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Negatively Stereotyping Historically Black Colleges and Universities as an Intergroup Process

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## Abstract

Negatively Stereotyping Historically Black Colleges and Universities as an Intergroup Process.

By

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Educating enslaved Africans was illegal in antebellum America. However, in the mid-1800s philanthropists and the U.S. Congress established higher education institutions for newly freed people. From then until present, inequitable economic policy and the lower status of Historically Black Colleges and Universities (HBCUs), vs. Historically White Institutions (HWIs), have reified a hierarchical ordering of Black and White schools — consistent with Social Dominance Theory (Sidanius & Pratto, 1999). In four studies (n=1059), endorsement of negative HBCU stereotypes via the HBCU Stereotype Scale (HBCU-SS) captured individuals' mental representations of this hierarchical ordering in ways that illuminate connections between racialized educational spaces and intergroup attitudes more broadly. Studies 1 & 2 demonstrate a unifactor structure across all four samples and establish construct validity for both Black and White participants. For all participants, the HBCU-SS was predicted by preference for group inequality — via the Social Dominance Orientation scale. For Blacks, the HBCU-SS was uniquely related to measures of racial identity. For White individuals the HBCU-SS was related to political attitudes, measures of generalized prejudice, as well as motivations to control prejudice. Study three shows that when White participants read about governmental in HBCUs (vs. HWIs), they were more likely to negatively stereotype HBCUs, suggesting hierarchy-maintaining motivations may drive these perceptions. Lastly, study four shows that when White participants are primed with threat to their majority status in society, they increase their stereotyping of HBCUs and increase their endorsement of inequitable resource allocations toward HBCUs.

## **Dedication**

I dedicate this dissertation to my father Dr. A. Wade Boykin, my brother Alfred Wade Boykin III, Esq., and my mother Jacquelynn Boykin whose unwavering support of me made this dissertation possible. Every day of my life, these three individuals inspire me. I would also like to dedicate this dissertation to my mentor Dr. Edmund W. Gordon whose encouragement, endorsement, and investment in my development helped to make this dissertation possible. Lastly, I would also like to dedicate this dissertation to the people who believed in me and to the people who didn't. I drew important inspiration from people in both camps.

## **Introduction**

Historically Black Colleges and Universities (HBCUs) have long and intricate history that is influenced by the history of Black and White race relations in the United States (Duster, 2009; Roebuck & Murty, 1993). Despite their central role as gateways to success for much of our population, there has been no research on attitudes and perceptions towards HBCUs. In this dissertation, I aim to fill this gap, and explore behavioral implications of attitudes towards HBCUs in terms of unequal resource allocation.

In this dissertation, I first give a brief historical background of HBCU's, including an introduction to aspects of their origins, early history, their opposition, and their modern benefits. Second, I connect this background information to several psychological constructs that may inform attitudes and resource inequities enacted towards HBCUs. Next, I introduce the potential that HBCU stereotyping is a theoretically meaningful construct that can be reliably measured. Serving this purpose, I present a study to develop and analyze the psychometric properties of a new measure: the HBCU Stereotyping Scale (HBCU-SS). To understand the construct validity of the HBCU-SS, I establish nomological net to demonstrate the relationships the measure has to several theoretically relevant constructs for Black and White people. I then test the sensitivity of this measure for understanding intergroup attitudes in an experiment pertaining to federal resource allocations to HBCUs vs. Historically White Institutions of higher learning (HWIs). Afterwards, I test the potential for HBCU stereotyping to operate as a mechanism through which racial group status threat informs Whites' endorsements of resource inequality for HBCUs. Lastly I discuss theoretical implications and limitations of the present program of research.

HBCUs fill a unique void in the decision space for college choice; many African American students report choosing an HBCUs for the opportunity to explore their racial identity and to grow intellectually within an environment where they can also unapologetically explore this aspect of their humanity more deeply (Van Camp, Barden, Sloan, and Clarke 2009). Relatedly, many African American students report choosing HBCUs to avoid dealing with marginalization, overt racism, microaggressions, and anti-Black behaviors that Black students report experiencing on HWI Campuses (Van Camp, Barden, and Sloan, 2010). In a survey analysis of over 2,000 Black individuals who graduated from college in the United States, Seymour and Ray (2015) found that the graduates of HBCUs experienced greater levels of financial, physical, and social well-being. Despite the positives that HBCUs bring to the table, these institutions are often characterized, collectively, in stereotypical terms. This dissertation aims to quantify negative attitudes towards HBCUs and their potential precursors and implications.

### **The Origins of HBCUs**

#### **Emancipation, Educability, and the Rise of HBCUs**

In most of the United States and Colonial America prior to 1865, the education of enslaved Africans was largely illegal or deemed socially unacceptable (Duster, 2009). Given the legalized subjugation of Blacks, a mere 28 out of a population of more than 4 million Blacks were awarded bachelor's degrees in United States universities prior to the Civil War (Drewry & Doermann, 2001). Coinciding with the period following the emancipation proclamation, theories of trait heritability emerged in the biological and social sciences (Galton, 1869, 1889; Hoffman, 1896; Ralls, 1877; Thomas & Sillen, 1972). Trait heritability theories provided a springboard for

biological determinism (i.e., that heritable traits as opposed to contextual factors govern racial differences in intelligence (Duster, 2015; Graves, 2003; Thomas & Sillen, 1972), and helped to support widely held lay-theories of African pathology, ineducability, and intelligence deficit relative to their European/White counterparts (Galton, 1869; Galton, 1889; Graves, 2003; Ralls, 1877; Thomas & Sillen, 1972).

Further, these biological deficit theories were overtly endorsed across the political spectrum. In an Illinois senate debate with the incumbent, three years prior to his ascendance to the presidency, Abraham Lincoln received a rousing applause for offering the following perspective: *“I am not, nor ever have been, in favor of bringing about in any way the social and political equality of the white and black races”* (Lincoln, 1860. Importantly, Lincoln continues to say that *“...there is a physical difference between the white and black races which I believe will forever forbid the two races living together on terms of social and political equality”*. These theories and sentiments gave way to state sanctioned segregation of society and educational opportunity.

Despite the 14th amendment to the Constitution and its promise of equal protection under the law for “all”, several court rulings established a legal mandate to maintain “separate but equal” spaces and facilities for Black and White Americans. Legal segregation permeated all aspects of American life from transportation, to neighborhood zoning, to schooling and more. Though a handful of Historically White Institutions (HWIs) in the North made the rare admissions offer to aspiring Black students, higher education opportunities were exceptionally scarce for this demographic. Thus a mere 40 African Americans received a college education in the first 90 years (1776-1866) of American history (Roebuck & Murty, 1993). However, new paths to education emerged through defiant acts of philanthropy and through acts of church-group charity, as a small number of designated higher education institutions for African Americans were established in Northern, Midwestern, and Southern United States (Roebuck & Murty, 1993). Large-scale Federal interventions followed the example set by these private donors and religious charities to fund and develop institutions to provide vocational training, as well as post-secondary education for America’s newly Freed Men and Women (Roebuck & Murty, 1993).

### **Opposition to HBCUs**

From the start, HBCUs were met with staunch opposition by many White southerners. On several occasions, there were deliberate attempts to sabotage these institutions with policy, funds withholding, the burning of buildings, as well as theft (Fleming, 1976). In one instance, the president of an HBCU, Talladega College, was shot and killed. It was in this context that Booker T. Washington explicitly argued that these institutions would not challenge or upset the racial hierarchy, and that Blacks were seeking trade skills to support themselves and to serve their own communities as opposed to pursuing upward mobility in White society at large (Duster, 2009). This strategy of appeasement proved effective, as southern lawmakers began to withdraw their active opposition to the institutions. However, in many cases, the financial and legislative support for HBCUs put forth by White southerners was designed to develop curriculums for skills in trade jobs that were becoming more obsolete with the technological advancements of the time, with the goal of keeping African Americans from interfering with opportunities for White labor seekers (Duster, 2009; Fleming, 1976; Roebuck & Murty, 1993). In this same period, the

Federal Land Grant Acts of 1862 and 1890 established the public funding of higher education institutions for Whites and Blacks respectively, which in turn helped to mitigate the efforts of opposition toward HBCUs (Duster, 2009; Lee & Keys, 2013).

At present, there are more than 100 HBCUs in existence, which continue to demonstrate their institutional value as they prepare a majority African American student body for a wide array of career paths (Duster, 2009). In their first century of existence, HBCUs educated more than 95% of African American college graduates in the US. In this, HBCUs have provided a consistent mechanism of upward mobility for African Americans. For example, a disproportionate number of African American doctors and current medical students are educated at HBCUs (Gasman, Smith, Ye, & Nguyen, 2017). This includes Howard University and Xavier University, which are consistently the top two producers of Black medical students, as well as Prairie View A & M, which ranks in the top 10 (Gasman et. al., 2017). Additionally, some of the country's most successful entrepreneurs, writers, and public servants are HBCU alumni (e.g. Oprah Winfrey, Sen. Kamala Harris, and Te-Nihisi Coates).

### **Stereotyping Black Spaces**

Despite the success and importance of HBCUs, there is reason to believe that there may be negative attitudes and stereotypes associated with these institutions. In a series of laboratory studies, Bonam, Eberhardt, and Bergsieker (2015) demonstrated that physical spaces associated with African Americans are themselves the subject of stereotypes. Using open-ended responses, participants were asked to generate characteristics of the areas where African Americans lived in the United States. Participants largely responded by generating a list of stereotypes to describe Black spaces that were parallel to the stereotypes Zou and Cheryan (2017) reported about Black people. For example, participants in both studies relatedly stereotyped (1) Blacks as criminals and Black spaces as crime-ridden, (2) Blacks as poor and Black spaces as impoverished, and (3) both Blacks and Black spaces as dirty (Bonam, Eberhardt, & Bergsieker, 2015; Zou & Cheryan, 2017).

Bonam and colleagues (2015) further demonstrated that these negative stereotypes, in turn, lead to negative appraisals of the monetary value of spaces occupied by Blacks, as well as the endorsement of harmful policies that would negatively impact the health and quality of life of the people who occupy the space (e.g. environmental protection). For example, participants in Bonam et al. (2015) were more likely to endorse policies that placed toxic chemical plants in neighborhoods with Black residents than in neighborhoods with White residents (Bonam, Berhardt, & Bergsieker, 2015). Further, Williams, Sng, and Neuberg (2016) demonstrate that perceivers associate races with ecologies, and showed that the default association made about Blacks was one of desperate and fast-life ecologies. This association between Black people and desperation ecologies leads individuals to stereotype Blacks as being susceptible to perpetuating mismanagement in their lives and to poor future planning. Taken together, this research suggests that historically Black institutions of higher learning may be similarly subject to negative associations and attitudes. Such attitudes have not, to my knowledge, been systematically assessed or measured in the psychological literature.

### **Stereotyping HBCUs?**

While no empirical research on the stereotyping of HBCUs exists, several qualitative studies offer insight into aspects of this proposed phenomenon. Using historical methods, Gasman (2011) examined perceptions of Black HBCU presidents as leaders. In this work, she



concluded that much of the sociological, historical, newspaper, and literary writings about HBCU presidents included descriptions of these presidents as incompetent, untrustworthy, nefarious, and impulsive in manners that undermine the effective management and governance of the institutions they lead. In contrast, Gasman's historical work also highlights finding a diversity of leadership styles, a balance of complex organizational contingencies, as well as an undervalued series of accounts of successful leadership at HBCUs. While these counter-narratives exist in the historical literature, they do not dominate the narrative to the same degree as the negative and stereotype-consistent messages do.

In related work, Gasman (2007) conducted a content analysis of media coverage of Morris Brown College, a privately owned HBCU in Atlanta, Georgia that was stripped of its accreditation in 2002. This study revealed that many articles discussing the specific plight of Morris Brown dubiously generalized their woes to all HBCUs and called for these universities to defend their existence in modern times. In a CNN online article (2003) describing the financial woes of Morris Brown College and another HBCU, Grambling State University, Gasman attempted to counter the biases in media coverage by highlighting that many of the nation's HBCUs are on firm financial footing, a sentiment offered in warning against overgeneralization. She stated that the amount of attention HBCUs receive is partly because they are few in number (CNN, 2003). If Gasman's assertion is correct, then the media could be both relying upon and perpetuating an illusory correlation between (a) HBCUs as a distinctive subset of institutions, and (b) the salient financial woes that a small fraction of these institutions are facing (Chapman, 1967; Mullen & Johnson, 1990).

