum Beliefs, IMS had no effect on Indirect Evaluations of the targets, $ps > .05$. For participants with high Zero-Sum Beliefs, stronger internal motivations to control prejudice lead to a slight increase in indirect evaluations of the Low Status target, $B = 0.34$, $t(111) = 1.66$, $p = .10$. The reverse pattern was found among participants with high Zero-Sum Beliefs who evaluated the High Status target. For these participants, greater internal motivations to control prejudice lead to significantly *lower* evaluations of the High Status target, $B = -0.36$, $t(111) = -2.07$, $p < .05$. That is, Zero-Sum Beliefs lead to higher evaluations of the Low Status targets, but lower evaluations of the High Status target, as IMS increased.

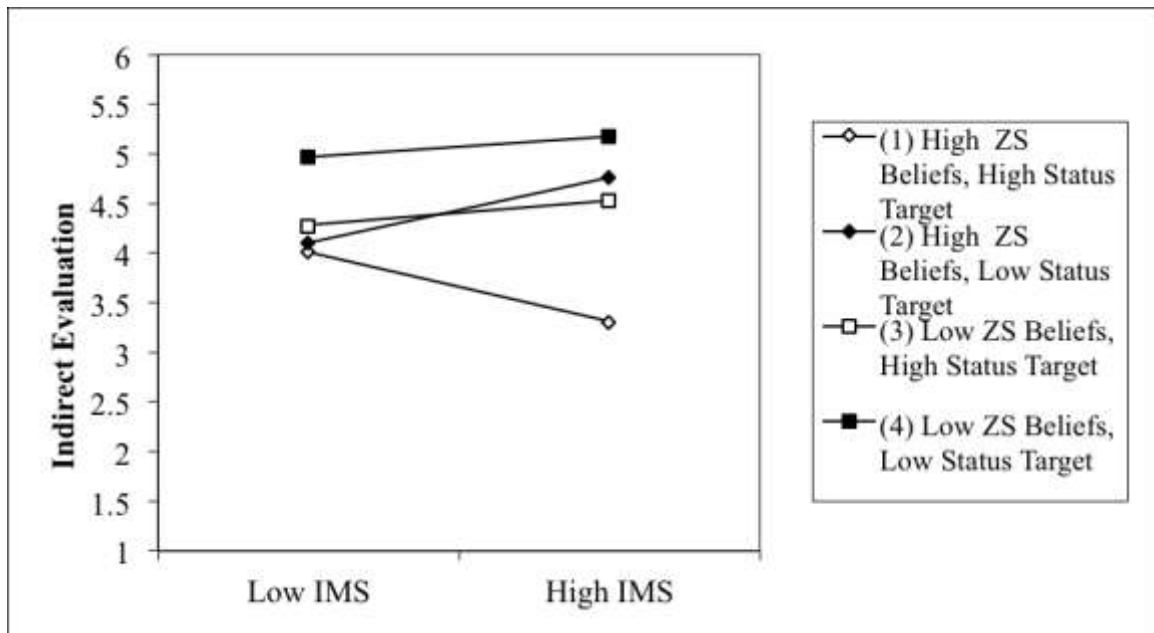


Figure 6. IMS x measured ZSB x Target Status Interaction on Indirect Evaluations by participants in the Zero-Sum Competition condition (Study 3B). In the Zero-Sum Competition condition, stronger internal motivations to control prejudice lead to significantly more favorable evaluations of the High Status target for participants with low ZSB. In the same condition, stronger internal motivations to control prejudice

lead to significantly *less* favorable evaluations of the High Status target for participants with high ZSB.

IMS is plotted one SD above and below the mean.

There was also a significant main effect for Zero-Sum Beliefs ($\beta = -0.32$, $t(111) = -2.57$, $p < .05$), and a significant main effect for target status, $\beta = -0.34$, $t(1) = -3.52$, $p < .05$. All effects are shown in Table 9.

Table 9

Summary of Hierarchical Regression Analysis for Interactions with ZSB Predicting Indirect Evaluations in Zero-Sum Competition Condition (Study 3b; $N = 120$)

Variable	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
IMS	0.03	0.13	0.02	0.04	0.14	0.03	0.06	0.14	0.05
EMS	0.02	0.10	0.01	0.06	0.10	0.05	0.02	0.10	0.02
ZSB	-0.38**	0.14	-0.35	-0.39**	0.14	-0.35	-0.35*	0.14	-0.32
Status	-0.24**	0.09	-0.22	-0.24**	0.09	-0.22	-0.36**	0.10	-0.34
IMS x Status				-0.25*	0.14	-0.23	-0.17	0.14	-0.15
IMS x ZSB				-0.04	0.08	-0.04	-0.07	0.08	-0.08
ZSB x Status				0.02	0.13	0.02	-0.03	0.13	-0.02
IMS x Status x ZSB							-0.18*	0.08	-0.25
R^2	.19			.24			.28		
R^2_{adj}	.15			.20			.23		
R^2_{change}	.19**			.06*			.03*		
Overall F	6.62**			5.15**			5.32**		
<i>df</i>	115			112			111		

Note: IMS and EMS were centered at their means.

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

The same hierarchical regression analysis was repeated for participants in the No Competition and Non-Zero-Sum Competition conditions, with the addition of a variable indicating participants' condition (effects coded; 'Non-Zero-Sum Condition' coded as 1, 'No Competition' coded as -1) in the first model as a control. The second model was significant ($R^2 = .19$, $F(8,177) = 5.03$, $p < .05$), and marginally significantly improved upon the first model, $\Delta R^2 = .03$, $F(3, 177) = 2.26$, $p = .08$. The IMS x Target Status interaction was significant, $B = 0.243$, $t(177) = 2.44$, $p < .05$ (See Figure 7). Greater internal motivations to control prejudice increased evaluations of the High Status target, $B = 0.56$, $t(177) = 3.64$, $p < .001$, however the same motivations did not increase evaluations of the Low Status target, $p > .05$. The main effect for status was also significant ($B = -.32$, $t(177) = -4.02$, $p < .001$), as was the main effect for IMS, $B = .34$, $t(177) = 3.41$, $p < .01$. The high (vs. low) status Black target was evaluated less favorably, and stronger internal motivations to control prejudice lead to more favorable evaluations of the target. Unlike the pattern observed for participants in the Zero-Sum Competition condition, the 3-way IMS x Status x Zero-Sum Beliefs interaction was not significant. All effects are shown in Table 10.

