IMPOSTORISM ON CAMPUS: THE EFFECTS OF STEREOTYPE THREAT ON

STATE INAUTHENTICITY AND STATE ANXIETY IN

TWO SAMPLES OF AFRICAN AMERICAN COLLEGE WOMEN

by

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(Under the Direction of Amy Hackney)

ABSTRACT

Despite the growing education levels of Black women, negative stereotypes of Black women persist and undermine the confidence of African American/Black college women in the classroom. Experimental evidence supports that stereotype threat, the fear of confirming a negative stereotype about one's group when being evaluated by others, undermines the performance of high achieving Black students (Steele & Aronson, 1995). Research has found the impostor phenomenon to be experienced as thoughts of inauthenticity, in conjunction with fear of failure and being exposed as a fraud (Ibrahim et al., 2020). Therefore, being continuously exposed to situations that create feelings of state inauthenticity, such as situations that create stereotype threat, could lead individuals to experience trait-like impostor fears. The primary purpose of the current research is to investigate a social-environmental causal factor of state impostor feelings in two samples of Black college women: stereotype threat. A second goal of the current research is to create original items from a culturally informed model of impostor feelings to assess trait levels of impostorism in two samples of Black female college students. Black female college students from a predominantly White institution (PWI) and a historically

Black college or university (HBCU) participated in this study. Due to the small sample size (N = 26), the current research results cannot be used to draw any conclusions about the effects of stereotype threat on state inauthenticity and state anxiety. However, the new culturally informed impostor items had high internal consistency ($\alpha = .81$), showed promise of accurately measuring impostorism, and will contribute to creating a more culturally informed impostor feelings measure. Overall, this research will contribute to the body of work concerning Black women in college struggling with anxiety, experiencing impostor phenomenon, and coping with stereotype threat.

INDEX WORDS: Stereotype threat, Impostorism, State inauthenticity, State anxiety, Culture, Black women

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DEDICATION

This study is dedicated to Black women everywhere. Your strength and perseverance have inspired me to continue asking questions and seeking answers.

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I would like to thank my parents for their unending love and support and for always being a

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INTRODUCTION

Black women have been reported to be the "most educated group in America" and the

rates of Black women obtaining college degrees continue to increase year after year (Katz, 2020,

p. 1). Despite the growing education levels of Black women, negative stereotypes of Black

women persist and undermine the confidence of African American/Black college women in the

classroom. A separate body of research on impostorism, which can be experienced as feeling like

a fraud, shows that many high-achieving individuals feel incompetent and worry that others will

discover their inadequacies. Although the impostor phenomenon was originally investigated in

samples of high-achieving White women (Clance & Imes, 1978) recent research shows that

underrepresented minority women feel the highest levels of impostorism, especially when they

feel that their field values brilliance (Muradoglu et al., 2021).

Recently, awareness of impostorism and suggestions for interventions have greatly

increased, with bloggers and academics alike asking, "Where do impostor feelings come from?"

To date, research has largely addressed this question by looking within an individual, measuring

self-esteem, personality traits, and constructs associated with mental illness, such as anxiety and

depression. This focus on the individual origins of the impostor phenomenon is also reflected in

the measurement of impostorism as a trait, rather than a state. A rare exception comes from

Feenstra and colleagues (2020), in which they call for research on the environmental causes of

impostor feelings. The primary purpose of the current research is to investigate one such social

environmental causal factor of impostor feelings in two samples of Black college women:

stereotype threat. A second goal of the current research is to assess trait levels of impostorism in

two samples of Black female college students using original items developed from a culturally informed model of impostor feelings in Black students.