It is well documented in previous research in psychology, as well as in mass communications, that news media can transmit racial biases and provide the kinds of negative cross-group depictions that impact attitudes (Dixon & Linz, 2000; Fujioka, 1999; Wiesbuch, Pauker, & Ambidy, 2009). In line with Henderson-King and Nisbett's (1996) research demonstrating that exposure to the negative behavior of one African American can lead to anti-Black attitudes, it is possible that negative media exposure to one HBCU could lead a general negative sentiment toward these institutions. Further, the combination of the novelty of the institution together with the negative connotation of the media coverage makes these negative contact experiences more memorable (Paolini, Harwood, and Rubin, 2010). Moreover, as negative associations and contact experiences have a greater impact on cognitive associations than do positive ones for individuals (Barlow et. al., 2012), it is possible the same is true for institutions. In this, negative press about an HBCU can generalize to all HBCUs and dominate schemas regarding these institutions overall.

Furthermore, it is important to note that one may not even have personal knowledge or familiarity with HBCUs to negatively stereotype them. As Bonam, Eberhardt, and Bergsieker (2015) showed, people generate stereotypical characteristics of Black spaces without ever having seen the space in question. It stands to reason that an HBCU's association with stereotyped people, or the assumption that the ecologies of an institution managed by stereotyped people are negative, could be enough to assume the inferiority of HBCUs relative to HWIs.

### **Subtle Racism and Racial Resentment?**

Reducing HBCUs to negative stereotypes could potentially indicate racist ideologies. As Jim Crow and overt discriminatory policies have been ushered out and deemed less acceptable in American society, theorists have developed research programs centered on a newer and “more subtle” forms of racism (Kinder & Sander, 1996; Henry & Sears, 2002). Two related ideas that were developed to quantify this phenomenon are symbolic racism and racial resentment. Each of these hinge on the concept that the nature of negative attitudes towards Blacks have been refashioned in modern times as negative attitudes towards violations of social norms and strongly held values. *Symbolic racism* was named as such to highlight the fact the newer subtle forms of racism are directed as abstractions (e.g. violations of moral values or policies that violate these values), as opposed to being directed at individuals, making the attitudes appear too murky, nebulous, and, ambiguous to be clearly defined as racist (Henry & Sears, 2002). The ambiguity allows the individual endorsing symbolically racist ideologies, and critics of this program of research, the philosophical room to protest that their positions are values based and not bigoted (Wilson & Davis, 2011). The related concept, *Racial Resentment*, was named to focus on resentment that emanates from the perceived violation of the norm itself (Kinder & Sanders, 1996; Wilson & Davis, 2011). The resentment is not about Blacks and their immutable qualities, but their violations of social norms (e.g. lack of commitment to hard work), or the violated norms that support them (e.g. wasteful interventions designed to alleviate non-existent prejudices) (Kinder & Sanders, 1996; Wilson & Davis, 2011). So as opposed to saying Blacks are inherently lazy, which would be overtly racist and unacceptable, one could instead say: “It’s really a matter of some people not trying hard enough; if blacks would only try harder they could be just as well off as whites” (Henry & Sears, 2002; Kinder & Sanders, 1996). Given the conceptual overlap between these two programs of research, as well as the overlap between the researchers who help to advance these theories, the text quoted in the previous sentence provides an example item that is used in scales designed to measure symbolic racism and in scales designed to measure racial resentment.

Gasman’s review of media coverage of HBCUs illustrates that these institutions are vulnerable to the kinds of abstract symbolic and derisions that could inspire racial resentment (2007). Specifically, she highlights that media coverage often lumps all HBCUs together as a monolithic entity, wherein the challenges of one Black College (e.g. Morris Brown) are construed as an indictment of them all (Gasman, 2007). This failure to disambiguate between the diversity amongst HBCUs, and repeatedly use the critique of one HBCU to uniformly signal the potential obsolescence of all HBCUs bears similarity to the “subtle” racism phenomenon. The fact that the attitudes are directed at a nebulous grouping of colleges and universities then provides a level of abstraction that clouds the potential that attitudes toward HBCUs are simply anti-Black attitudes at their nature. Moreover, the fact that many of these institutions receive public funds (Roebuck & Murty, 1993), or that they provide an academic space for students to learn where they can worry less about prejudices that many Whites believe do not exist (Boutwel et. al., 2017) could stoke racial resentment related to their potential to be perceived by Whites as a waste of resources.

### **Status Threat**

In an attempt to garner financial and legislative support, fundraising efforts for the development of both public and private HBCUs made deliberate appeals to White

philanthropists, legislators, and constituents that HBCUs would not upset the racial status hierarchy in American society (Duster, 2009; Allen, Jewel, Griffin, & Wolf, 2007). While advocating for the *institute model* for Black education (e.g. Hampton University & Tuskegee University), Booker T. Washington argued that higher education for Blacks should focus on industrial and practical skills that could be leveraged to serve the Black community, as opposed to focusing on erudition and liberal arts (Allen et. al., 2007; Washington, 1901). Washington's approach drew criticism from several Black scholars of his time, as this approach seemed to acquiesce to racial hierarchy as opposed to challenge it (DuBois, 1903). However, as previously stated, this approach was effective in reaping financial support and mitigating opposition from Whites, as it was designed to ameliorate concerns that Blacks could educate themselves to equality with Whites in society (Allen et. al., 2007; Washington, 1901). This path taken by Booker T. Washington, and others who were tasked with raising funds for HBCUs, signals that the potential for status elevation for Blacks was a particularly threatening proposition for Whites in that time. Relatedly, Craig & Richeson (2014a-b) found empirical support, across multiple studies, for the idea that threats to Whites' hierarchical status in society leads White individuals to endorse policies that are perceived to benefit Whites – at the expense of ethnic and racial minorities. In this, societal status is seen as a zero-some resource that needs to be protected, thus occurrences that can lead to increases in status for ethnic minorities (e.g. increases in numerical growth or increases in opportunities) are interpreted as threats to Whites' hierarchical position in society. In this, we expect status threat to serve as a mechanism that leads to increased negative attitudes toward HBCUs and to the endorsement of less financial resources being allocated to HBCUs.

### **What should negative attitudes towards HBCUs relate to?**

In this section, I introduce constructs that should be theoretically related to one's attitudes towards HBCUs. Though clearly not an exhaustive list, this section nevertheless begins the process of outlining the nomological net for the measure that I propose in this dissertation. I begin here by highlighting two concepts that should relate to a person's attitudes toward HBCUs regardless of their race: Social Dominance Orientation and Preference for the Meritocracy. Next, as I argue that attitudes toward HBCUs should have different meanings for Black and White people respectively, I introduce separate sets of constructs to help inform nomological nets for these two racial demographics.

### **Social Dominance and Hierarchy**

Higher learning is inherently ordinal and hierarchical; given that it is described as “higher” communicates distinction and relativity to something below. Likewise, the American higher education system has been leveraging empirical metrics to hierarchically rank order universities for nearly 150 years (Meredith, 2004). Each year many university administrators as well as college hopefuls await the US News & World Report (USNWR) rankings of universities to assess the perceived prestige of various institutions. USNWR rankings, among other ranking systems, impact application rates, admissions rates, tuition costs, grant funding, and relative resource allocations as many universities compete for limited resources and rank positioning (Meredith, 2004). At their essence, universities are organizations founded by humans, and to rank order these social institutions by any metric is to quantify group hierarchy and stratification. Thus college rankings, and the hierarchy-based resource inequality that is influenced by these rankings, are processes consistent with the Social Dominance Theory (SDT) assertion that arbitrary sets of socially determined distinctions can govern resource inequality (Sidanius &

Pratto, 1999; Sidanius et. al. 2016). When this perspective of institutional hierarchy is coupled with the history of racial subjugation experienced by Blacks in the United States, it is unsurprising that HBCUs are consistently ranked in a lower position relative to large numbers of Historically White Institutions (HWIs) by USNWR and other similar ranking systems (USNWR, 2018). This pattern is in line with research on perceptions of racial ranking and position, which demonstrate that when people are tasked with ranking racial groups in general in terms of advantage and desirable traits in the United States, individuals often rank Whites higher than Blacks (Blumer, 1958; Bobo, 1999; Zou & Cheryan, 2017).

How individuals perceive a university and its hierarchical status should be influenced by a person's Social Dominance Orientation (SDO), a measure of individual differences in preference for group-based hierarchy. People from societal groups that occupy advantageous positions regarding resource inequality in society, or rather dominant group members, score consistently higher on SDO than members of subordinate and subjugated groups. Consistent with empirical findings, dominant group members who score high on SDO are theorized to behave in ways that help to maintain and enhance their groups advantages in society. One manner of enhancing and imposing hierarchy is by legitimizing negative stereotypes about subordinate groups within a society and their members and defining them as having inferior traits (Sidanius & Pratto, 1999; Sidanius, et. al. 2016). This stereotyping of people, which is related to SDO, may also extend to institutions of higher learning are attended by and associated with stereotyped groups of people. Thus, if stereotyping HBCUs is a meaningful construct, we would expect it to be related to Social Dominance Orientation for members of higher positioned groups.

### **Preference for the Meritocracy Principle**

As discussed earlier, HBCUs were initially created for the purpose of restorative justice in the context of extreme racial oppression. Blacks were not allowed to pursue education, which hindered opportunities for Black people to develop their talents and earn a living wage. HBCUs attempted to make the playing field more equal, such that Blacks could improve their conditions on their merits. Regardless of whether equality was achieved through the development of HBCUs, they were founded with meritocratic principles within the context of the segregated societal constraints that begat their existence. Preference for the Meritocracy Principle (PMP), as the name implies, describes an individual preference for the principle of resource allocation based on one's work and merits. Individuals who are high on PMP do not necessarily endorse the existence of meritocracy within a given a situation, only that they prefer this ideal.

In data published by Davey and colleagues (1999), People high in PMP were shown to oppose Affirmative action programs for women and minorities, but only when these programs were construed to violate fair principles. Participants in this study were comparatively in less opposition to an equal treatment program with no special provisions for qualified candidates from particular demographics. Although affirmative action programs are designed for restorative justice within the context of historical marginalization, the policies that govern their operationalization can potentially be seen to violate meritocratic principles for a given pool of opportunity seekers. To further illustrate this point, Son Hing and colleagues (2011) demonstrated that PMP is a distinct construct from the hierarchy legitimizing myth that believing that meritocracy actually exists within society.

While not central to their hypotheses, PMP was demonstrated as negatively correlated with SDO in two lines of previous research (Son Hing et al., 2011; Young, 2013). From this standpoint, this statistical pattern could support the idea that PMP is the endorsement of a principle of merit-based resource allocation as opposed to subjugation and impermeable group-based resource inequality. As we expect stereotyping HBCUs to be positively correlated with SDO, the stereotyping of HBCUs should be negatively associated with the PMP.

### **HBCU Stereotyping among Blacks**

A great amount of SDO research has been conducted to understand majority group members' attitudes toward minority out-groups; however, SDO is still a meaningful construct for understanding minority group psychology and behavior. In a series of multiple regression analyses, individual differences in SDO were significant predictors of several subconstructs of the Cross Racial Identity Scale (CRIS), a multi-dimensional measure of the meaning African Americans draw from the experience of being Black. Importantly, SDO predicted Miseducation in Blacks, a subconstruct designed to assess the extent to which Black people negatively stereotype of Black people (Boykin, Martin, Worrell, and Mendoza-Denton, under review). Equally important, SDO was correlated with five out of the six subconstructs of the CRIS suggesting that individual differences in preference for group hierarchy are related to multiple aspects of Black identity.

In Freeman and DeGregory's (2015) list of 22 talking points to use in response to common disparaging comments and questions about HBCUs, the authors write, "Who among us hasn't heard these harsh words, argued against them, and in some instances uttered them ourselves?" This quote remorsefully signals that these negative attitudes towards HBCUs exist in discourses among Black people, and have even been stated by HBCU advocates. It is further important to highlight that several of the 22 talking points mentioned in this article speak directly to space-focused stereotyping, including themes specifically related to the assumed inferiority of HBCUs relative to HWIs, the perceived obsolescence of HBCUs, and the falsely prescribed homogeneity among HBCUs that are consistent with Gasman's (2007) qualitative findings regarding Morris Brown (e.g. HBCUs are obsolete and all the same). Taken together with hierarchy endorsements measured by SDO predicting Black stereotyping of Blacks, this suggests that negative stereotyping of HBCUs could be related to Black identity as well as SDO among Black individuals.