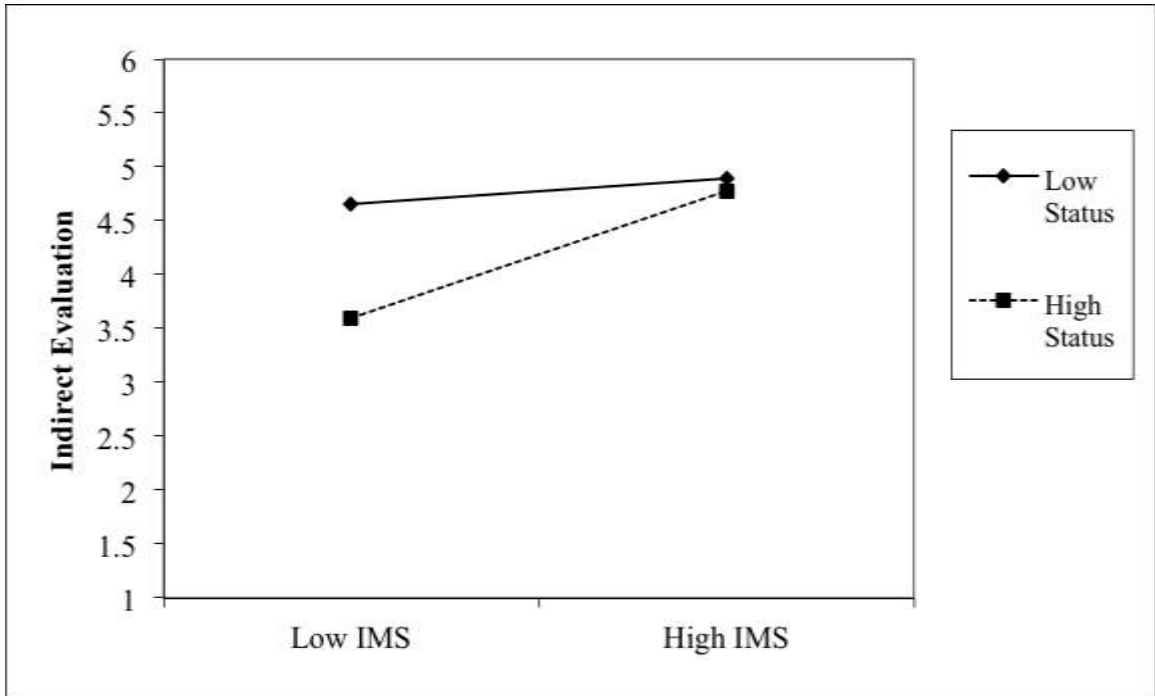


Figure 7. IMS x Target Status Interaction on Indirect Evaluations by participants in the No Competition and Non-Zero-Sum Competition conditions (Study 3b). In these neutral conditions, stronger internal motivations to control prejudice lead to more favorable evaluations of the High Status Target but did not impact evaluations of the Low Status target. IMS is plotted one SD above and below the mean.

Table 10
Summary of Hierarchical Regression Analysis for Interactions with ZSB Predicting Indirect Evaluations in Non-Zero-Sum Competition and No Competition Conditions
(Study 3b; N = 186)

Variable	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
IMS	0.28**	0.10	0.28	0.34**	0.10	0.33	0.34**	0.10	0.34
EMS	-0.05	0.08	-0.04	-0.04	0.08	-0.03	-0.04	0.08	-0.03
ZSB	0.02	0.11	0.02	-0.01	0.12	-0.01	0.01	0.12	0.01
Status	-0.30**	0.07	-0.28	-0.30**	0.07	-0.28	-0.34**	0.08	-0.32
IMS x Status				0.23*	0.10	0.23	0.25*	0.10	0.24
IMS x ZSB				-0.05	0.05	-0.10	-0.06	0.05	-0.11
ZSB x Status				0.13	0.10	0.12	0.09	0.11	0.09
IMS x Status x ZSB							-0.05	0.05	-0.09
R^2	.15			.18			.19		
R^2_{adj}	.13			.15			.15		
R^2_{change}	.15*			.03			.00		
Overall F	7.97**			5.66**			5.07**		
<i>df</i>	181			178			177		

Note: IMS and EMS were centered at their means.

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

Discussion

Again, Study 3b failed to directly support Hypotheses 5a and 5b. The manipulation check revealed that the No Competition vs. Zero-Sum Competition vs. Non-Zero-Sum Competition did not alter participants' expressed Zero-Sum Beliefs. As in Study 2, there was a significant main effect for Target status, such that the target presented as a physician was evaluated more negatively than the target evaluated as a member of the cleaning staff. However, the predicted three-way interaction between Competition Type and Target Status was not significant.

In Study 3a, there were direct correlations between both IMS and EMS and each dependent measure. Therefore, I examined the moderating effects of IMS and EMS on the dependent measures. Because Hypotheses 5a and 5b were framed to make separate comparisons between the Zero-Sum Competition and No Competition conditions, and between the Non-Zero-Sum Competition and No Competition conditions, I examined the moderating effects of IMS and EMS and these effects coded condition variables separately.

There was a significant three-way IMS x Target Status x Zero-Sum Competition condition interaction on indirect evaluations, demonstrating that greater internal motivations to control prejudice produced higher indirect evaluations of the High Status Target in the No Competition control condition and of the Low Status Target in the Zero-Sum Competition condition. Greater internal motivations to control prejudice also produced higher indirect evaluations of the Low Status target in the Zero-Sum Competition condition as well. However, greater internal motivations to control prejudice had no effect on evaluations of the High Status target in the Zero-Sum

Competition condition, or on evaluations of the Low Status target in the No Competition condition.

It is unclear exactly what psychological mechanisms were operating in the Zero-Sum Competition condition; however, it appears that the Zero-Sum Competition condition signaled greater threats associated with the High Status target. The manipulation of Zero-Sum Competition in Study 3b only provided the concept of zero-sum outcomes in a domain (i.e. within the context of the hospital position), but did not specifically prime the idea of zero-sum outcomes related to broader economic resources, such as jobs or the social status hierarchy. Thus, the prime may have elicited perceptions of scarce economic resources specifically related to the position but did not elicit perceptions of a Zero-Sum Beliefs regarding Whites and Blacks in general.

Both the Zero-Sum Competition prime and the Non-Zero-Sum Competition prime may have created high desirability for the opportunity to be featured in the video. However, only the Zero-Sum Competition prime should have signaled any threat, as it was only in this condition that the positive outcome for the Black employee would result in worse outcomes for other (potentially White) employees. Indeed, the three-way IMS x Target Status x Non-Zero-Sum Competition condition interaction was nonsignificant. Within the analysis including the Non-Zero-Sum Competition variable, only the main effects for IMS and Target status were significant. Taken together, these findings suggest that a specific level of threat related to High Status Blacks was only present in the zero-sum condition.