Racial Stereotypes of Black Women

How do racial stereotypes affect Black women? It is important to use an intersectional perspective to understand how stereotypes affect Black women. Black women in the United States experience both racial and gender discrimination in a way that is nearly impossible to examine separately (Spates et al., 2020). This phenomenon is described as gendered racism, which is defined as a particular kind of racial and gender oppression that interconnects to create a specific, and more difficult, experience for women who occupy many subordinated positions (Essed, 1991). Many researchers have considered racial and gendered discrimination as a phenomenon that can lead to a multitude of negative psychological and physical health issues (Clark et al., 1999; Geronimus et al., 2006; Green & Darity, 2010; Klonoff & Landrine, 1995; Landrine & Klonoff, 1996; Shorter-Gooden, 2004). Several meta-analyses support these observations, especially the negative relationship between racial discrimination and mental health among Black Americans (Neal-Jackson et al., 2020; Pieterse et al., 2012).

Stereotypes are tools of discrimination used to generalize, oversimplify, and even make caricatures of the groups they are attached to. Stereotypes of Black women have persisted throughout history, such as the Jezebel and the Sapphire. The Jezebel is characterized as hypersexual, seductive, and manipulative and the Sapphire is characterized as sassy, loud, and overbearing (Ashley, 2014). While the Jezebel stereotype is no longer as common today, other stereotypes of Black women continue. More recent stereotypes that continue to be perpetuated are The Angry Black Woman (which is a resurrection of the Sapphire; Ashley, 2014), the Strong Black Woman (SBW), and the Welfare Queen. The Sapphire (Angry Black Woman) trope

presents Black women as verbally aggressive, nagging, and argumentative (West, 1995). According to Jerald et al. (2017), the Strong Black Woman (SBW) is expected to put the needs of others before her own, requires no help and never asks for it, epitomizes strength even in the face of adversity, and rarely shows vulnerability. The Welfare Queen is characterized as a lazy, poor, and single Black woman who abuses government assistance by having babies and expecting government support (Gilens, 1999). Black women are demonized through this stereotype, not just because of race, gender, or class, and not just because she is single with children (Foster, 2008). It is the intersectionality of these identities that creates the Welfare Queen caricature. Each of these stereotypes negatively impacts Black women, and the awareness of these stereotypes affects the way Black women navigate the world, as they are often trying not to fall into these stereotypes (Jerald et al., 2017).

Social situations can activate stereotype content (Spencer et al., 2016). In a college setting, the Angry Black Woman and the Strong Black Woman are likely accessible stereotypes, as Black college women navigate social and cultural norms regarding classroom participation expectations, academic help-seeking, and interactions with peers and professors. The awareness of these stereotypes and the possibility that any behavior could confirm these generalizations is a concern that many Black women hold, causing distress (Thomas, 2020). This worry that a member of a marginalized group may hold about confirming a stereotype is referred to as stereotype threat.

Stereotype Threat

Stereotype threat is a disruptive state that undermines performance and aspirations in members of marginalized groups who find themselves in a situation where negative stereotypes provide a framework for assessing their behavior (Spencer et al., 2016). In other words,

stereotype threat is a phenomenon that causes stigmatized individuals to experience group-based evaluative concerns in stereotype-relevant situations (Oliver et al., 2017). For instance, research has shown that negative stereotypes about the competency and intelligence of Black Americans can negatively impact academic performance when the threat of confirmation to the stereotype is deemed possible (Thomas, 2020). In self-reports, Black American students identify stereotypes and stereotype threat as the biggest obstacle to their academic success (Johnson-Ahorlu, 2013).

In their pioneering study of stereotype threat, Steele and Aronson (1995) looked at the debilitating effect stereotype threat can have on the intellectual performance of Black Americans. In the first study, Black and White, male and female college students were given a 30-minute test consisting of verbal portions of the GRE. In the experimental group, participants were told that the test would ascertain verbal ability. As expected, Black students underperformed in the stereotype threat condition compared to White students, but performance between Black and White students was comparable in nondiagnostic control conditions (with SAT scores controlled). Black students in the stereotype threat condition also underperformed compared to Black students in the nondiagnostic control condition and a challenge control condition. Study two, which tested Black and White female college students, found the expected diagnosticity by race interaction, but a test of whether state anxiety mediates the relationship between stereotype threat and performance showed that state anxiety was not affected by stereotype threat. Steele and Aronson (1995) reasoned that the effects of stereotype threat may have worn off after the end of the twenty-five minute verbal test, at which time the state anxiety measure was completed.