### **Intergroup Nomological Net**

HBCUs were founded initially as a response to intergroup subjugation and violence and their founding were a severe violation of racial and societal norms (Duster, 2009; Fleming, 1976; Roebuck & Murty, 1993). Given these, we should expect the HBCU-SS measure to be related to scales designed to advance our understanding of intergroup processes. As such, in addition to SDO, I expected negative attitudes towards HBCUs among Americans to be correlated with the Right-Wing Authoritarianism and Racial Resentment scales (Kinder & Sanders, 1996). Additionally, given past correlations between SDO and motivations to control prejudice, I expected a positive relationship between the HBCU-SS measure and External Motivation to Control Prejudice and a negative relationship between the HBCU-SS and Internal Motivation to

Control Prejudice (Lowery, Hardin, & Sinclair, 2001; Forscher, Cox, Graetz, & Devine, 2015). Conversely, as I expect Black individuals' feelings about the experience of being Black to be related to their attitudes towards HBCUs, attitudes toward these institutions should be largely irrelevant to the feelings Whites have toward the experience of being White. Thus, we do not expect a relationship between HBCU stereotyping and White identity denial, nor toward the subjective sense of social status Whites feel in society, as they could be seen as irrelevant to White social mobility (Plaut & Goren, 2014).

### **Current Studies**

The research I have reviewed assessing attitudes towards HBCUs is almost entirely qualitative or historical in nature. While all of this work makes valuable yet indirect contributions to understanding negative construals of HBCUs, none of this research directly assesses the stereotyping of HBCUs as a reliable or meaningful construct. In the present studies I discuss the creation of the Historically Black College and University Stereotype Endorsement Scale (HBCU-SS), a measure designed to directly assess the endorsements of negative stereotypes about HBCUs as an individual difference variable. I first test the internal consistency of our proposed construct in two separate African American Samples. I next seek to evaluate the construct validity of the HBCU-SS. I then seek to establish whether the HBCU-SS generalizes as a reliable construct for a non-African American sample, and subsequently seek to establish nomological netting as it relates more specifically to a predominately White sample. Next I used the HBCU-SS measure in an experimental design to assess HBCU stereotyping as an intergroup process related to resource allocations between universities primarily founded to serve different demographics. Lastly I tested whether threat to White's status in society contributed to HBCU stereotyping, and whether these proposed processes worked in tandem to inform the endorsement of resource inequality between HBCUs and HWIs. These studies will not seek to untangle whether the negative media about HBCUs cause or are the result of these attitudes.

### **Study 1: Psychometrics & Group Differences**

Study 1 describes the development of the HBCU Stereotype Endorsement Scale (HBCU-SS). The measure is intended to capture individual differences in the endorsement of negative stereotypes about HBCUs.

I expected that Whites would score systematically higher on the HBCU-SS measure than Blacks. With respect to gender, the out-group male target hypothesis within Social Dominance Theory asserts that men have evolved to be the predominant aggressors toward out-groups, and that this pattern underlies gender differences observed in attitudes towards out-groups (Navarrete, McDonald, Molina, & Sidanius, 2010; Sidanius & Pratto, 1999). In terms of African Americans, previous research has not demonstrated significant gender differences for African Americans with respect to stereotyping their own group (Fhagen-smith, Vandiver, Worrell, & Cross, 2010). However, this previous work references attitudes towards out-group and in-group people as opposed to group-relevant space, a meaningful distinction that could potentially either mute or exacerbate typically observed relationships between gender and stereotyping in unpredictable ways. For this reason, I do not make any strong predictions about gender differences on the HBCU-SS measures across any of our three samples.

## Study 1: Method

### Participants

Participants in Study 1 were recruited via four separate Qualtrics panels with distinct characteristics. Samples A & B were made up exclusively of African Americans, Samples C & D exclusively consisted of White Americans. Abbreviated sample characteristics are reported in Table 1.

### Historically Black College and University – Stereotype Endorsement Scale (HBCU-SS)

I chose a rational approach (Burisch, 1984) for generating HBCU-SS items, leveraging a range of qualitative, anecdotal, and historical sources to derive items with potential to capture the proposed phenomenon of HBCU stereotyping. Several items were adapted to a Likert format from derogatory questions posed in Freeman and DeGregory's (2015) aforementioned collection of talking points for HBCU advocates. For example, the question "Aren't most students at HBCUs those who couldn't get in anywhere else?" (Freeman & Degregory, 2015), was adapted into the HBCU-SS scale item "students at HBCUs couldn't get in anywhere else." Some items were derived from HBCU relevant themes that are consistent with negative stereotypes about Black people in general. For instance, the 7<sup>th</sup> and 13<sup>th</sup> highest rated stereotypes about Blacks generated in Zou & Cheryan (2017) were that Black people are rhythmic and musical. Regarding HBCUs, Essoka (2014) reminds us that marching bands are a popular, salient, and historical aspect of HBCU culture, which are maintained in part to bring greater visibility to the university. To this end, I created the item "The only good thing about HBCUs are the marching bands." Items were scored on a 7-point scale from 1 (*strongly disagree*) to 7 (*strongly agree*), where higher scores indicate greater endorsement of stereotypes about HBCUs. Initially, the scale drew from a pool of 10 scored items across samples, including 4 reverse scored items, and 2 distractor items (version 1).

## Study 1: Results

### Factor Structure

In sample A, we conducted exploratory factor analyses utilizing principal components analysis with unrotated rotations. Results, were suggestive of a two-factor structure, wherein the first factor explained approximately twice as much variance as the second. Details of these results are displayed in Table 1. A closer look at the pattern of factor loadings revealed that all of the reverse-scored items were attempting to load on a theoretically meaningless second factor. I excluded several combinations of reverse scored items in attempts to retain a single factor structure. However, in every combination, including any of the 4 reverse-scored items consistently split the items into a theoretically meaningless factor. This resulted in a 6-item version of the HBCU stereotyping scale, exclusively consisting of the forward scored items.

In each of our four samples, a principal components analysis with unrotated solutions was conducted, and these analyses were repeated on the total sample. Consistently, results were suggestive of a unifactor structure with 6-items. Alpha levels for the HBCU-SS in all four samples demonstrated good to reasonable internal consistency suggestive of a 1-factor structure, while the combined sample demonstrated good reliability ( $\alpha_{total} = .82$ ). Specific factor loadings for the unifactor structure, abbreviated sample demographic features, and alpha levels for the HBCU-SS measure are reported on Table 2.

## **Racial and Gender Differences**

Samples A and B were made up exclusively of Black participants, while Samples C and D were made up of White participants. Thus, to begin assessing racial group differences on the HBCU-SS measure, I created a dummy code for race (Black = 0; or White = 1) across all four samples, as well as within-race contrast codes (1 or -1) to account for differences between the pairs of same race samples. I first ran an ANOVA for race across all four samples, while entering the within-race contrast codes as covariates, finding significant results. Overall, Whites scored higher on the HBCU-SS ( $M_{whites} = 3.08$ ;  $SE_{whites} = .57$ ) than Blacks ( $M_{blacks} = 2.74$ ;  $SE_{blacks} = .64$ ) with a Cohen's *d* effect size of .23 ( $F = 14.16$  [1, 1059],  $p = .000$ ). These significant between-race effects across the samples were run accounting for the also significant within-race differences found between the two Black samples ( $F = 11.39$ ;  $p = .024$ ) and the two White samples ( $F = 5.08$ ;  $p = .02$ ). However, similar between-race results were found when the within-race contrast codes were not included in the model as covariates ( $d = .13$ ). Further, these effects were stronger, but in the same direction, when controlling for gender, and social class with or without the contrast coefficients for within race differences ( $d = .32$ ;  $d = .31$ ).

Across the four samples, gender effects were relatively consistent. Gender effects for all four samples (A-D) as well as for the total sample are presented in Table 3.

### **Study 1: Discussion**

These data demonstrate support for a single general factor structure for the HBCU-SS measure of historically Black college stereotyping. Given that the individual items contain somewhat disparate subject material (e.g. marching bands vs. academic selectivity), their consistent loading on a single general factor suggests that negative stereotypes about HBCUs across subject domains are part of a common construct. As well, Study 1 demonstrated the measure is relatively stable and reliable for the both Black and White respondents, and captures approximately half of the variance in the items across all four samples. Additionally, as would be expected, results revealed small to medium effects for race and generally small effects for gender on the HBCU measure. These findings are theoretically consistent with a measure that is related to status and hierarchy (Sidanius & Pratto, 1999), which are critical aspects of the phenomenon of interest as conceptualized. As these results give encouragement that the HBCU-SS captures reliable signal within and across groups, I proceeded to establish the nomological net of the measure.

### **Study 2: Nomological Net**

To evaluate the validity of HBCU stereotyping as a construct, I established a nomological net to determine whether the HBCU-SS correlates with theoretically relevant measures, as well as unrelated to theoretically irrelevant measures (Chronbach & Meehl, 1955). Owing to the scale's intent for measuring negative stereotypes towards institutions founded for educating Black people, I decided to establish overlapping, yet separate, nomological nets for Black and White individuals. The concept of group based hierarchy underlies both stereotyping and the comparative evaluation of schools (e.g. ranking) (Sidanius & Pratto, 1999). For this reason I assessed orientation toward group based hierarchy in all four samples. Provided that HBCUs are institutions established for upward social mobility for African Americans through education (Duster, 2009; Humphreys, 2006; Roebuck & Murty, 1993), I measured individuals in all samples on their preferences for the principle of meritocracy. As I hypothesized SDO and PMP should be related to the HBCU-SS in Black and White samples, I analyzed whether these



relationships are consistent across groups, or whether race moderates the theorized relationship between SDO and HBCU-SS, as well as the relationship between the PMP and the HBCU-SS. Specifically for Black participants, I hypothesized that their attitudes toward Black institutions of higher learning would be related to their attitudes about the experience of being a Black person. With this in mind, I also included measures of Black identity in our nomological net for our African American samples. Specifically for Whites, I hypothesized that attitudes towards HBCUs would be related to intergroup attitudes related to prejudice and motivations to control prejudice.

Study 2 is organized into six subsections. First, I present the methods and results for Studies 2a and 2b, wherein I analyzed the proposed nomological net for the HBCU-SS in two African-American samples. Similarly, I present the methods and results for Studies 2c and 2d which analyzed the proposed nomological net for the HBCU-SS in two White samples. Next, since SDO and PMP are the two constructs that I believed to be relevant the HBCU-SS for Black and White people, studies 2e and 2f separately analyzed whether the relationships between these two constructs and the HBCU-SS were moderated by race. I follow these up by presenting a discussion of the results of these six studies and what their results tell us about the construct validity of the HBCU-SS measure.

## Study 2a: Method

### Participants and Procedure

For this study we recruited an online Qualtrics panel of English speaking participants in the United States, who identified as Black/African American. Participants first answered a series of demographic pre-screening questions to determine their eligibility relative to our exclusion criteria. Participants who were deemed eligible advanced to the main study, which contained a battery of tests designed to last for 30 minutes. Study 2a recruited 120 participants; however, 43 participants were dropped from these analyses for not completing the relevant measures. Our final sample consists of 77 participants (77% female,  $M_{age} = 39.9$ ,  $SD_{age} = 14.2$ ). I address the issue of potential non-representativeness in study 2b with a larger and more gender balanced nationally representative African American sample in Study 2b.

### Measures

**Social Dominance Orientation (SDO<sub>6</sub>).** Participants were given the 16-item SDO<sub>6</sub> (Pratto et. al. 1994) scale, a unifactor measure of preference for group-level hierarchy and inequality. Scale items were measured from 1 (strongly disagree) to 7 (strongly agree) with eight reverse-scored items. Sample items from this scale include: “Some groups of people are simply inferior to other groups” which is forward scored and “All groups should be given an equal chance in life” which is reverse scored. Higher scores on this scale indicate a greater preference for group inequality, while lower scores indicate a greater preference for more egalitarian resource distribution between groups. The SDO<sub>6</sub> scores were internally consistent in this sample (see table 4).