The finding that in the participants with greater internal motivations to control prejudice demonstrated less prejudice against all targets except the High Status target in

the Zero-Sum Competition and the Low Status target in the No Competition condition was unexpected but supports my general argument. Participants high in IMS should be particularly inclined to *not* discriminate against High Status Blacks, as High Status Blacks are stereotyped relatively more positively compared to Low Status Blacks (as supported by Pilot Study 1). If one is specifically motivated to control prejudice, then it should be particularly easy to do so against a group that is positively stereotyped or unthreatening. Thus, this absence of a relationship between IMS and evaluations of High Status Blacks *only* under an economic-resource threatening conditions suggests that an additional motivation was overriding the motivation to control prejudice.

This notion that the condition designed to elicit Zero-Sum Competition imposed some additional threat that was absent in the Non-Zero-Sum Competition and No Competition conditions is further supported by the findings of the final analyses in Study 3b. I explored the three-way IMS x Target Status x Zero-Sum Beliefs interaction separately for those participants in the Zero-Sum Competition and for those participants in the other two conditions (Non-Zero-Sum competition and No Competition). For participants in the two non-threat-inducing conditions, stronger internal motivations to control prejudice lead to higher evaluations of the High Status target, as one might expect. However, for the participants in the threat-inducing (Zero-Sum Competition) condition, a different pattern was observed. In this condition, participants' IMS interacted with their expressed Zero-Sum Beliefs and with the Target's Status. For participants evaluating High Status targets, stronger internal motivations to control prejudice only increased evaluations if participants also had low Zero-Sum Beliefs. For participants with high Zero-Sum Beliefs, stronger internal motivations to control

prejudice actually *decreased* evaluations of the High Status target. This pattern of findings is highly unusual given the consistent literature demonstrating the ability of individuals internally motivated to control prejudice to successfully control prejudice, and thus not discriminate. This finding is discussed in greater detail below.

Chapter 9: General Discussion

The purpose of this research was to examine the specific instances in which High Status Blacks face increased discrimination relative to Low Status Blacks. A majority of social psychological research has focused on the negative stereotypes and evaluations of Blacks, but has paid little attention to positive stereotypes of Blacks or impressions of Black subgroups. Given the wealth of findings that suggest that crime-related traits are strongly associated with Blacks (e.g. Eberhardt, et al., 2004), it is important to demonstrate that these associations do not apply to all Blacks. Moreover, it is also important to consider the impact of positive stereotypes on discrimination, particularly under threatening conditions. This research focused on discrimination towards High Status Blacks, who are positively stereotyped as being intelligent and educated.

I based my predictions regarding the specific contexts in which High Status Blacks face discrimination, and the psychological mechanisms driving this effect, on components of the Instrumental Model of Group Conflict (Esses et al., 1998). This model was proposed to explain how competition over scarce resources leads to discrimination. Esses and colleagues argue that competition over scarce resources should cause ingroup members to feel threatened if they perceive the competition as characterized by zero-sum outcomes; that is, if they perceive a necessary and inverse relationship between the ingroup's access to the resource and any other group's access to the resource. Once they feel threatened, they should discriminate against a relevant outgroup competitor in an attempt to undermine the outgroup competitor's chances of gaining access to the resources. An outgroup should be perceived as a strong competitor

for the resources if the outgroup is perceived as a) similar to the ingroup in domains related to the scarce resource, b) distinct from the ingroup in domains unrelated to the scarce resource, and c) large enough that their success in the resource domain would be detrimental to the ingroup's success in the resource domain.

Regarding the discrimination of High Status Blacks, I reasoned that they should face discrimination from Whites under conditions of economic resource scarcity because they are stereotyped as being similar to Whites in this domain. Because Low Status Blacks would not be similar to Whites in this domain, I expected that they would not be perceived as a relevant outgroup competitor and would therefore not face increased discrimination. Further, I reasoned that Whites should be particularly inclined to discriminate against High Status Blacks under conditions of economic resource threat if they also perceived the competition over resources to be characterized by zero-sum outcomes, or if they are generally inclined to have strong Zero-Sum Beliefs about the social status hierarchy. Again, I did not expect zero-sum perceptions to influence discrimination of Low Status Blacks because I reasoned that they would not pose a threat to scarce economic resources, and if anything, would maintain social status hierarchies.

Support for Hypotheses

Across six studies, I demonstrated that although High Status Blacks are stereotyped positively, there are specific instances in which they face increased discrimination relative to Low Status Blacks. Pilot Study 1 demonstrated that whereas both Low Status Blacks and Blacks in general are more strongly associated with crime-related traits than education-related traits, High Status Blacks are more strongly associated with education-related traits than crime-related traits. This study also

demonstrated that High Status Blacks are associated with education-related traits to the same degree as Whites and High Status Whites. The findings of this study are important for two reasons. This pattern of associations supports Hypothesis 1 that *only* High Status Blacks, should be perceived as a relevant outgroup competitor for scarce economic resources because the skills associated with their group should provide an advantage in the economic resource domain, and because their skills match those of Whites in the same domain.

These findings are also important because they demonstrate that High Status Blacks are stereotyped positively. I have argued, as have other researchers (e.g. Stephan et al., 2002), that negative stereotypes are not a necessary precondition to discrimination. In line with Butz and Yogeewaren's (2011) findings, even groups that are stereotyped positively can face discrimination when those positive stereotypes signal their potential success in a competition over scarce resources. In the case of discrimination against High Status Blacks, the specific association between High Status Blacks and education-related traits signals their similarity to High Status Whites, and thus their potential as competitors for scarce economic resources.

Studies 1-3 were designed to explore the specific conditions and motivations that lead to increased discrimination against High Status Blacks, relative to both Low Status Blacks and High Status Whites. Study 1a partially supported Hypothesis 2 by showing that under conditions of economic resource scarcity (i.e. high number of job applicants), High Status Blacks were evaluated more harshly compared to High Status Whites (this effect was trending towards significance). Furthermore, the evaluations of these High Status Blacks were significantly lower than Low Status Blacks applying for jobs under

similar conditions, and were significantly lower than evaluations of High Status Blacks applying for jobs under conditions of little economic resource scarcity (i.e. low number of job applicants). This finding lends support to the notion that under neutral, or non-threatening contexts, High Status Blacks may be evaluated positively, but that under status-threatening contexts, their positive stereotypes work against them.