In a third study, Black and White, male and female college students were randomly assigned to believe they were going to take a test that was either diagnostic of their verbal

abilities, nondiagnostic of their verbal abilities, or assigned to a no test control group.

Participants then completed measures of stereotype activation, self-doubt activation, stereotype

avoidance, self-handicapping, and demographic identification. Again, controlling for SAT scores,

results showed that Black students in the diagnostic condition showed more racial stereotype

activation, more self-doubt activation, and more racial stereotype avoidance than participants in

any other condition. Furthermore, Black students in the diagnostic condition were the least likely

to self-report their racial identity and showed higher levels of self-handicapping. In study four,

rather than manipulating test diagnosticity, Black and White participants stated their race either

before or after taking the test. The results showed that Black students in the race prime condition

performed worse on the verbal test items than all other participants, indicating that activating the

construct of race was sufficient in inducing stereotype threat.

Since the publication of Steele and Aronson (1995), stereotype threat research has

focused on the external validity of the phenomenon. For example, documenting the detrimental

effects of stereotype threat in women on math tests (Cadinu et al., 2003), as well as memory tests

on older adults (Armstrong et al., 2017). Research has also extensively examined important

moderating (Davis et al., 2006) and mediating variables (Cadinu et al., 2006), particularly for

BIPOC individuals (Ellison et al., 2022). It is important to note that some research has found

difficulty yielding positive results when replicating previous stereotype threat research (i.e.,

Finnigan & Corker (2016). However, most recent replications of stereotype threat effects have

focused on gender-based threats, and only 18% of stereotype threat studies have assessed

race-based stereotype threat (Forscher at al., 2019). Lewis and Michalak (2019) conducted a

cross-temporal meta-analysis utilizing decades of research on stereotype threat. Their two main

hypotheses, which were competing hypotheses, included: (1) the initial evidence for stereotype

threat was strong but has dissipated over time, and (2) the evidence was always weak or null and only showed significance due to research degrees of freedom. The evidence was found to support the first hypothesis, that stereotype threat effect size has decreased over time; importantly, this decreased effect size was found for gender-based stereotype threat, but not for race-based stereotype threat, and race-based stereotype threat effects were larger than the gender-based effect. These results suggest that further study of race-based stereotype threat effects is warranted (Lewis & Michalak, 2019). Of current interest, are the results of the previously mentioned Steele and Aronson's (1995) third study, in which stereotype threat activated racial stereotypes, self-doubt, and distancing from racial stereotypes. To what extent does stereotype threat lead to a distancing of the Self, or feelings of inauthenticity?

Feelings of inauthenticity are feelings related to feeling different than one's true self. For example, when people experience evaluation apprehension they experience thoughts and feelings that do not align with the version of one's self that is deemed authentic. It is also important to note that Sedikides and colleagues' (2017) surmised that chronic feelings of inauthenticity could develop into more trait levels of impostorism. In summary, stereotype threat creates feelings of self-doubt and distancing from stereotypical interests and activities in Black students. To the extent that Black college women experience stereotype threat in the classroom, they may distance themselves from components of themselves and feel inauthentic, or like an impostor. Before detailing the link between impostorism and feelings of inauthenticity, previous research on the impostor phenomenon is first described.