**Cross Racial Identity Scale (CRIS).** In order to assess Black racial identity attitudes, participants also completed the 40-item CRIS measure (Vandiver et al., 2000; Worrell et al., 2004). The CRIS estimates how strongly African Americans endorse the six racial identity

attitudes that correspond with the Nigrescence Theory – Expanded (NT-E): Pre-Encounter Assimilation (PA), Pre-Encounter Miseducation (PM), Pre-Encounter Self Hatred (PSH), Immersion-Emersion Anti-White (IEAW), Internalization Afrocentric (IA), and Multiculturalist Inclusive (IMCI). In brief, Pre-Encounter Assimilation (PA) assesses the extent to which the individual identifies as an American over identifying as an African American. An example item from this scale is: “If I had to put a label on my identity, it would be “American,” and not African American.” Pre-Encounter Miseducation (PM) assesses the extent to which the individual endorses negative stereotypes about Black people. An example item from this scale is: “Many African Americans are too lazy to see opportunities that are right in front of them.” Pre-Encounter Self Hatred (PSH) assesses the extent to which an individual feels negatively about the experience of being Black. An example item from this scale is: “I sometimes struggle with negative feelings about being Black.” Immersion-Emersion Anti-White (IEAW) attitudes assess the extent which the individual has negative feelings toward White people. This scale includes items such as: “I hate the White community and all that it represents.” Internalization Afrocentric (IA) attitudes assess the extent to which the individual believes that their lives should be guided by African centered principles and values. This attitude is assessed with items such as: “Black people will never be free until we embrace an Afrocentric perspective.” Lastly, Multiculturalist Inclusive (IMCI) attitudes assess the extent to which an individual exhibits both self-acceptance as well acceptance for all social groups. Multiculturalist Inclusive (IMCI) attitudes are assessed with items such as: “As a multiculturalist, it is important for me to be connected with individuals from all cultural backgrounds (Latinos, gays & lesbians, Jews, Native Americans, Asian-Americans, etc.). Each of these six attitudes is estimated by participant responses to a 7-item subscale, wherein items are scored from 1 (*strongly disagree*) to 7 (*strongly agree*), assessing the degree to which the item represents the participant’s own thoughts and feelings. The CRIS measure also includes 10 “noise” items, which are not intended for scoring. In a relatively large body of previous research, CRIS scores have been demonstrated high internal consistency and goodness of fit indices that support a 6-factor model structure (Vandiver, Cross, Worrell, & Fhagen-Smith, 2002). In like manner, the six subscales of the CRIS showed high internal consistency in our sample (see Table 4).

**Preference for the Meritocracy Principle (PMP).** Participants’ preferences for meritocratic based resource allocation was assessed using the 15-item PMP scale (Davey et. al., 1999). Each item was assessed on a 7-point scale from 1 (strongly disagree) to 7 (strongly agree) with 5 reverse coded items. Examples items from this scale include: “In organizations, people who do their job well ought rise to the top” which was forward scored, and “Sometimes it is appropriate to give a raise to the worker who most needs it, even if he or she is not the most hard working” which was reversed scored. Higher scores on the PMP measure indicate greater preference for the principle of meritocratic resource allocation.

### Study 2a Results

Descriptive statistics and zero-order correlations for Study 2a are displayed in table 4. Overall, results of study 2a demonstrate the HBCU-SS is significantly correlated with SDO, as well as several subconstructs of the CRIS. Specifically, the HBCU-SS was positively related to SDO, as well as the Miseducation, Self-Hatred, and Anti-White subscales of the CRIS, and was negatively related the Multiculturalist Inclusive subscale. The HBCU-SS was unrelated to the Assimilationist and the Africentric subscales of the CRIS. As predicted, the HBCU-SS was negatively correlated with the PMP measure.

To address the high attrition rate for participants in Study 2a, I created a dichotomous variable for participants who dropped out of the study before responding to the SDO and PMP measures to contrast against participants who completed these measures. The results of a MANOVA demonstrate that the 77 participants who completed these measures did not systematically differ on the HBCU-SS measure or any of the six subscales of the CRIS than the 30 participants who left the study before taking these measures (all  $p$ 's  $> .2$ ). The 13 additional participants opted not to respond to any of our measures after entering the study.

## Study 2b Method

### Participants and Procedure

In this study I recruited a larger ( $N=368$ ) Qualtrics panel of native-English speaking undergraduate student who self-identified as Black/African American. Students were drawn from public and private universities from diverse regions across the United States including universities varying levels of national ranking and prestige. Upon completing pre-screening demographic measures to assess our exclusion criteria, consenting participants advanced to the general study containing my measures of interest including the SDO, PMP, CRIS, and the HBCU-SS measure. After 17 participants were dropped for not completing our measures of interest, a resulting sample of 355 was included in the final analyses (55% female,  $M_{age} = 24.6$ ,  $SD_{age} = 8.2$ )

### Measures

Participants completed the same CRIS and PMP measures as in study 2a.

**Social Dominance Orientation (SDO<sub>7</sub>).** To assess preference for group-level hierarchy, participants completed the updated 16-item SDO<sub>7</sub> scale (Ho et. al., 2015). Similar to the SDO<sub>6</sub>, higher scores on the SDO<sub>7</sub> correspond to greater levels of preference for group-level hierarchy, and group based resource allocation.

## Study 2b Results

Descriptive statistics and zero-order correlations for Study 2b are displayed in table 5. The results of study 2b replicated and extended the findings of 2a. The HBCU-SS measure was again positively correlated with SDO, and the Miseducation, Self-Hatred, and Anti-White subscales of the CRIS. The Multiculturalist Inclusive subscale of the CRIS was again negatively correlated with the HBCU-SS, and the PMP was again negatively correlated with the HBCU-SS also.

## Study 2c Method

Study 2c begins our analysis of the nomological net for the HBCU-SS among White participants. In addition to using looking at the relationships that SDO and PMP have with the HBCU-SS, these studies seek to analyze several constructs from the literature on prejudice and intergroup relations. The theoretically relevant constructs including in this nomological net include Right Wing Authoritarianism, a personality variable created to measure generalized prejudices individuals have toward many groups (Altmeyer, 1996). *Racial Resentment*, a variable to understand resentment of abstract ideas, such as policies designed to help people is also

included in this analysis. To understand whether the HBCU-SS is related to individual's motivations to control prejudices, this study includes analyses of both Internal and External Motivations to Control Prejudice. As HBCU stereotyping should *be unrelated to Whites' racial identification, these analyses look at the relationship between White Identity Denial* (Plaut & Goren, 2014) and the HBCU-SS. Lastly, since HBCU's are institutions for African American economic mobility, stereotyping them should be unrelated to White individual's sense of their own social status in the world. I include a measure to estimate of *Subjective Social Status* at the individual level in these analyses (Adler, Epel, Castellazzo, & Ickovics, 2000).

### **Participants and Procedure.**

I recruited a Qualtrics panel of native English speaking participants in the United States who identified as White/European American from regionally dispersed areas (Northeastern, Southern, Midwest, Western) consistent with the 2010 US Census. This study recruited 222 participants (White/European American = 91.5%; Asian = .4%; Latino/Native American = 4.9%; Multi-Racial = 3%); however, 1 participant was dropped from analyses for not completing the relevant measures. The final sample consisted of 221 participants (53% female,  $M_{age} = 51.0$ ,  $SD_{age} = 16.1$ ).

### **Measures.**

***Right Wing Authoritarianism.*** Right Wing Authoritarianism was assessed with a 10-item abbreviated version of Altmeyer's Right Wing Authoritarianism scale (1996). This version of the scale was previously validated in MacFarland (2005) and uses 6 forward scored items and 4 reverse scored items. Forward scored items included "Our country will be destroyed someday if we do not smash the perversions eating away at our moral fiber and traditional beliefs.", and reverse scored items included "There is no 'ONE right way' to live life; everybody has to create their own way." Reliability for the abbreviated RWA scale was in excellent range ( $\alpha=.93$ ,  $M_{RWA}=2.93$ ,  $SD_{RWA}=.73$ ).

***Racial Resentment.*** To measure racial resentment I used a 6-item version of Kinder & Sanders (1996) Racial Resentment scale. This measure has item overlap with Henry & Sears' (2000) Symbolic Racism Scale, such that this measure will serve as our approximation of both constructs. This version contains three forward scored items and three reverse score items. An example item from this scale is: "It's really a matter of some people not trying hard enough; if blacks would only try harder they could be just as well off as whites." I observed good internal reliability for our measure of racial resentment ( $\alpha=.86$ ,  $M_{RacialResentment}=3.12$ ,  $SD_{RacialResentment}=.89$ ).

***Motivations to Control Prejudice.*** I assessed motivations to control prejudice by using Plant and Devine's (1998) Internal and External Motivations to Control Prejudice Scales. The Internal Motivation to Control Prejudice Scale (IMS) contains 4 forward-scored items with one reversed scored item, while the External Motivation to Control Prejudice (EMS) scale contains 5 forward-scored items. All items were scaled on a 9-point scale ranging from strongly disagree (1) to strongly agree (9). An example item from the IMS scale is "Because of my personal values, I believe that using stereotypes about Black people is wrong." In contrast, the EMS scale contains items such as "Because of today's PC (politically correct) standards I try to appear nonprejudiced toward Black people." I observed acceptable reliability in our sample for the IMS

scale ( $\alpha_{IMS}=.91$ ), as well as for the EMS scale ( $\alpha_{EMS}=.85$ ).

**White Identity Denial.** White identity denial refers to the idea that many White people do not believe that the concept of race or ethnicity does not apply to them and thus is not a part of their self-concept. I assessed White racial identity denial by using Goren & Plaut's (2011) 8-item index, which was scored on a 7-point scale from strongly disagree (1) to strongly agree (7). Items on the White Identity Denial Scale include "I prefer to think of myself as a typical American rather than as a member of a racial or ethnic group." Reliability was in the acceptable range for the White Identity Denial scale ( $\alpha=.88$ ,  $M_{whitedenial}=4.64$ ,  $SD_{whitedenial}=1.33$ ).

**Subjective Social Status.** I measured Subjective Social Status using the Subjective SES Scale (Adler, Epel, Castellazzo, & Ickovics, 2000), which uses a picture of a 10-rung ladder. Consistent with Adler et. al. (2000) The graphical ladder was accompanied with the following instructions: *"Think of this ladder as representing where people stand in our society. At the top of the ladder are the people who are the best off, those who have the most money, most education, and best jobs. At the bottom are the people who are the worst off, those who have the least money, least education, and worst jobs or no job."* Participants were instructed to click the radial button corresponding with the rung that best represents where stood on the ladder. ( $M_{SSS} = 5.49$ ;  $SD_{SSS} = 1.95$ ).

### Study 2c: Results

Descriptive statistics and zero-order correlations for Study 2b are displayed in table 6. The Results of Study 2c replicate the pattern found in studies 2a-b, that the HBCU-SS positively correlates with SDO and negatively correlates with the PMP. As expected, the HBCU-SS was shown in Study 2c to correlate positively with both the RWA and Racial Resentments scales. Further, Internal and External Motivations to Control Prejudice correlated in diverging and theoretically consistent patterns. IMS was negatively correlated with the HBCU-SS, while EMS was positively related the HBCU stereotyping measure. Lastly, the HBCU-SS was unrelated to both White identity denial and Subjective Social Status.

### Study 2d Method

#### Participants and procedure.

Participants for Study 2d were recruited via Qualtrics panel. All participants in this sample identified as White/European American, and were from regionally dispersed areas (Northeastern, Southern, Midwest, Western) consistent with the 2010 US Census. There were 386 participants recruited for this sample however, 6 participants were dropped from analyses for not completing all of the relevant measures. The final sample consisted of 380 participants (53% female,  $M_{age} = 51.0$ ,  $SD_{age} = 16.1$ ).

#### Measures.

Participants in Study 2D completed a similar set of measures as participants in study 2C. Specifically, participants in study 2D completed the HBCU-SS, SDO, PMP, Racial Resentment, EMS, IMS, and Subjective Social Status measures.

### **Study 2d Results**

Descriptive statistics and zero-order correlations for Study 2b are displayed in table 7. Consistent with previous studies, SDO and PMP were positively and negatively related the HBCU-SS respectively. Racial Resentment also positively correlated with the HBCU stereotyping measure. As well, findings replicated with IMS negatively correlating and EMS positively correlating with the HBCU-SS. Lastly, the Subjective Social Status scale was again uncorrelated with the HBCU stereotyping measure.

### **Study 2e Method**

#### **Participants and Procedure.**

Study 2e combines participants from studies 2a-2d to compare the relationship between the HBCU-SS and SDO across Black and White samples. The total sample consisted of 1,066 participants, with 476 Black respondents and 590 White respondents. To test whether race would significantly moderate the relationship between SDO and the HBCU-SS, I regressed the HBCU-SS on SDO while using race as a dichotomous moderator controlling for gender and within-race differences among samples. To control for within-race differences between the two Black samples and the two White samples, we entered contrast codes for the Black and White pairs of samples as covariates. Data were analyzed via multiple regression analysis using the process macro (Hayes Model 1) with 5000 bootstrapped samples. The descriptive statistics and features of each sample were described in more detail in previous studies.