Study 1b also partially supported Hypothesis 2, although demonstrated a somewhat different pattern of results. Across both high and low scarcity conditions, participants evaluated High Status Blacks more negatively compared to both High Status Whites and Low Status Blacks. The lack of an effect due to the scarcity manipulation may be attributable to sample differences across Study 1a and Study 1b. As the entire sample in Study 1B was recruited through Amazon Mechanical Turk, it is likely that a larger portion of the participants were older and had more work experience. Given that college students (who comprised a large portion of the sample in Study 1a) are preparing to enter the workforce, information regarding the chances for success or failure may be particularly salient and informative to them. Thus, learning that an applicant has only a few competitors for a job may lead them to believe that jobs are plentiful. Older, more seasoned workers, however, may be less optimistic about job prospects in general, and may feel a more chronic sense of threat due to the current economic climate. These participants may also be more likely to have experienced personal instances of unemployment or economic hardship. Thus learning that fewer applicants applying for positions may not have had a significant impact on their comfort regarding the scarcity of economic resources. Together Study 1a and Study 1b demonstrate that despite the positive stereotypes associated with High Status Blacks (as evidenced by Pilot study 1

and previous literature; Devine & Baker, 1991; Fiske et al., 2002; Czopp & Monteith, 2006), High Status Blacks can face increased discrimination in work-related settings that are so closely tied to economic resources.

Studies 2, 3a, and 3b aimed to examine the specific underlying motivations that lead participants to target their discrimination towards High Status Blacks, rather than Low Status Blacks under economic threat conditions. Study 2 was designed to replicate the effect of economic threat on discrimination of High Status Blacks, and to test Hypothesis 3, that discrimination against High Status Blacks under conditions of economic threat serves a specific function. In line with Esses and colleagues' (1998) model, discrimination under conditions of economic resource scarcity serves to specifically disadvantage a relevant outgroup competitor. As Pilot study 1, Study 1a, and Study 1b demonstrated that High Status Blacks should be considered a relevant outgroup competitor under these condition (and thus they are discriminated against), Study 2 was also designed to test my third hypothesis that discrimination against High Status Blacks is functional. That is, it should be driven specifically by a motivation to undermine the potential performance of Blacks in the resource-relevant domain. The final purpose of study 2 was to test the role of Zero-Sum Beliefs on this targeted discrimination of High Status Blacks (Hypothesis 4).

The findings of Study 2 did not support Hypothesis 3 that High Status Blacks are discriminated against specifically so that their performance in the resource-relevant domain is undermined. In Study 2, participants were primed with either economic resource threat (by writing about how the economic downturn would impact their lives) or an unrelated threat (by writing about how climate change would impact their lives).

They were then given the opportunity to evaluate a hospital employee twice, and were told that the employee's supervisor would only have access to their responses on the first set of evaluations, but that only researchers would have access to their responses on the second set of evaluations. Contrary to my expectations regarding the specific function of discrimination under conditions of resource threat, responses did not differ as a function of Target Status, Threat Type, and Discrimination Functionality. Although the results of Study 2 also did not directly replicate the findings of Study 1a, or my specific expectations that Zero-Sum Beliefs would serve as a mediator of the effect of target status and threat type on discrimination, the results were somewhat consistent with my expectations in Hypothesis 2 and Hypothesis 4.

In line with Hypothesis 2, participants only discriminated against the High Status Black target under conditions of economic resource threat (not under threat related to climate change). However, I only found this effect for participants with stronger Zero-Sum Beliefs, as I predicted in Hypothesis 4. For participants who were primed with economic resource threat and who evaluated a High Status target, stronger Zero-Sum Beliefs significantly predicted evaluations of the High Status Black employee. Those participants with stronger Zero-Sum Beliefs evaluated the High Status Black target more negatively than participants with weaker Zero-Sum Beliefs, under conditions of economic resource threat. Given that Zero-Sum Beliefs had no effect on evaluations of the Low Status target in either condition, or on evaluations of the High Status target in the climate change threat condition, it appears that the discrimination was in response to the specific threat posed by the High Status Black target (i.e. threat to economic resources).

This finding supports my general argument that High Status Blacks should not be perceived as threatening unless resources are threatened, the resource domain is related to a trait associated with High Status Blacks, and the competition over resources is characterized as having zero-sum outcomes. In study 2, some participants were asked to think about how the threat of climate change would impact their lives. This manipulation served to present a threat that was not related to the specific traits associated with High Status Blacks. As expected, High Status Blacks did not face increased discrimination in this domain – *even from those participants with stronger Zero-Sum Beliefs*. This finding is significant as it demonstrates that High Status Blacks are not generally threatening; rather they are only threatening in specific conditions where their positive traits related to intelligence and education signal their competition over scarce economic resources.

Study 3a was designed to experimentally manipulate perceptions of competition to demonstrate the effects of perceived Zero-Sum Competition on discrimination (Hypothesis 5a), and to test the hypothesis that perceptions of Non-Zero-Sum Competition (i.e. believing that the success of one group will lead to successes by another group) should reduce discrimination against High Status Blacks below a base-rate level (Hypothesis 5b). In this study, participants were asked to read an article that either discussed the increasing status of Blacks at the expense of Whites, the increasing status of both Blacks and Whites together, or a neutral article about the increasing popularity of reality television. Although the manipulation was effective in increasing Zero-Sum Beliefs for participants asked to read an article about the increasing status of Blacks at the expense of Whites, the article about the increasing status of both races did not significantly lower Zero-Sum Beliefs below the level observed in the control condition.

Furthermore, study 3a did not produce the predicted interactions, and thus provided no support for Hypotheses 5a and 5b.

There were several serious limitations of Study 3a. For one, the manipulation may have been too overt and contradicted news articles published around that time. The sample size in Study 3a was also insufficient. Study 3b was conducted as a conceptual replication in an attempt to overcome these limitations. In Study 3b, participants were asked to evaluate a hospital employee who could potentially be selected for a desirable position. Some participants were simply asked to evaluate an employee for the position (No Competition), or were further instructed that if the employee were selected, it would either harm other employees' opportunities (manipulation of Zero-Sum Competition) or improve other employees' opportunities (manipulation of Non-Zero-Sum Competition). These manipulations did not alter participants' expressed Zero-Sum Beliefs and did not produce the expected interactions, however they did lead to several interesting findings discussed below.