Impostor Phenomenon

The impostor phenomenon presents as feelings of ineptitude in one's abilities or competencies, including fears of being discovered as inadequate or out of place in a high achieving group (Fassl et al., 2020). Much of the research on the impostor phenomenon pertains to high achieving individuals who externalize their success, such as college students and women (Fassl et al., 2020; Lige, 2017). In more recent studies, these identities have been looked at in combination with one another, to see if college women are more likely to experience impostorism compared to college men (Cusack et al., 2013). Specifically, Cusack and colleagues (2013) investigated whether or not there are gender differences in the rate of impostor beliefs experienced between men and women in college. Five items (gender, mental health, perfectionism, test anxiety, and low self-esteem) that have been found in previous research to be associated with the impostor phenomenon, were assessed. Cusack et al. (2013) found that female college students were more likely to experience impostor phenomenon than their male counterparts, indicating that gender might be associated with feelings of impostorism. Results additionally showed that increased impostorism was associated with poor mental health and higher levels of test anxiety and perfectionism. Unexpectedly, self-esteem was not related to the impostor phenomenon in this sample of college students, but the researchers speculated that the nonsignificant results may be due to bias with self-report measures and social desirability in their sample. Despite the nonsignificant results, the researchers stated that it is pertinent to recognize that other research has consistently found a significant negative relationship between self-esteem and the impostor phenomenon.

The study of the impostor phenomenon has progressed from women and college students to people of color, and most recently, to college students of color. Within the last decade, there has been an attempt to fill the gap in research on the impostor phenomenon among students of

color. Research suggests that the impostor phenomenon is negatively associated with the psychological health of Black American students (Bernard et al., 2020). Previous research suggests that the impostor phenomenon is positively related to mental health risk in female, Black American college students, particularly in those who report being the target of racial discrimination (Bernard et al., 2017). The general findings of Bernard and colleagues suggest that important person-specific factors and race-related experiences should be considered when creating effective counseling interventions for Black women who experience the impostor phenomenon. Peteet, Brown, Lige, and Lanaway (2015) investigated the impostor feelings associated with psychological distress and self-esteem in Black American college students. They hypothesized that increased impostorism would predict increased psychological distress and that increased impostorism would predict decreased self-esteem. Both hypotheses were supported in the results such that the impostor phenomenon was negatively associated with self-esteem but positively associated with psychological distress (Peteet et al., 2015). The research on impostor feelings and the negative impacts they can have on college students is fairly substantial, though many studies are limited by low sample sizes and inconsistent measurement of impostor related attitudes (Lige et al., 2017).

As earlier reviewed, recent research found that underrepresented minority women feel the highest levels of impostorism, especially when they feel that their field values brilliance (Muradoglu et al., 2021). Given that research shows that Black/African college students and Black/African American graduate students, post-docs, and professionals experience impostorism, we now turn to address, where might such impostor feelings come from, by discussing feelings of state authenticity and state inauthenticity.

State Inauthenticity

Sedikides, Slabu, Lenton, and Thomaes (2017) describe state authenticity as a temporary feeling of being in sync with the true self. State inauthenticity, then, is defined as the feeling that a person is not acting as their true or real self, and instead is being fake. Feelings of state inauthenticity are associated with situations in which one is being evaluated, feels incompetent, feels isolated, and feels that they are conforming to or failing to meet the expectations of others (Lenton, Bruder, et al., 2013). Additionally, state inauthenticity is associated with negative emotions, such as anxiety, sadness, disappointment, and fear, and is associated with lower self-esteem than state authenticity (Lenton, Bruder, et al., 2013). In considering directions for future research, Sedikides and colleagues (2017) questioned whether the recurring experiences of state inauthenticity create the impostor phenomenon. Ibrahim et al. (2020) describes the impostor phenomenon as thoughts of inauthenticity, in conjunction with fear of failure and being exposed as a fraud. Thus being chronically exposed to situations that create feelings of state inauthenticity, such as situations that create stereotype threat, could lead individuals to experience trait-like impostor fears.