### **Study 2e Results**

First, the results of study 2e show significant main effects of both race ( $b = .64$ ;  $t=3.44$ ,  $p < .001$ ) and SDO ( $b = .69$ ;  $t = 12.36$ ,  $p < .0001$ ) in their prediction of the HBCU-SS, where Whites continue to score significantly stereotype HBCUs at a higher than Blacks and SDO is related with more HBCU stereotyping. Further, there was an interaction ( $b = -.14$ ;  $t = -2.19$ ;  $p < .05$ ) such that Whites score significantly higher than Blacks on the HBCU-SS at low and at mean levels of SDO, however their respective scores are not significantly different at high levels of SDO. A graph of the results of this probed interaction is plotted in figure 1.

### **Study 2f Method**

#### **Participants and Procedure.**

Similar to the procedure in Study 2e, Study 2f combines participants from studies 2a-2d to compare the relationship between the HBCU-SS and PMP across Black and White samples. The total sample consisted of 1,066 participants, with 476 Black respondents and 590 White respondents. To test whether race would significantly moderate the relationship between PMP and the HBCU-SS, I regressed the HBCU-SS on PMP while using race as a dichotomous moderator controlling for gender and within-race differences among samples. Again, to control for within-race differences between the two Black samples and the two White samples, we entered contrast codes for the Black and White pairs of samples as covariates. Data were again analyzed via multiple regression analysis using the process macro (Hayes Model 1) with 5000 bootstrapped samples. The descriptive statistics and features of each sample were previously described in greater detail.

### **Study 2f Results**

Results of study 2f show significant main effects of both race ( $b = -1.22$ ;  $t = -2.18$ ,  $p < .001$ ) and PMP ( $b = -.67$ ;  $t = -8.64$ ,  $p < .001$ ) in their prediction of the HBCU-SS measures in the total sample, where Whites endorse stereotypes about HBCUs more strongly and PMP predicts less stereotyping respectively. There was an interaction ( $b = .32$ ;  $t = 2.93$ ;  $p < .005$ ) such that Whites score significantly higher than Blacks on the HBCU-SS at mean and high levels of PMP,

however their scores are near identical at low levels of Preference for the Meritocracy Principle ( $p < .01$ ). A graph of these results is plotted in figure 2.

### **Study 2 Discussion**

Whereas Study 1 established the HBCU-SS as a reliable measure of HBCU stereotyping, the overall the results of study 2 support this measure as having meaningful validity for Black and White samples. Supporting our hypothesis that the HBCU-SS would be related to SDO, a measure of the endorsement of group-based distribution of resources, all four samples showed significant and consistent relationships with relatively large effects. Similarly, each of our four sample showed significant and consistently negative relationships with preferences for meritocratic distribution of resources, as measured by the PMP. Further, the significant interactions between SDO and PMPs relationship with the HBCU-SS show that while the measure has meaningful variation in both populations, the nature of that meaning as it relates to both hierarchy and resource distribution is slightly different.

In samples A and B (Studies 2a-b), which consisted of Black/African American participants, the HBCU-SS was related to the CRIS measure of Black racial identity in a consistent pattern. Given the HBCU-SS has a consistent relationship to SDO, it is not surprising that the pattern of correlations between the HBCU-SS and the CRIS resemble the patterns of correlation between SDO and the CRIS (Boykin, Martin, Worrell, & Mendoza-Denton, under review). These findings suggest that the ways in which African American's think about the experience of being Black is related to their attitudes toward HBCUs. Since HBCUs began as a restorative justice project to counter barriers to education and economic mobility for African Americans, they are an especially relevant education option for African Americans making college choices (Allen & Hanif, 1981; Roebuck & Murty, 1993; Van Camp, Barden & Sloan, 2010). African American students who higher in Multicultural inclusive attitudes (I-MCI) may for connect with students from across the African diaspora as well as students many countries across the world, and thus would be less inclined to stereotype HBCUs. Many students who decide to attend HBCUs do so for the sake of racial identity exploration, which to some degree signals that there is a racial identity related component to approaching and possibly to avoiding an HBCU (Van Camp, Barden, & Sloan, 2010; Van Camp, Barden, Sloan, & Clarke, 2009). African Americans who may be motivated to differentiate themselves hierarchically in status from the rest of their racial group, may do so potentially by either affiliating with an HBCU as a signal of racial pride (I-Afrocentric), or by avoiding an HBCU to signal their affiliation with what they believe to be higher status institutions more congruent with their self concept (PE-Miseducation). These perspectives converge with a C-CAPS framework (Mendoza-Denton & Mischel, 2007), which would assert that (1) an African American person's construal of HBCUs, (2) their ego respective goals to affiliate or distance with HBCUs, (3) their affective reactions to HBCUs, and (4) their values regarding the virtues of HBCUs are all rooted in their prior socialization regarding these institutions (Mendoza-Denton & Mischel, 2007; Mischel & Shoda, 1995; Mischel & Shoda, 2008). Together, these cognitive-affective processing units will help inform their identity, personality, and behavior regarding HBCUs (Mendoza-Denton & Mischel, 2007; Worrell, Mendoza-Denton, Telesford, Simmons, & Martin, 2011).

It may seem counter intuitive that Anti-White (IE-AW) attitudes would be related to HBCU stereotyping. However, from a social dominance perspective it follows that African Americans who wish to supplant Whites from their position as the dominant group in society may also believe that HBCUs are an inferior mechanisms through which to turn the tables. Their negative attitudes toward Whites, who may be perceived as imposing barriers to restrict their

resource gains and status mobility, are then related to their devaluation of HBCUs as having limited capacity to mitigate these restrictions and improve their status. Additionally a devaluation of HBCUs could also be related to more general devaluation of Black people and by extension Self-Hatred (P-SH) for being associated with the racial group.

Participants in samples C & D (Studies 2c-d), who were exclusively White/European Americans, demonstrated that the HBCU-SS is related to intergroup attitudes. While not as strongly related as SDO, the correlation between White participants scores on the RWA scale and HBCU stereotyping further suggest that prejudice is a factor in White attitudes toward HBCUs. The argument for the HBCU attitude and prejudice relationship is further supported by the HBCU-SS's correlations with the racial resentment scales in both samples. As well, motivations to control prejudice's relationship to the HBCU-SS demonstrate a pattern that is theoretically consistent with each measure. In this, internal motivation to control prejudice mitigates the overt stereotyping of HBCUs, while individuals who are motivated to control their prejudice as a manner to manage external social perceptions are more likely to negatively stereotype HBCUs. Consistent with our hypothesis, White identity was unrelated to HBCU stereotyping, as HBCUs are irrelevant to White self-conception. Lastly, since White individuals tend to socially compare themselves to other Whites, perceptions of social comparative status as measured by the Subjective Social Status scale were unrelated to the HBCU-SS.

### **Study 3**

Studies 1 & 2 established the reliability and validity of the HBCU-SS as a measure of the level to which individuals' stereotype HBCUs across samples of varying racial groups. In Study 3, I sought to expand this line of inquiry by testing whether HBCU stereotyping is a process that is sensitive to a manipulation that pertains to the allocation of resources across groups. Specifically, I sought to understand whether Whites would exhibit greater stereotyping of HBCUs when presented with information about an HBCU receiving federal funding vs. being presented with information about an HWI receiving federal funding. Previous findings have shown that when endorsing affirmative action hiring policies as a policy designed to positively benefit Blacks, Whites are more sensitive to the impact these policies have for Whites' job prospects; however, when the policies are viewed to also benefit Whites, then Whites were more likely to endorse them (Lowery, Unzueta, Knowles, & Goff, 2006). Ultimately, when the policy also benefits the ingroup, Whites are more supportive of it.

Relating this intergroup process to the context of HBCUs, Lee and Keys (2013) demonstrate that in many states, public land grant universities are inequitably funded in a pattern where a state's historically White land grant institutions are funded in a manner that honors the state's constitutional obligations, while many of these same states fail to honor this obligation as it pertains to their historically Black land grant institutions. We posited that these patterns of inequitable resource allocations between institutions with racially differentiated student bodies are tied to malleable cross-group attitudes at the level of the individual (Mendoza-Denton & Mischel, 2007). Considering that the majority of policy makers responsible for these allocations tend to be White, it would stand to reason that inequitable resource allocations would favor the institutions serving the White majority (i.e., the policymakers' in-group).

To test this framework, we selected two universities, an HBCU (Howard University) and an HWI (Oregon State University), with uniquely similar attributes suitable for comparison. Howard University was ranked #134 in USNWR in 2016 and was founded in 1867 as part of a federal act of congress to educate newly freed and thus underprivileged African American students. Comparatively, Oregon State University was ranked #135 in USNWR (2016) and was



established in 1868, as a federal land grant institution with the expressed purpose of providing education for the underprivileged. For reference, Oregon was admitted to the United States in 1859 as the only free state with expressly written and enforced Black exclusion laws (McLagen, 2015). That is, while human chattel slavery was outlawed throughout the state, Blacks were legally forbidden from living, working, or owning property in the state until 1927. Further, White ship merchants who brought slaves to the state were heavily fined if they left the state without their enslaved Blacks (McLagen, 2015). From this standpoint, Oregon State University can be thought of explicitly as a federally funded Historically White Institution designed for the upward mobility of underprivileged Whites. We hypothesized that White participants would endorse comparatively more negative stereotypes about HBCUs, scoring higher on the HBCU-SS, if they are presented with information that Howard University received federal funding, and less stereotypes about HBCUs if they were presented with information that Oregon State University received federal funding.

### **Study 3 Method**

#### **Participants and design**

This study analyzes data from Sample C in study 1. As a reminder, we recruited a Qualtrics panel of native English-speaking participants in the United States who identified as White/European American from regionally dispersed areas (Northeastern, Southern, Midwest, Western) consistent with the 2010 US Census. This study recruited 204 participants; however, 4 participants were dropped from analyses for not completing all of the relevant measures. The final sample consisted of 200 participants (53% female,  $M_{\text{age}} = 51.0$ ,  $SD_{\text{age}} = 16.1$ ). Lastly, Study 3 used a 2 (information: Federal Funding v. History/Control) x 2 (university type: HWI vs. HBCU) between-participants design.

#### **Procedure and stimuli**

Upon completing a demographic pre-screening questionnaire to determine their eligibility relative to our exclusion criteria, eligible participants advanced to the main study. They were next prompted to carefully read summary details about a United States university on which they would subsequently be asked to answer questions. We manipulated university type by using a vignette that discussed the history of either Howard University (an HBCU) or Oregon State University (an HWI). Additionally, we manipulated the summary information by offering identically written histories about the universities, which either omitted (condition 1; “History” condition) or included (condition 2; “Government Funding” condition) that the universities were founded in response to a federal act of congress and received federal funding (See appendix X for full vignettes). Participants were next asked a series of questions about the university they read about. These included their estimate of the demographic breakdown of the universities (manipulation check), whether they believed the university was founded on fair principles (1 ‘strongly disagree’ to 5 ‘strongly agree’), and whether they believed the university contributed positively to the American population (1 ‘strongly disagree’ to 5 ‘strongly agree’). Next participants completed a battery of measures, including the HBCU-SS ( $\alpha = .80$ ,  $M = 3.17$ ,  $SD = 1.23$ ).

### **Study 3 Results**

The result of our 2 (information: Federal Funding v. History/Control) x 2 (university type: HWI vs. HBCU) between-participants design did not demonstrate a main effect for the university type ( $F[1, 200] = 0.12$ ,  $p = .74$ ) nor for the information condition ( $F[1, 200] = .01$ ,  $p = .92$ ). As predicted; however, there was a significant interaction between university type and information,

$F(1, 200) = 6.14, p = .04, \eta^2 = .02$ . This interaction remained significant when controlling for gender and social class. Surprisingly, simple effects analyses did not reveal significant differences within levels of either condition. The results of these analyses are presented graphically in figure 3.