Unexpected Impact of IMS

Study 3b did not directly support Hypothesis 5a and 5b, however I conducted exploratory analyses with IMS and EMS (Plant & Devine, 1998), as these variables were found to correlate with the dependent measures. Although the manipulation of Zero-Sum Competition and Non-Zero-Sum Competition did not alter participants' measured Zero-Sum Beliefs, I reasoned that the Zero-Sum Competition prime may still have induced greater resource threat relative to the Non-Zero-Sum Competition and No Competition conditions because it explicitly described a competition, of which the winner would become more successful than others. I examined the interaction of the Competition Type

variables and IMS and EMS, and found that as one might expect, stronger internal motivations to control prejudice lead to more favorable evaluations of the High Status Black target in the No Competition condition, and lead to more favorable evaluations of the Low Status Black target in the Zero-Sum Competition condition. However, contrary to what one might expect, in the potentially more threatening condition (designed to create perceptions of Zero-Sum Competition), participants' internal motivations to control prejudice had no effect on evaluations of the High Status Black target.

This effect was particularly interesting, as individuals high in the internal motivation to control prejudice consistently demonstrate *lower* levels of bias (Devine, Plant, Amodio, Harmon-Jones, & Vance, 2002; Hausmann & Ryan, 2004; Amodio, Harmon-Jones, & Devine, 2003), and actively work to rid themselves of prejudice (Plant & Devine, 2009). It is surprising that there would be any context in which strong internal motivations to control prejudice would not reduce bias. To further explore this effect, I examined the three-way interaction between IMS, Target Status, and measured Zero-Sum Beliefs for those participants who were in the condition characterized by job-related threat (designed to prime perceptions of Zero-Sum Competition). For these participants only, this three-way interaction was significant. Participants with stronger internal motivations to control prejudice evaluated High Status targets more favorably when they had low Zero-Sum Beliefs. However when they had high Zero-Sum Beliefs, they evaluated High Status targets significantly more *negatively*. This negative relationship between internal motivations to control prejudice and evaluations among participants with stronger Zero-Sum Beliefs is unexpected and surprising.

Given the consistent findings regarding the success that individuals who are internally motivated to control prejudice have in actually controlling prejudice, this finding begs the question of what could cause participants with stronger internal motivations to control prejudice specifically, to show *greater* discrimination against High Status Blacks. Research examining the processes by which high IMS individuals are able to respond with lower levels of bias may shed some light on these findings. Research finds that those who are internally motivated to control prejudice engage in conflict monitoring whereby they continually monitor their behavior so that it is not influenced by stereotypes and biases (Amodio, Devine, & Harmon-Jones, 2008). Further research suggests that these individuals also automatically inhibit negative stereotypes (Devine, et al., 2002; Gonsalkorale, Sherman, Allen, Klauer, & Amodio, 2011). As a result, individuals high on IMS are typically able to prevent the activation of negative stereotypes that often lead to prejudice. For example, Glaser and Knowles (2008) found a marginally significant negative correlation between IMS and automatic associations between Blacks and weapons. However, as Stephan and colleagues' research (2002) demonstrates, negative stereotypes are only one antecedent of prejudice (and presumably discrimination).

Being able to control the activation and use of negative stereotypes or negative impressions more generally, may not predict one's response to a perceived threat. More importantly, in the context of evaluations of High Status Blacks under conditions of economic threats, this conflict monitoring that high IMS individuals are so good at may work against them. In suppressing and inhibiting the negative stereotypes of Blacks, the positive stereotypes associated with High Status Blacks may become more salient –

relatively (they don't have other stereotypes diluting their impressions). Thus, in the face of specific environmental threats to the success of the ingroup, the routinized inhibition of negative stereotypes may produce an increase in discrimination because the positive stereotypes, that specifically pose a threat in these instances, become more salient. In working to reduce one's negative stereotypes of the target, one may focus on the positive stereotypes. Participants high in IMS may be more inclined to show discrimination because the threat is that much more salient. Thus, these targets may appear to be even more threatening to ingroup resources.

Implications, Limitations, and Future Directions

The purpose of this research was to address a gap in the literature regarding the influence of social status on racial discrimination. I have argued that race and social status are confounded in the literature, such that when participants make judgments about Blacks, they are actually thinking of Low Status Blacks. This is problematic because it suggests that the racial prejudice and discrimination that has been demonstrated in the literature may be due to a Race x Status interaction. This is also problematic because the resulting research on racial discrimination treats Blacks as a homogeneous group (see Celious & Oyserman, 2001; Czopp & Monteith, 2006). Consequently, little research has examined the contexts in which High Status Blacks face increased discrimination relative to Low Status Blacks, or the psychological mechanisms driving this specific instance of discrimination.

Blacks tend to have lower status than Whites, in terms of income, education, and homeownership rates (United States Census Bureau, 2011a; 2011b; 2012), and when they do improve their social status, they have difficulty maintaining it (Cole & Omari,

2003). One possible explanation for Blacks' fluctuation into and out of higher social statuses is that High Status Blacks face increased discrimination in economic and academic settings, compared to Low Status Blacks. I have argued and demonstrated that High Status Blacks face increased discrimination in these contexts when resources are threatened, and when competition over these resources is characterized in terms of zero-sum outcomes. High Status Blacks are stereotyped as being intelligent and educated, and therefore are perceived as relevant outgroup competitors when economic resources are scarce. Importantly, I found preliminary evidence that even strong internal efforts to control prejudice can backfire and lead to increased discrimination against High Status Blacks under threatening contexts characterized by zero-sum outcomes.

The findings presented here have several important implications for social psychological research on racial discrimination. To the best of my knowledge, this paper represents the first set of studies to systematically examine the interaction of race and social status as they jointly predict discrimination. Specifically, I demonstrated instances of targeted discrimination against high (vs. low) status Blacks across four experiments.

This research also offers a test of several components of Esses and colleagues' (1998) Instrumental Model of Group Conflict. I demonstrated that when resources are scarce, and competition over those resources is characterized by zero-sum outcomes, relevant outgroup competitors will face increased discrimination. In this case, pilot study 1 and studies 1a, 1b, and 2 demonstrate that High Status Blacks are a relevant outgroup competitor under conditions of economic scarcity, such that when competition is characterized by zero-sum outcomes, they will face increased discrimination.

This research raises several interesting questions regarding the dueling motivations of remaining unbiased, and protecting the resources and status of the ingroup. Some researchers have begun to examine whether securing resources for one's ingroup is a stronger motivation than remaining unbiased. For instance, Falomir-Pichastor, Muñoz-Rojas, Invernizzi, and Mugny (2004) showed that anti-discrimination norms reduced discrimination under non-threatening contexts, but had no impact on discrimination under conditions of perceived threat to economic resources. Further research suggests that when the outcomes of one's own group are at stake, motivations to protect the ingroup, rather than one's feelings towards the outgroup per se, are what determine judgments (Lowery, Unzueta, Goff, & Knowles, 2006).