State Anxiety

Anxiety is one of the major consequences of stereotype threat. Stereotype threat serves to increase individual anxiety levels, thus hurting performance (Steele & Aronson, 1995). Osborne (2007) conducted a study to test the claim of stereotype threat directly affecting anxiety and through that, performance. Participants were randomly assigned to conditions of either high or low stereotype threat involving difficult mathematical tasks. Measures of physiological arousal were recorded while participants completed the math task. Osbourne found physiological reactance as a function of the stereotype threat manipulation, meaning participants were

experiencing physiological effects of increased heart rate and perspiration as a result of stereotype threat induction. These findings align with the idea that stereotype threat affects anxiety. In other words, the presence or increase of anxiety is one of the psychological/physiological consequences that African American people experience when faced with phenomena, like stereotype threat, that has to do with racial discrimination (Clark et al. 1999), and Black women are more likely than any other demographic to experience many chronic physical and mental health conditions (Jerald et al., 2017). This increased rate of mental and physical health issues has been linked to discrimination and stereotype threat (Jerald et al., 2017; Keith, Lincoln, Taylor, & Jackson, 2010). Because previous research has linked stereotype threat to increased rates of anxiety, state anxiety was measured in the study to determine whether Black, female, college students that attend a PWI versus an HBCU have higher rates of state anxiety after exposure to stereotype threat.

Measuring Trait Impostor Phenomenon in Black Female College Students

The Clance Impostor Phenomenon Scale (CIPS) is a reliable and validated measure that assesses feelings of impostorism. The CIPS measures feelings related to the fear of intellectual failure and worry that others will discover one's lack of knowledge or abilities. However, the CIPS has primarily been used in samples of White individuals and garnered critiques that the scale items do not measure certain cultural and situational aspects of impostorism that are important in African American samples (Stone et al., 2018). Stone and colleagues created a culturally informed model of the impostor phenomenon that considers the socio-racial experiences of Black graduate students who attend a predominantly white institution (PWI), and how these experiences contribute to psychosocial costs, psychological vulnerability, and increased impostor feelings (Stone et al., 2018).

Stone and colleagues conducted focus groups with twelve Black graduate students who attended a PWI. Thematic analysis led to five themes related to feelings of impostorism in this sample: Awareness of Low Racial Representation, Questioning Intelligence, Expectations, Psychosocial Costs, and Explaining Success Externally and many subthemes. Awareness of Low Racial Representation represents a lack of physical representation of one's race. Questioning Intelligence involved doubting of own intellectual abilities, questioning intellectual belonging, and doubting the quality of work. Expectations included hyper awareness of others' expectations and high expectations put on self, and from family/community. Physiological Costs entailed racial isolation, feelings of otherness, and a need to prove one's worth. Explaining Success Externally was characterized by attributing one's success to outside forces. For the current research, each theme from Stone et al. (2018) was operationalized and adapted to create new items that measure impostorism in African Americans. The organization and format of the CIPS was also utilized in creating a culturally informed measure.

HBCU v. PWI

It has been discussed in previous research that the historically black college/university's (HBCU) environment differs from the predominantly white institution's (PWI) in ways that facilitate, versus impairs, the achievement for African American students (Allen, 1992; Chavous et al., 2004). In an early study, Allen (1992) examined the differences in the college experience between Black undergraduates who attended HBCUs and those who attended PWIs and found that Black student achievement, social involvement, and career aspirations were more heavily reliant on social context, whereas social connections bridged the gap between individual characteristics and the institutional characteristics (Allen, 1992). In other words, student

achievement and involvement were heavily affected by social interactions and thus shapes how a student reacts when faced with adversity.

Chavous et al. (2004) examined relationships among stereotype expectations, gender, and academic self-concept and performance of African American students at PWIs and HBCUs. They found that choice of major, gender, and social interactions were related to stereotype expectations as well as academic outcomes. That is to say that expectations of being stereotyped and academic success seemed to be affected by program of study, gender, and social connections. Ultimately, Chavous and colleagues found stereotype expectations were more strongly related to men's rather than women's academic performance at the PWI, and the opposite was found for those who attended an HBCU, in that stereotype expectations related to lower academic performance for women than for men at the HBCU.