### **Study 3: Discussion**

The results of this study demonstrate that for Whites, the negative stereotyping of HBCUs is a process that is sensitive to the manipulation of intergroup resource allocation. Results suggest that stereotyping HBCUs decreased when it was highlighted that an HWI received federal funding, a condition where ingroup status is protected. HBCU stereotyping was highest in the condition where information regarding an HWI was offered without funding information. One reason for this could be that this condition provides a baseline for the true comparative attitude between HWIs, as relatively familiar institutions for White upward mobility, contrasted against attitudes about HBCUs, possibly encoded as inferior institutions of Black upward mobility. A relatively surprising outcome was the non-significant simple effect difference between the HBCU funding and HBCU history conditions, but with both conditions still being lower than the HWI history condition. While the relative difference between the two HBCU conditions were in the expected direction, showing more stereotyping in the HBCU receiving funding than in the history condition, the non-significance of this effect could potentially be attributed to a lack of statistical power to find this effect. Both of these two HBCU conditions featured information about HBCUs, and information is one of the mechanisms through which contact (including media contact) reduces prejudice (Fujioka, 1999; Ortiz & Harwood, 2007). In this, the offering of information about HBCUs could have mitigated threat, and reduced stereotyping in both of the HBCU conditions, thus making the difference between the HBCU simple effects conditions more subtle than could be detected with the statistical power available with our test.

### **Study 4**

Study 3 demonstrated that HBCU stereotyping is a malleable construct that is sensitive to experimental manipulation. Study 4 attempts to test the larger framework that threats to Whites' status in society operates in tandem with HBCU stereotyping as intervening processes to explain endorsements of inequitable resource allocations for HBCUs. As Booker T. Washington found it effective to argue that HBCUs would not upset the racial hierarchy in America to increase Whites' support for HBCUs (Duster, 2009; Washington, 1904), we hypothesized that increases in threats to Whites hierarchical status would lead to increases in their stereotyping of HBCUs and lead to reductions in their endorsement of monetary support for HBCUs. Previous research has shown that presenting White Americans with information that highlights increases in the collective populations of American ethnic minorities –relative to the population density of Whites– can invoke status threat (Craig & Richeson, 2014a-b; Danbold & Huo, 2015; Outten, Schmitt, Miller, & Garcia, 2012). Further, this heightened sense of threat to their status in society leads Whites to endorse more negative attitudes toward minorities (Craig & Richeson, 2014a), to endorse policies that help to maintain Whites' societal advantages (Craig & Richeson, 2014b), and to decrease support for diversity initiatives (Danbold & Huo, 2015). Similarly, research by Lowery and colleagues (2006; 2012) demonstrates that motivations to protect in-group advantages can influence Whites' engagement with policy interventions designed to support Blacks' upward mobility in society (e.g. affirmative action).

As humans have a strong tendency to protect in-group advantage (Hein, Silani, Preuschoff, Batson, & Singer, 2010; Lamm, Meltzoff, & Decety, 2010; Molenberghs, 2013), the

aforementioned studies make plausible the idea that threat to group status, which affects attitudes toward out-groups and societal mechanisms that effect out-group's status, could lead to negative attitudes toward HBCUs. Relatedly, previous literature has shown resource allocation and distributive injustice across groups can be driven by motivations to enact in-group advantages (Lowery, Chow, Knowles & Unzueta, 2012; Sidanius, Haley, Molina & Pratto, 2007; Tajfel, Billing, Bundy & Flament, 1971). Taken together, these literatures could potentially provide insight into the challenges and oppositions Booker T. Washington, supportive legislators, and other advocates faced while attempting to raise funds to support institutions to support the status mobility of Blacks.

To this end, I tested whether an experimental induction of group hierarchical status threat would increase Whites' experience of status threat, which should increase their negative attitudes toward HBCUs, and in turn lead them to more greatly endorse inequitable allocations of resources for HBCUs relative to HWIs. My test of this theoretical framework, illustrated in Figure 4, leverages status threat manipulations, previously shown by Craig & Richeson (2014a-b) to evoke group status threat in Whites and increase negative attitudes toward minorities to see whether this causal process extends to attitudes toward and resource allocations for HBCUs. Figure 4.

## Study 4 Method

### Participants and Design

I analyzed data from sample D used in previously in studies 1 & 2D. As a reminder, we recruited a Qualtrics panel of native English speaking participants in the United States who identified as White/European American, who were from regionally dispersed areas (Northeastern, Southern, Midwest, Western) consistent with the 2010 US Census. Study 4 recruited 385 participants; however, 5 participants were dropped from analyses for not completing all relevant measures. The final sample for Study 4 consisted of 380 participants (43.3% female,  $M_{age} = 54.2$ ,  $SD_{age} = 16.33$ ). Lastly, Study 4 used a 2 cell (majority minority as status threat Induction vs. within U.S. migration as control) between-participants design consistent with research by Craig & Richeson (2014a-b).

### Procedure and stimuli

Similar to Study 3, participants completed a demographic pre-screening questionnaire to determine their eligibility as English speaking European American / White individuals who were over 18. Eligible participants advanced to the main study and were prompted to carefully read an article that provided demographic data analyzed from the 2010 US Census to be followed by a series of questions. Identical to the procedure by Craig & Richeson (2014), we manipulated status threat by randomly assigning participants to either read (1) an article that highlighted projections of the U.S. becoming a majority minority country by 2042; or (2) a control article that highlighted a trending increase in the amount of within country migration that Americans were implementing.

### Measures

**Status Threat.** Next we assessed with the following single-item measure taken from Craig & Richeson (2014a-b): "Increases in racial minorities' status will reduce White Americans' status." This item was measured on a 7-point scale from (1) strongly disagree to (7) strongly agree ( $M = 4.04$ ;  $SD = 1.80$ ). Participants were next asked a series of questions about the university they read about. These included their estimate of the demographic breakdown of the universities they

read about to determine whether they understood they were read about either a predominately White university or a predominately Black university (manipulation check). Participants were also asked whether they believed the university they read about was founded on fair principles (1 ‘strongly disagree’ to 5 ‘strongly agree’), and whether they believed the university contributed positively to the American population (1 ‘strongly disagree’ to 5 ‘strongly agree’).

**HBCU Stereotyping.** Study 4 used the same 6-item HBCU-SS measure that was used in previous studies ( $\alpha=.77$ ,  $M=2.92$ ,  $SD=1.13$ ).

**Resource Allocation.** To measure relative resource allocations for HBCUs and HWIs, we used Sidanius and colleagues’ (2006) modified version of the Tajfel resource allocation matrices. The Tajfel matrices, originally used in the “minimal groups” research juxtaposes equitable resource allocation against either a preference for maximum profit or the willingness to sacrifice profit for having maximum advantage in the ratio between in-group and out-group resource allocations (Tajfel, Billig, Bundy, & Flament, 1971). The Sidanius et. al. (2006) combines measurement of preference for all 3 of three modes of resource distribution into one 7-pt. scale. Here, participants can endorse (1) maximum profits for their own in-group, which is coupled with the out-group being allocated even more resources (absolute profit) at one pole; (4) both groups receiving the same amount of fiscal resources (absolute fairness) in the middle; or (7) maximum group difference where the in-group gains the least amount of resources overall, but with the greatest proportional difference relative to the out-group at the extreme pole. The details of the step allocations in this measure are displayed in the Table 8. ( $M=3.77$ ,  $SD=1.63$ )

#### Study 4 Results

Descriptive statistics and intercorrelations were previously shown in Table 7. To recap, we were interested in whether a status threat manipulation would affect participant’s endorsements of resource allocations for HBCUs, and whether status threat and HBCU stereotyping operated as intervening processes in this relationship. To this end, we tested whether Whites who were presented with information about shifting racial demographics in America perceived more threat to White’s status in society (status threat), increased HBCU stereotyping, and in turn, were more likely to take less resources in order to give less resources to HBCUs. Accordingly, we tested for serial mediation with 5,000 bootstraps (Hayes, 2013; model 6) by modeling the status threat manipulation as a dichotomous predictor, status threat and HBCU stereotyping as serial mediators, and relative resource allocation between HBCUs and HWIs as an outcome variable. As illustrated in Figure 5, the indirect effects were significant for our theoretical model,  $a_1d_2b_2 = .07$ , 95% CI[.04,.14].

#### Study 4 Discussion

The results of study 4 provided empirical support for the hypothesis that a status threat manipulation could lead to increases in Whites’ experience of threat to their status in society, which in turn lead to more negative attitudes toward HBCUs, and which ultimately lead to the endorsements of less equitable resource allocations for HBCUs. In their review of the historical record Allen and colleagues (2007) suggest that one source of White opposition to HBCUs in the 1800s was the idea that these institutions could lead to Blacks to become dissatisfied with occupying a lower status in society. They further argue that the potential for this threat to Whites’ status in society was an obstacle to securing funding support for HBCUs in this period. In the present day, Lee & Keys (2013) demonstrate that funding disparities between HBCUs and HWIs are a problem that persists currently. As such, our serial mediation demonstrates a link

between status threat and negative attitudes toward HBCUs, such that increases of threat lead to increases in negative stereotyping. Further, the results of Study 4 suggest that racial status threat, through stereotyping, may contribute to the funding disparity between HBCUs and HWIs in a manner similar to the historical record. However, it is important to acknowledge that the status threat manipulation did not have a direct effect on either HBCU stereotyping, or resource allocation endorsements. One explanation for this could be that information pertaining racial shifts in demographics heighten a general status threat that is partially, but not exclusively, related to attitudes toward Blacks. Future studies could test a Black specific racial status shift induction in a similar model.

### **General Discussion**

While HBCUs have educated underserved communities for nearly two centuries, the institutions themselves have been both underserved and underfunded (Wilson, 1990). HBCUs and their alumni have contributed greatly to American history (Roebuck & Murty, 1993) and the American economy (Humphreys, 2006). Collectively, they have produced representatives of congress, senators, governors, judges, entrepreneurs, philanthropists, global humanitarians, presidents of nations, and many other positive contributors to the United States and the global community. HBCU students, professors, and alumni collectively crafted the strategies that led to the Civil Rights Act of 1964 (Roebuck & Murty, 1993). As well, this distinct group of 104 universities in the United States provides a unique opportunity for individuals from all backgrounds to study in an environment that largely and historically serve a diversity of students of African descent (Nahal, Thompson, Rahman & Orr, 2010). Further, African American students often experience less stress and greater academic adjustment in these environments (Arroyo & Gasman, 2014), as well as greater prospects in the labor market upon graduation (Price, Swiggs, & Swinton, 2011). This work could ultimately help attenuate the processes and practices that economically endanger a proven training ground for African American scientists, writers, doctors, inventors, and engineers to flourish in a nurturing scholastic environment (Lee & Keys, 2013).

The present research used large nationally representative samples, and is the first to provide empirical support for negative attitudes toward HBCUs as a psychological process. Study 1 leveraged principle components analyses and alpha reliabilities to establish that HBCU stereotyping is a reliable construct for Black/African American's and White/European-Americans. Study 2 established that this construct is related to theoretically relevant constructs such as endorsement of group hierarchy and preference for meritocratic distribution of resources for Black and White people. Further study 2 demonstrates that the meaning of this construct is different for Black and White people. In this, we demonstrate that the HBCU-SS is related to Black identity but not to White identity, and that race moderates the relationships such as the one between hierarchy endorsement and HBCU stereotyping. Study 3 leveraged an experimental design to establish that HBCU stereotyping is a malleable construct that for White people is differentially sensitive to information regarding resource distribution for historically White and historically Black institutions. More specifically, White individuals stereotype HBCUs less when told that White institutions receive funding, and stereotype them more when told that Black colleges receive federal funding. Study 4 revealed that a status threat manipulation, designed to cause increases in perceived threat to Whites' status in society, can indirectly effect both HBCU stereotyping and in turn resource allocations for HBCUs relative to HWIs.

The results from this project provide an examination of psychological processes that underlie the endorsement of distributive policies for Historically Black Colleges and

Universities. This work can lead to a better understanding of the types of messaging that can mitigate negative stereotypes about HBCUs, which could then allow for greater endorsements of allocating public economic resources for HBCUs. This topic has shown timely relevance given the current U.S. President's promise to allocate the largest amount of resources to HBCUs of any president in American history (Wootson, 2017, May, 8th). This work may help sophisticate our understanding of how intergroup processes such as status threat and space-focused stereotyping can lead to disparate economic resource distribution models, and maybe even the policies, that negatively impact the fiscal health of HBCUs.