Research has yet to examine the limits of internal motivation to control prejudice specifically. Examining IMS together with Zero-Sum Beliefs may be a useful avenue for future researchers to pursue. These two constructs both predict outgroup attitudes, but the sources of these attitudes are conceptually distinct. Whereas IMS is characterized by a genuine motivation to treat others fairly (Plant & Devine, 1998), Zero-Sum Beliefs are specifically related to the success of one's own group relative to others. IMS is independent of one's own group success. This research demonstrates that when the two are pitted against one another (the success of one's own group at the expense of the ingroup), one's motivations to protect the resources for the ingroup are a stronger motivation than simply maintaining egalitarian values. Future research should examine the process by which Zero-Sum Beliefs win out over motivations to control prejudice, specifically the notion that by routinizing the inhibition of negative stereotypes, it

becomes easier to discriminate against positively stereotyped groups in domains in which their stereotypes make them competitors.

In addition to the theoretical implications of this research, the findings presented here offer important insights into the roles that race and social status play in the United States. Recent economic data (Weller, Ajinkya, and Farrell, 2011) shows that the racial income gap has widened in recent years during the economic recession. This widened income gap may be due, in part, to chronically salient perceptions of economic resource threats and Zero-Sum Beliefs over scarce economic resources, such as jobs. If these threats are more salient due to the economic recession, then it is no wonder that Black Americans have had a more difficult time maintaining higher social status. Future research should examine the effect of economic crises on chronic perceptions of resource threat and subsequent discrimination.

Future research should also extend these findings beyond employment settings. Although employment is closely related to one's social status, the same motivations and patterns of discrimination may also be influential in other domains, such as lending practices aimed at Black home-buyers.

Although the results of this research provide preliminary evidence that High Status Blacks face discrimination under conditions of economic resource scarcity and zero-sum outcomes, there are several limitations of the research. A limitation of Study 1a is that half of the participants completed the study online, whereas the other half completed the study in the lab, after they had completed other neutral tasks. The sample variable was controlled for and did significantly interact with the order variable, however this interaction had no theoretical meaning. This variable also did not produce any

significant interactions with the variables of interest. If anything, these sample differences should have created more variance in the data and reduced the possibility of observing a significant three-way interaction.

A limitation of studies 1a, 1b, and 3b is the use of participants who were recruited online. Because these participants did not come in to the lab to complete the study, it is not possible to know whether they fully paid attention while completing the study, or whether their self-reported demographic information was accurate.

Although the findings across Studies 2 and 3b are somewhat consistent, the effects were mainly observed on the indirect evaluation measure. It is not unexpected that participants would be more cautious in providing direct evaluations. The finding that this variable reached significance across studies is not surprising as it would have been more difficult for participants to hide their biases on the more indirect measure.

There is an alternative explanation regarding the findings of Studies 2, 3a, and 3b. Each of these studies employed the same video to provide a target who could be frame as either a member of the cleaning crew or a physician. It is possible that participants assigned to the High Status condition evaluated the target's performance as lower than what they would expect from a physician, regardless of the physician's race. Because there would be no way to make an equivalent comparison to a White High Status target, it is possible that it was not the target's status itself driving the observed effects, but rather the target's performance or accent that was judged to be unexpected for a doctor. However, it is unlikely that a majority of participants judged the actor's performance to be sub-par. If evaluations were low due to a poor performance, it is not clear why participants under economic resource threat, and those with strong Zero-Sum Beliefs

would be particularly inclined to discriminate – if anything, this should have lead to lower levels of discrimination because a target with poor performance should pose less of a threat. Thus, it is unlikely that this could explain the observed effects.

There is one additional alternative explanation that applies across all the studies. In each study I selected names to represent the Black employees that were common names for Black Americans. However, if these names were perceived as prototypical, they may not have represented participants' stereotypes of High Status Blacks, but instead may have signaled a lower social status. That is, participants exposed to a high status employee (the senior consultant applicant in Studies 1a and 1b, and the physician in Studies 2, 3a, and 3b) may have judged the employee to be a lower status Black person that had improved their status through education, rather than having been brought up in a high status background. If this is the case, it is also possible that participants judged the High Status Black targets as beneficiaries of unfair treatment that enabled them to become successful. That is, participants may not have judged the employees as having the internal abilities to become successful, and instead may have assumed that the employees became successful through affirmative action programs (that were deemed to be unfair). It may be the case that participants discriminated against the High Status Black target not because they felt threatened, but because they felt that the High Status Black target had been given unfair advantages. Future research should explore whether participants make assumptions regarding affirmative action when evaluating the performance of High Status Black employees.

Chapter 10: Conclusion

This research represents an important first step in broadening our understanding of the various contexts in which Blacks face discrimination. The data presented here demonstrates that although High Status Blacks are stereotyped positively, they still face discrimination in domains related to those positive stereotypes. When economic resources are scarce and competition over resources is characterized by zero-sum outcomes, High Status Blacks face increased discrimination relative to Low Status Blacks. This research is particularly important as it demonstrates that gaining social status for Blacks may backfire and cause increased discrimination.

Appendix A

High Status Job Description (Study 1a and 1b).

Open Position: Senior Consultant (3 open positions)

The role of **Senior Consultant**, within Sandline Sports & Entertainment, serves as the advisor to the VP of Marketing and the unit President in providing account specific marketing plans and corporate support programs that will enhance our work for existing Clients. The individual will work closely with other members of the team to create and oversee marketing materials that support business innovation. The Senior Manager will be seen as the main resource for the field to enhance Client relationships.

Essential Functions

- Create templates for Clients to utilize for business planning and reviews
- Create materials for Senior Executive visits and be part of the presentation team
- Create innovative marketing materials to communicate to Clients our value proposition and enhance our relationships
- Provide quarterly results analysis
- Support region operational teams with information and analysis

Preferred Qualifications

- Minimum 10 years relevant experience (collaborative marketing, innovation, Client relationship building)
- MBA or other advanced degree
- 7 years supervisory experience
- Experience working with a multi-site retail brand organization, restaurant group or grocery chain with a strong quality market position
- Demonstrable results leading a high-performing team to grow sales, acquire clients, or build brand perceptions
- Outstanding presentation skills
- Possesses a high degree of intellectual curiosity

Key Competencies

- High level of organizational skills
- Competency with Microsoft Office programs - with a focus on Excel and PowerPoint
- Creative thinker that is not afraid of challenging the existing culture
- High degree of comfort with autonomy

Salary and Benefits

- Compensation: \$150,000-220,000, commensurate with experience
- Competitive benefits, including employer-matched 401K contributions, comprehensive health care, and 4-weeks paid vacation

Appendix B

High Status Resume (Study 1a).