More recently, Reeder and Schmitt (2013) looked at whether African American students from HBCUs and PWIs differ from each other in academic motivation. The study also investigated whether the type of institution (PWI v. HBCU) moderates the differences between academic judgment and academic motivation, as well as achievement. Academic judgment refers to the application of knowledge that results in effective decision making in the classroom and greater university setting. The results showed that ACT, SAT, and GPA were strongly correlated with college GPA at both types of institutions, which is consistent with previous research. They also found that continuous learning and judgment were related to GPA at PWIs, but only judgment was significantly related to GPA at HBCUs. The study concluded that African Americans do excel at PWIs, but it is more difficult for them to do so because of the exposure to stereotype threat and impostor related feelings. The researchers also concluded that unless Black students make their education a priority and are prepared to deal with the additional stress a

college student faces on top of the pressures a Black person faces, they may want to consider an HBCU. However, the research did not investigate Black women specifically, nor did it experimentally investigate stereotype threat or measure impostorism, which is what the current research set out to accomplish.

An additional study that contributed to the body of work pertaining to the use of academic tests in research with Black individuals was Davis, Aronson, and Salinas's (2006) study that used verbal items from the GRE practice test to serve as a dependent variable. Participants were told there were two parts to the study, and that they would need to complete part two twenty-four hours after completing part one. Verbal reasoning tests have been used in previous research to induce stereotype threat in Black students. The results found that high threat affected performance on the verbal test, that is students in the high threat condition answered fewer questions right than those in the low threat condition. Researchers did not find a significant correlation between racial identity attitudes and SAT scores. In the low threat condition, there was a significant positive correlation between the number of verbal test items answered correctly and internalization status attitudes. These internalization attitudes were measured by the Black Racial Identity Attitudes Scales (BRAIS), and those who endorsed attitudes portraying a strong sense of self and belonging to their race group, scored better on the verbal test items than those who did not.

The purpose of the Davis et al. study was to address Steele and Aronson's (1994) question about the consequences of exposure to an environment full of devaluing stereotypes about a person's group (Davis et al., 2006). The study found support for stereotype threat and internalized attitudes moderated performance in low threat conditions but not in high threat conditions. The researchers addressed why racial identity attitudes did not predict performance in

high stereotype threat conditions. They postulated that this was because of two reasons: the influence of individual differences is weak when situational demand is strong, and internalization attitudes on performance are not protective enough in high stereotype threat situations because the individual holding on to these attitudes are the ones who want to disprove negative stereotypes about Black people. Despite racial identity attitudes failing to predict performance in high stereotype threat situations, the verbal reasoning test did successfully induce stereotype threat in participants.

The current research assumes that Black people, particularly Black women, have a harder time being successful and feeling authentic at PWIs. One study that looked at black women, in particular, was Negga, Applewhite, and Livingston (2007) who compared Black women attending PWIs and HBCUs; previous research has posited that the difference in Black students who attended these different types of institutions are significant. Negga and colleagues address the lack of research on comparisons of stress with students that attend historically black colleges/universities and PWIs. The study examines the relationship between self-esteem, social support, school racial composition, age, and gender on students' stress by using the Student Stress Survey. The participants included Black and White students from both Historically Black Colleges/universities and PWIs. There were significant negative correlations found between stress and self-esteem, as well as, stress and social support for Black and White students who attended an HBCU and White students who attended a PWI, but not for Black students who attended a PWI. The study concluded that African American students who attend a PWI may require additional assistance (interventions/counseling) that is culturally sensitive to racial discrimination, isolation, and coping, as well as addressing the other factors common to all students at PWIs, such as control and self-esteem.

The assumption for the current study is that the exposure to stereotype threat and impostor related feelings will be less prominent in an HBCU environment that was built for Black people; on the other hand, stereotype threat and impostor-related feelings are expected to be elevated in African Americans who attend a PWI, an academic environment with fewer Black people. Participants will be chosen from two different universities: a predominantly White institution (PWI) and a historically Black college/university (HBCU).