In recent years, several corporations and celebrity lead efforts have pushed to raise funds for HBCUs. Notably, recording artist Beyoncé leveraged her 2018 performance at the Coachella music festival to highlight HBCU marching band culture before donating \$100,000 in scholarship performance (Terrell, 2018). Boeing, a leading corporation in aviation, donated six million dollars to the Thurgood Marshall College Fund, a non-profit foundation that provides support for students that attend 47 of the nations HBCUs (TMCF, 2018). Additionally, Tom Joyner, and HBCU alum (Tuskegee University) and host of a nationally syndicated radio show, utilizes his program to raise funds for a different HBCU per month (Henson, 2014). These efforts highlight some of the altruistic efforts that help to support HBCUs in modern times; however, there are many more routes that could be leveraged to support these institutions. In research that focuses on Altruism at HBCUs, Henson (2014) points out that many HBCUs and HBCU supporting foundations welcome volunteer hours for their fundraising efforts. Henson (2014) goes further to call out that in many cases HBCU alumni do not give to their institutions, which contributes to many of them having relatively small endowments. Further research on the processes outlined in this dissertation could help fundraising efforts to better understand the kinds of appeals that could be made to inspire more corporate, non-profit, and volunteer based altruism toward HBCUs.

### **Limitations and Future Directions**

There are several ways in which this work could be expanded upon in future studies. One the major motivations for students cite for attending college is to prepare for a career. Extending this line of reasoning, laboratory and field studies can explore whether HBCU stereotyping contributes to seeing applicants with similar credentials and qualifications as being more or less worthy of job opportunities. This could be approached using resume studies in the lab, and extended to audit studies in the field. Understanding these processes could also provide a lens into factors that influence prospective students' decisions about whether to attend HBCUs. The current work also makes theoretical connections to policy implications; however, several executive orders and pieces of legislation regarding HBCUs have been discussed in the debate regarding higher education. Therefore, future directions could examine how HBCU stereotyping informs attitudes toward specific pieces of real world policy. This work can also be extended to include behavioral outcomes wherein participants can promote the causes of HBCUs or contribute to monetary funds such as the Thurgood Marshall Scholarship fund or the United Negro College Fund which both provide scholarships and monetary support for HBCUs and their students.

The current research has several limitations. First, this research relied exclusively on the use of online samples collected through Qualtrics panels. While Qualtrics panels allow researchers to reach respondents across the country, there may be characteristics of online respondents who arrive to inclusion in Qualtrics panels that make them different from field of laboratory respondents. Additionally, the status threat manipulation in study 4 had an indirect

effect on HBCU stereotyping and resource allocation, it did not have a direct effect on either of our measures of these phenomenon. Future studies should resolve this issue by developing a Black upward mobility specific and HBCU relevant manipulation. The current research may under estimate these effects, however this is currently unknown.

## 10-item Exploratory Factor Analysis of the HBCU-SS

Table 1. Exploratory Factor Analysis for 10-Item HBCU-SS using Principal Component Analysis with Unrotated Solutions

Sample A		
Item	Factor 1	Factor 2
Students at HBCUs couldn't get in anywhere else.	.76	-.33
HBCUs do not prepare students for the real world.	.76	-.30
Only Black people attend HBCUs.	.68	-.00
The only good things about HBCUs are marching bands.	.67	-.42
<b>HBCUs are welcoming to students of all races. (R)</b>	.64	.37
<b>It is still significant and important to have HBCUs operating today. (R)</b>	.59	.47
HBCUs encourage segregation.	.62	-.32
<b>HBCU campuses are just as safe as historically white college campuses. (R)</b>	.47	.70
HBCUs are mostly all the same.	.52	-.29
<b>HBCUs prepare students well for graduate school. (R)</b>	.37	.74
% of Variance	38.71	19.57
<b>Alpha reliability</b>	.81	
<b>Sample Size</b>	107	
<b>Mean (SD)</b>	2.47 (1.09)	

(R) Reverse-Coded Items



Table 2

Principle Components Analysis with unrotated solutions for the HBCU-SS presented with descriptives and sample summaries

	All	Black	White	Sample A	Sample B	Sample C	Sample D
1. Students at HBCUs couldn't get into anywhere else.	0.623	0.615	0.641	0.575	0.626	0.64	0.633
2. HBCUs do not prepare students for the real world.	0.806	0.817	0.795	0.824	0.816	0.789	0.797
3. Only Black People Attend HBCUs.	0.641	0.672	0.596	0.673	0.666	0.642	0.561
4. Students at HBCUs couldn't get in anywhere else.	0.811	0.848	0.775	0.816	0.856	0.768	0.779
5. The only good things about HBCUs are the marching bands.	0.798	0.828	0.783	0.796	0.832	0.797	0.775
6. HBCUs encourage segregation.	0.673	0.773	0.581	0.701	0.792	0.618	0.563
Alpha	0.819	0.852	0.785	0.818	0.858	0.802	0.772
N	1059	471	588	102	366	204	384
Variance Explained	53.29%	58.34%	49.14%	54.25%	59.22%	50.86%	47.90%
M (SD)	2.93 (1.31)	2.84 (1.46)	3.01 (1.17)	2.46 (1.33)	2.95 (1.48)	3.17 (1.23)	2.92 (1.13)
% Female	51.4%	59%	46.7%	72%	55.3%	53%	43.3%
Age (SD <sub>age</sub> )	41.44 (18.97)	27.86 (11.57)	53.04 (16.15)	38.94 14.33	24.62 (8.19)	50.95 (16.07)	54.2 (16.10)

Table 3. Gender differences on the HBCU-SS scale in Samples A-D.

Study	Gender				ANOVA F (df)	Cohen's d	p-value
	Men		Women				
	M	(SD)	M	(SD)			
A	2.85	1.56	2.31	1.31	3.61 [1, 105]	.37	.06
B	3.12	1.49	2.81	1.47	4.15 [1, 364]	.22	.04
C	3.24	1.32	3.06	1.07	1.12 [1, 196]	.16	.29
D	3.04	1.20	2.72	1.02	7.43 [1, 372]	.29	.02
All	3.10	1.34	2.76	1.26	17.56 [1,1046]	.26	.02

Table 4.

*Descriptive Statistics for Study 2A*

	$\alpha$	M (SD)	1	2	3	4	5	6	7	8	9
HBCU-SS	.82	2.46 (1.33)	-								
SDO	.86	2.11 (1.07)	.44**	-							
PMP	.64	3.71 (.73)	-.33*	-.43**	-						
PA	.79	4.09 (1.63)	.12	-.050	-.01	-					
PM	.78	2.74 (1.38)	.50**	.40**	-.07	.32**	-				
PSH	.85	2.23 (1.40)	.47**	.23*	-.211†	.17	.46**	-			
IEAW	.81	1.71 (0.93)	.49**	.30**	-.26*	.12	.37**	.54**	-		
IA	.84	3.10 (1.41)	.11	.06	-.040	-.05	.09	.35**	.53**	-	
IMCI	.75	5.46 (1.26)	-.34**	-.34**	.36**	.16†	-.07	.09	-.17†	.12	-

Note. \*\* $p < .01$  \* $p < .05$  † $p < .10$ ; SDO=Social Dominance Orientation, PMP= Preference for the Meritocracy Principle; PA = Pre-encounter Assimilation; PM = Pre-Encounter Miseducation; PSH= Pre-Encounter Self-Hatred; IEAW = Immersion–Emersion Anti-White; IA = Internalization Afrocentricity; IMCI = Internalization Multiculturalist inclusive.

Table 5.

*Descriptive Statistics for Study 2B*

	$\alpha$	M(SD)	1	2	3	4	5	6	7	8	9
HBCU-SS	.86	2.95 (1.48)	-								
SDO	.90	2.91 (1.15)	.48**	-							
PMP	.72	4.84 (.76)	-.36**	-.57**	-						
PA	.86	3.98 (1.53)	.26**	-.07	.12*	-					
PM	.91	3.31 (1.54)	.55**	.38**	-.27**	.38**	-				
PSH	.86	2.86 (1.68)	.47**	.28*	-.23**	.22**	.45**	-			
IEAW	.91	2.22 (1.47)	.59**	.46**	-.41**	.09†	.43**	.60**	-		
IA	.82	3.54 (1.31)	.42**	.28**	-.19**	.11*	.48**	.39**	.61**	-	
IMCI	.80	5.36 (1.22)	-.25**	-.49**	.45**	.22**	-.06	-.04	-.23**	.06	-

Note. \*\* $p < .01$  \* $p < .05$  † $p < .10$ ; SDO=Social Dominance Orientation, PMP= Preference for the Meritocracy Principle; PA = Pre-encounter Assimilation; PM = Pre-Encounter Miseducation; PSH= Pre-Encounter Self-Hatred; IEAW = Immersion–Emersion Anti-White; IA = Internalization Afrocentricity; IMCI = Internalization Multiculturalist inclusive.

Table 6.

*Descriptive Statistics for Study 2C*

	$\alpha$	M(SD)	1	2	3	4	5	6	7	8	9
HBCU-SS	.80	3.17 (1.22)	-								
SDO	.91	2.56 (1.14)	.54**	-							
PMP	.75	5.24 (.74)	-.35**	-.33**	-						
RWA	.93	2.93 (.73)	.22**	.35**	-.01	-					
Race Res	.86	3.12 (.89)	.19**	.32**	.19**	.43**	-				
EMS	.85	5.04 (1.93)	-.28**	.16*	.19**	-.15*	.00	-			
IMS	.91	3.20 (1.62)	.43**	-.69*	-.33**	.20**	.34**	-.05	-		
White Identity	.88	4.64 (1.33)	-.01	-.15†	.18*	.10	.02	.05	-.18*	-	
SSS	-	5.49 (1.95)	.07	.14†	-.03	.08	-.04	-.22**	.06	.0	-

Note. \*\* $p < .01$  \* $p < .05$  † $p < .10$ ; SDO=Social Dominance Orientation, PMP= Preference for the Meritocracy Principle, RWA = Right-wing authoritarianism, Race Res= Racial Resentment Scale, EMS = External Motivations to Control Prejudice, IMS = Internal Motivations to Control Prejudice, SSS=Subjective Social Status

Table 7.

*Descriptive Statistics for Study 2D*

	$\alpha$	M(SD)	1	2	3	4	5	6	7
HBCU-SS	.77	2.92 (1.13)	-						
SDO	.91	2.72 (1.11)	.41**	-					
PMP	.72	5.22 (.70)	-.13**	-.18**	-				
Race Res	.86	3.19 (.94)	.33**	.48*	.18**	-			
EMS	.83	4.37 (1.89)	.19**	.09†	-.16**	.07	-		
IMS	.91	7.01 (1.57)	-.34**	-.56**	.18**	-.38**	-.04	-	
SSS	-	5.38 (1.99)	.06	.07*	-.07	-.05	.08	.04	-

Note. \*\* $p < .01$  \* $p < .05$  † $p < .10$ ; SDO=Social Dominance Orientation, PMP= Preference for the Meritocracy Principle, Race Res= Racial Resentment Scale, EMS = External Motivations to Control Prejudice, IMS = Internal Motivations to Control Prejudice, SSS=Subjective Social

Figure 1. The relationship between SDO and the HBCU-SS for Black and White Participants.

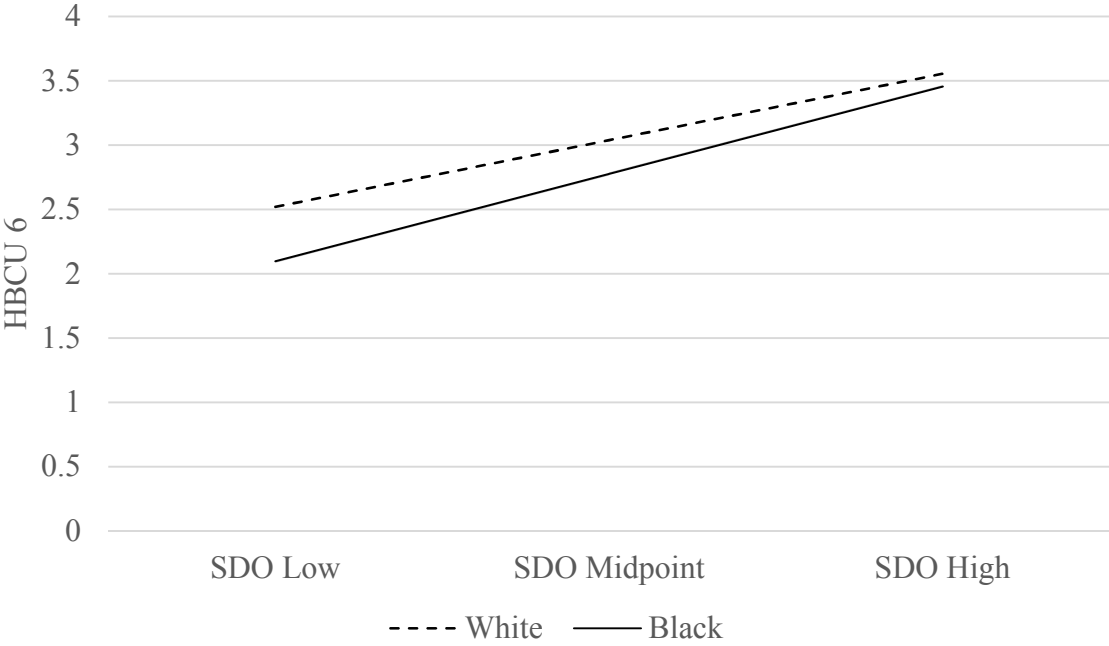


Figure 2. The relationship between PMP and theHBCU-SS for Black and White Participants.