JAMAL HOWARD
5326 Mulberry Ct.
Greenbelt, MD 20809

EDUCATION

- [REDACTED] University, [REDACTED] May 1994
B.A. in [REDACTED] GPA 3.87
- University of Michigan, Ann Arbor, MI, May 1998
M.B.A., concentration in [REDACTED], GPA [REDACTED]
Honors:
 - o Earned top grade on MBA project involving marketing of new products and services
 - o G. Stanton Emory Award for [REDACTED]

CAREER SKILLS / KNOWLEDGE

- [REDACTED]
- Product Promotion
- Sales Training and Development
- New Client Development
- Competitive Strategy Development
- Long and Short Range Planning

CAREER ACHIEVEMENTS

- Managed the entire inside and outside sales force for a Fortune 500 company, increasing sales by double digit figures for three consecutive years.
[REDACTED]
- Restructured inside and outside sales department for a Fortune 500 company. Worked with CEO, managers and members of the marketing, advertising and sales department to streamline operations and information reporting process.
[REDACTED]

RELEVANT WORK EXPERIENCE

[REDACTED], Middletown, MD 2008 - Present
Senior Account Manager:
[REDACTED]

Baites, Cromwell, and George, LLC, [REDACTED] 2002 - 2008
Account Manager:

- Initial responsibilities included inside sales support interacting with over 35 small to mid-sized customers. Accelerated growth of new accounts resulted in rapid placement into the outside sales workforce.
[REDACTED]

Seaward Gourmet, Ashton, MD 1996 - 2002
New Product Developer:

- Elected Product Developer of the Year by gourmet food industry for work related to product branding.
[REDACTED]

Note: The High Status resume used in Study 1b was identical except that it used different names and had an additional section that listed memberships in professional

organizations. This section was used to provide additional information signaling the applicant's race.

Appendix C

Low Status Job Description (Study 1a and 1b).

Open Position: Cafeteria Aide (3 open positions)

The role of **Cafeteria Aide**, within Sandline Sports & Entertainment, works to serve customers ordering food during sports events at a large stadium. The individual will assist food servers, cashiers, and cooks. The Cafeteria Aide will work before games to assist in food prep, will work during games to maintain a cleanly food service area, and will work after games to breakdown food service stations.

Essential Functions

- Set up and break down frying stations
- Prepare all ready-made sandwiches, labels them and date them
- Cut and weigh meat and cheeses needed for the day
- Mop floor at the end of the night
- Cleans and sanitizes work areas, equipment and utensils

Preferred Qualifications

- Minimum 1 year experience in the food service industry
- Minimum 1 year experience prepping food
- High school diploma or GED
- Knowledge of food safety
- Must be able to safely operate a meat slicer
- Must be able to read and follow recipes
- Ability to understand and follow directions given by management

Key Competencies

- Comfort with autonomy
- Ability to work in fast-paced environment
- Understanding of cleaning techniques
- Comfort with non-traditional work schedule and late working hours

Compensation

- **\$7 - \$13/hour, commensurate with experience**

Appendix D

Low Status Resume (Study 1a).

JAMAL HOWARD
5326 Mulberry Ct.
Greenville, MD 20809

EDUCATION

- [REDACTED] High School, [REDACTED] Graduated May, 1990
- ServeSafe Certification, 2002-present

CAREER SKILLS / KNOWLEDGE

<ul style="list-style-type: none">• Sanitizer Mixing Formulas• Cash Register Operation	<ul style="list-style-type: none">• Food Presentation• Ability to prioritize restaurant needs• Line Cooking Skills
---	--

RELEVANT WORK EXPERIENCE

[REDACTED], Middletown, MD 2008 - Present
General Assistant and Line Cook
[REDACTED]

- Grill prepped foods, such as chicken, steaks, and appetizers
- Cleaned restaurant area before, during, and after dinner

Baites, Cromwell, and George Catering, [REDACTED] 2002 - 2008
Cook's Assistant
[REDACTED]

- Did various other duties as required by cook.

Seaward Gourmet, Ashton, MD 1996 - 2002
Food Runner
[REDACTED]

- Carried food to tables in a timely manner as a table's food was prepared and ready. Ensured that food was presented to the correct restaurant patrons.

Note: The Low Status resume used in Study 1b was identical except that it used different names and had an additional section that listed memberships in professional

organizations. This section was used to provide additional information signaling the applicant's race.

Appendix E

Zero-Sum Beliefs scale adapted from Esses, et al. (1998; Study 2, Study 3a, Study 3b). Participants were asked to rate (on a six-point scale) the extent to which they agreed or disagreed with the following statements.

1. When blacks make economic gains, Whites lose out economically.
2. Blacks tend to open up small businesses, which means that there are fewer business opportunities available to Whites.
3. The more power Blacks obtain, the more difficult it is for Whites.
4. As Blacks take advantage of education opportunities, there are fewer spots and opportunities available for Whites.
5. Blacks take jobs away from Whites.
6. More Blacks in positions of power means fewer opportunities for Whites.
7. Blacks have too much say about political issues.
8. Blacks have been trying to get ahead economically, at the expense of Whites.
9. More good jobs for Blacks means fewer good jobs for Whites.
10. Financial aid to Blacks hurts Whites.
11. Programs like affirmative action give Blacks an advantage over Whites.

Appendix F

Zero-Sum Competition Manipulation (Study 3a)

Americans Lose Status as African... <http://www.washingtonpost.com/national/health-science/white-americans-lose-status-as>

The Washington Post

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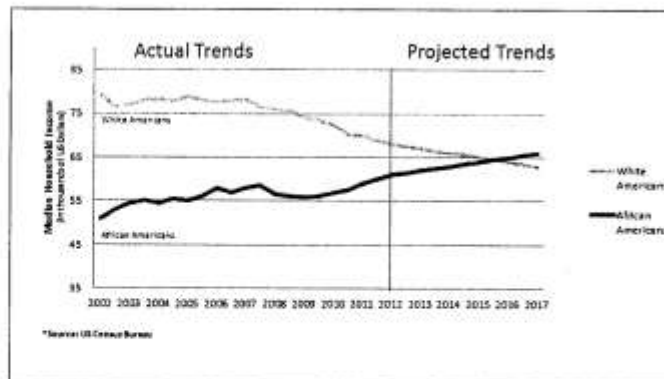
White Americans Lose status as African Americans Gain Status

By **Steven Mufson**, Updated: Monday, April 16, 4:23 PM

Recent research from The U.S. Census Bureau, The Policy Research Institute, and the Department for Housing and Urban Development suggests that the overall well-being of different groups in this country is shifting. Across three recently published studies, it appears that some minority groups are gaining social status and improving their economic well-being. Just as minorities gain status and economic power, Whites in this country are losing status and economic power.

According to national longitudinal survey conducted by the Policy Research Institute and the US Census Bureau, over the past 10 years, the annual median income of African Americans has steadily increased between 2 and 4% each year. However, these increases do not appear to occur across all ethnic groups in this country. During the same time period, Census data shows that White Americans' annual median income has decreased between 3 and 5% a year.

Another study conducted by the Department of Housing and Urban Development shows similar trends in home ownership rates. The percentage of white families owning their own homes has decreased over the past 5 years, as the percentage of African families owning homes has increased. This trend is most notable in suburbs of major cities. Researchers expect this trend to continue. During the next 15 years, African Americans will likely surpass White Americans in terms of wealth and home ownership rates.



4/16/2012 7:46 P.

Americans Lose Status as African... <http://www.washingtonpost.com/national/health-science/white-americans-lose-status-as->

Researchers attribute these recent trends to scarce resources and increased competition. They argue that it is not possible for all citizens to improve their well-being at the same time. Because wealth and education opportunities are limited, when African Americans gain education and increase their wealth, White Americans may have fewer opportunities. As one ethnic group increases their economic wealth, other groups will necessarily lose wealth.

This research demonstrates that the successes of different ethnic groups in this country are linked. Economic resources are finite and limited. The economists and political scientists conducting this research argue that it just is not possible for all groups to have higher incomes, access to credit, desirable jobs, academic scholarships, and placement in colleges and universities.

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Appendix G

Non-Zero-Sum Competition Manipulation (Study 3a)

Americans and African Americans... <http://www.washingtonpost.com/national/health-science/white-americans-and-african-amer...>

The Washington Post

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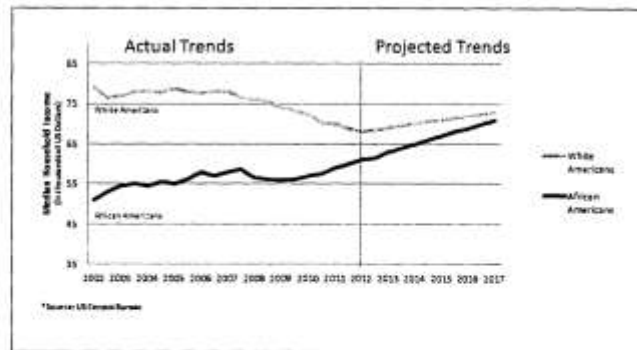
White Americans And African Americans Gain Status Together

By **Steven Mufson**, Updated: Monday, April 16, 4:23 PM

Recent research from The U.S. Census Bureau, The Policy Research Institute, and the Department for Housing and Urban Development suggests that the overall well-being of different groups in this country is shifting. Across three recently published studies, it appears that some minority groups are gaining social status and improving their economic well-being. Just as minorities gain status and economic power, Whites in this country are also gaining status and economic power.

According to national longitudinal survey conducted by the Policy Research Institute and the US Census Bureau, over the past 10 years, the annual median income of Black Americans has steadily increased between 2 and 4% each year. Similarly, these increases do appear to occur across all ethnic groups in this country. During the same time period, Census data shows that White Americans' annual median income has increased between 3 and 5% a year.

Another study conducted by the Department of Housing and Urban Development shows similar trends in home ownership rates. The percentage of white families owning their own homes has increased over the past 5 years, as the percentage of black families owning homes has also increased. This trend is most notable in suburbs of major cities. Researchers expect this trend to continue. During the next 15 years, Black Americans and White Americans will move forward together in terms of wealth and home ownership rates.



Researchers attribute these recent trends to economic redevelopment and increased innovation. They argue that it is possible for all citizens to improve their well-being at the same time. As one group increases its wealth and resources, it creates new opportunities and resources for other groups. If all groups are increasing in wealth and status, then all groups can support each other. When Black

4/16/2012 7:46 PM

Americans and African Americans... <http://www.washingtonpost.com/national/health-science/white-americans-and-african-amer...>

Americans gain education and increase their wealth, White Americans may have more opportunities. As one ethnic group increases their economic wealth, other groups will necessarily increase in wealth as well.

This research demonstrates that the successes of different ethnic groups in this country are linked. Economic resources are not finite or limited. The economists and political scientists conducting this research argue that it very possible for all groups to have higher incomes, access to credit, desirable jobs, academic scholarships, and placement in colleges and universities.

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Appendix H

No Competition Manipulation (Study 3a)

Reality Show Domains Expanded

<http://www.washingtonpost.com/national/entertainment/reality-show-domains-expanded...>

The Washington Post

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Reality Show Domains Expanded

By [Steven Mufson](#), Updated: Monday, April 16, 4:23 PM

Recent research from The U.S. Federal Communications Commission, The Media Research Institute, and Viacom suggests that the types of domains covered by reality shows are shifting. Across three recently published studies, it appears that reality shows are still among the most popular form of television entertainment, and as new reality shows are being created, they are covering a wider variety of topics.

According to the FCC, over the past 10 years the number of new ratings applications has increased between 20 and 30% a year. Traditional networks, such as MTV and Bravo have increased their reality show coverage, but other networks, such as Lifetime, are also joining in.

There has also been an increase in the number of competition-based reality shows. Most major cable networks now have at least one show where people compete for a prize. For instance, HGTV has a show called 'Design Star' where designers compete for their own reality design show.

Public television networks are also joining this trend. These reality shows tend to cover topics that are less familiar to viewers, such as people with unusual hobbies, or exceptional virtuositities in the arts or music.

Researchers attribute these recent trends to a growing fascination with the way that real, ordinary people live their lives and interact. Viewers also appear to be interested in unique or unusual lifestyles or life events that they may never experience. Viewers also enjoy learning about the lives of people from different parts of the country or the world. The experience allows a broader expansion of experience than simple fiction-based entertainment.

Appendix I

Hospital Evaluation Questions (Study 3a and Study 3b). Participants were asked to rate their agreement with the following items (on a six-point scale from ‘*strongly disagree*’ to ‘*strongly agree*’).

1. I would feel confident about the diagnoses given by Sandline physicians.
2. The care provided by all Sandline staff would be exceptional.
3. I would feel concerned that I might catch a virus if I had to stay at Sandline Hospital overnight.
4. The rooms at Sandline are probably clean and comfortable.
5. I would consider going to Sandline for routine check-ups.
6. I would worry that the staff at Sandline are incompetent

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