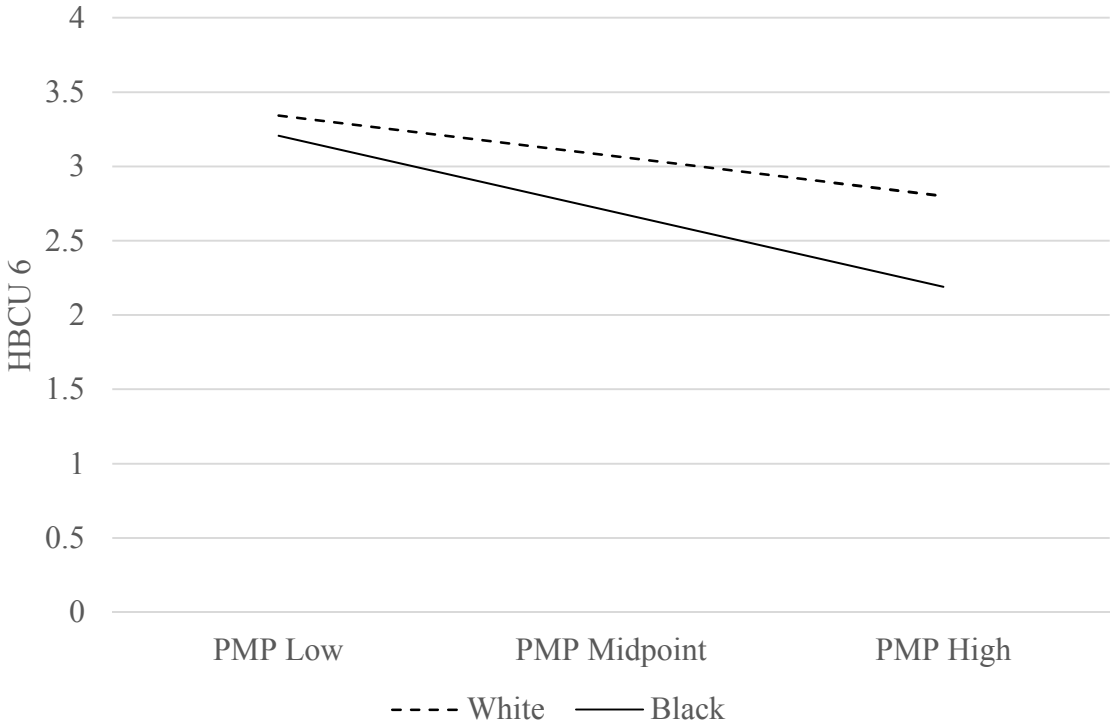




Figure 3. Mean HBCU stereotyping as a function of experimental condition.

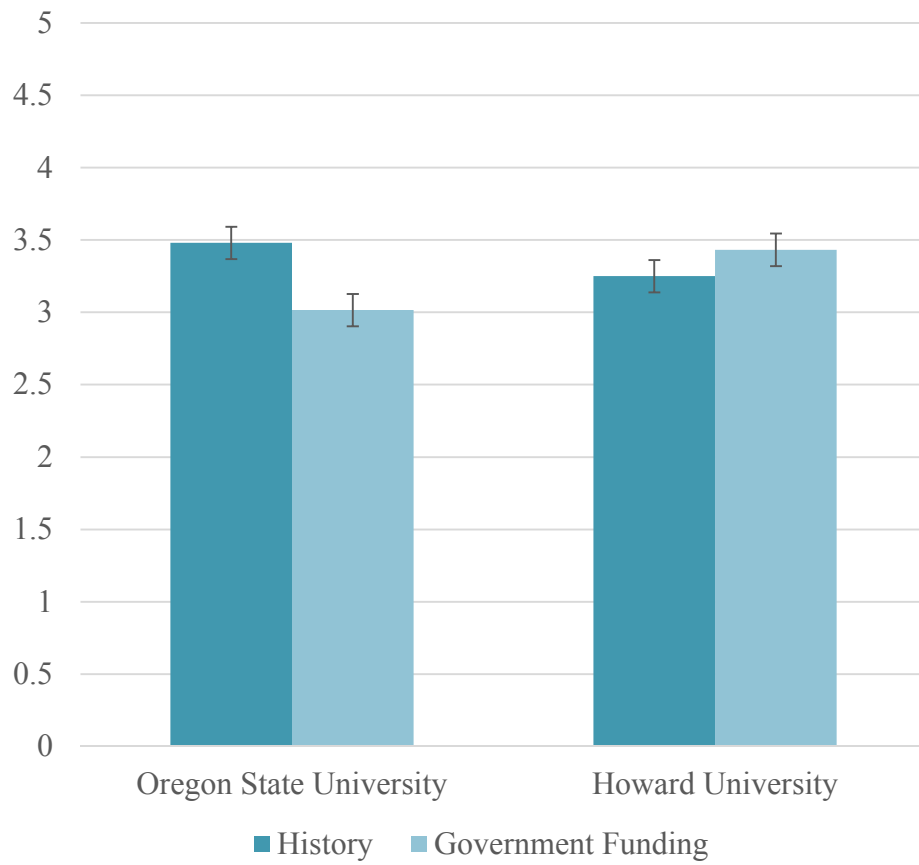


Table 8. Public Funding Allocation Structure

University Type	1 Maximum Profit	2	3	4 Maximum Equality	5	6	7 Maximum Difference
HWIs	\$19	\$17	\$15	\$13	\$11	\$9	\$7
HBCUs	\$25	\$21	\$17	\$13	\$9	\$5	\$1

Figure 4. Theoretical serial mediation model for the indirect effect of racial shift on resource allocation.

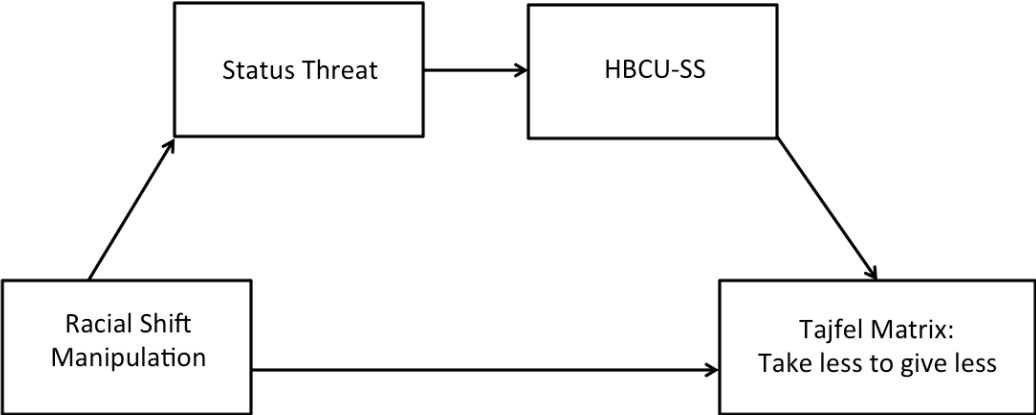


Figure 5. Study 4 serial mediation Results for the indirect effect of racial shift on resource allocation.

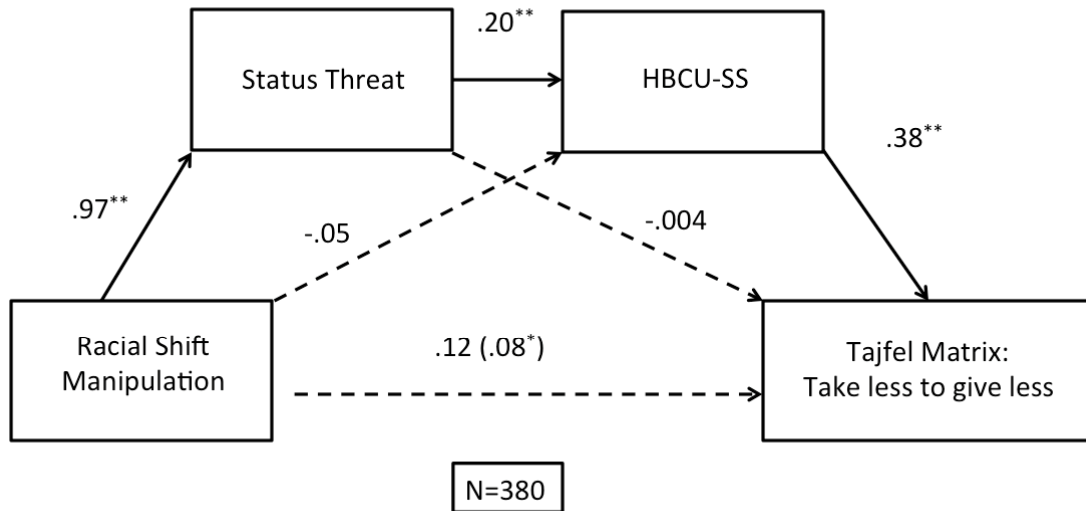


Figure 5.  $N = 380$ . The mediation model for Study 4. The first coefficient on the path from the Racial Shift Manipulation to the Resource allocation (Taking less to give less) represents the total effect without mediators in the model; the second coefficient on this path (in parentheses) represents the direct effect when mediators are included in the model. Path loadings represent standardized regression coefficients. The confidence interval for the overall model is (.04, .014). \*  $p < .01$ , \*\*  $p < .001$ .

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## Appendix

### Study 3 Manipulation

#### **Howard University History Condition (Full):**

Howard University is a leading university founded in 1867. Howard University was established to expand education access to African-Americans. Howard has grown from a single-frame building in 1867 to having evolved to more than 80 acres and multiple buildings. It is classified by the Carnegie Foundation as a research university producing a high amount of research at the undergraduate and graduate level. The university offers more than 100 undergraduate, graduate and doctoral degree programs. It is accredited and is nationally ranked within the top 150 universities in the United States and has gained several notable distinctions. In terms of sports, Howard is part of the NCAA Division I and has retained that title for several decades. Howard university attracts students from across the United States.

#### **Howard University Government Funding Condition (Full):**

Howard University is a leading university founded in 1867 and is funded partly by the U.S. Department of Education. Howard University was founded in response to a Federal Act of Congress to expand educational opportunities for African-Americans. Today, It is classified by the Carnegie Foundation as a research university producing a high amount of research at the undergraduate and graduate level. The university offers more than 100 undergraduate, graduate and doctoral degree programs. It is accredited and is nationally ranked within the top 150 universities in the United States and has gained several notable distinctions. In terms of sports, Howard is part of the NCAA Division I and has retained that title for several decades. Howard university attracts students from across the United States.

#### **Oregon State University History Condition (Full):**

Oregon State University is a leading university founded in 1868. Oregon State University was established to expand education access to the underprivileged. Oregon State University has grown from a single-frame building in 1868 to having evolved to more than 80 acres and multiple buildings. It is classified by the Carnegie Foundation as a research university producing a high amount of research at the undergraduate and graduate level. The university offers more than 100 undergraduate, graduate and doctoral degree programs. It is accredited and is nationally ranked within the top 150 universities in the United States and has gained several notable distinctions. In terms of sports, Oregon State is part of the NCAA Division I and has retained that title for several decades. Oregon State University attracts students from across the United States.

**Oregon State University Federal Funding Condition (Full):**

Oregon State University is a leading university founded in 1868 and is funded partly by the U.S. Department of Education. Oregon State University was founded in response to a Federal Act of Congress to expand educational opportunities for the underprivileged. Today, Oregon State University is classified by the Carnegie Foundation as a research university producing a high amount of research at the undergraduate and graduate level. The university offers more than 100 undergraduate, graduate and doctoral degree programs. It is accredited and is nationally ranked within the top 150 universities in the United States and has gained several notable distinctions. In terms of sports, Oregon State is part of the NCAA Division I and has retained that title for several decades. Oregon State University attracts students from across the United States.