Summary, Current Study Overview, and Hypotheses

The current research investigated stereotype threat and the role of campus type on state inauthenticity and state anxiety and initiated work on culturally informed impostor phenomenon items**.** Though the research is limited, previous studies show that Black people are susceptible to impostor feelings and the negative effects that go along with stereotype threat (Bernard et al., 2020). Not only can the persistence of stereotypes such as the Strong Black Woman and the Angry Black Woman lead to detrimental consequences for Black women, but the worry of confirming these stereotypes can lead to distress (Jerald et al., 2017; Thomas 2020). One of the consequences associated with stereotype threat is anxiety. Research suggests that stereotype threat serves to increase anxiety levels, which negatively impacts performance (Steele & Aronson, 1995). Research has also found the impostor phenomenon to be experienced as thoughts of inauthenticity, in conjunction with fear of failure and being exposed as a fraud. Therefore, being continuously exposed to situations that create feelings of state inauthenticity, such as situations that create stereotype threat, could lead individuals to experience trait-like impostor fears. Susceptibility to stereotype threat tends to be higher in Black students who attend a PWI in comparison with Black students who attend an HBCU. Davis and colleagues (2006)

discussed the differences and it was posited that the Black students who attend a PWI experience pervasive exposure to devaluing stereotypes about their race.

In the current study, participants were randomly assigned to the stereotype threat or no stereotype threat condition. Participants then completed measures of state anxiety and state inauthenticity in counterbalanced order. A second goal of the current research is to initiate quantitative work on culturally informed trait impostor items. To this end, all participants additionally completed a validated measure of the impostor phenomenon, and Black participants also completed new culturally informed impostor items.

Based on the previous research, I formed the following hypotheses:

(1) Because Sedikides and colleagues (2017) questioned whether the recurring experiences of state inauthenticity create the impostor phenomenon and because previous research suggests that the impostor phenomenon is positively related to mental health risk in female, Black American college students, particularly in those who report being the target of racial discrimination (Bernard et al., 2017), I predicted that there will be a correlation of campus type on state inauthenticity and state anxiety such that Black female students who attend a PWI will have higher levels of state inauthenticity and state anxiety than Black female students who attend a HBCU.

(2) Because research suggests the presence or increase of anxiety is one of the psychological/physiological consequences that African American people experience when faced with phenomena, like stereotype threat, that has to do with racial discrimination (Clark et al., 1999), and Black women are more likely than any other demographic to experience many chronic physical and mental health conditions (Jerald et al., 2017), I predicted that there will be a

main effect of stereotype threat condition on state inauthenticity and state anxiety such that Black female students who experience stereotype threat will have higher levels of state inauthenticity and state anxiety than Black females in the control condition.

3) Because research suggests that the HBCU's (HBCU) environment differs from the PWI's (PWI) in ways that facilitate, versus impairs, the achievement of African American students (Allen, 1992; Chavous et al., 2004), I predicted that there will be a significant interaction between campus type and stereotype threat condition such that Black female college students who attend a PWI and experience stereotype threat will have the highest levels of state inauthenticity and state anxiety than participants in any other condition.

4) Because research suggests that a culturally informed model of the impostor phenomenon that considers the socio-racial experiences is necessary (Stone et al., 2018), I predicted that there will be a positive association between responses on the culturally informed impostor items and scores on a validated trait impostorism scale.

5) Because research suggests that African American students who attend a PWI may require additional assistance that is culturally sensitive to racial discrimination, isolation, and coping, as well as addressing the other factors common to all students at PWIs, such as control and self-esteem (Negga et al., 2007), I predicted that Black female students who attend a PWI will have higher levels of trait impostorism and report higher endorsement of culturally informed impostorism than Black females who attend a HBCU.

CHAPTER 2

METHOD

Participants

The intended population is Black women in college. Participants were recruited through a PWI (Georgia Southern University) and an HBCU (Savannah State University). Black women at Georgia Southern were recruited through the distribution of flyers by volunteer faculty, the Housing email pool, flyers posted on campus, and word of mouth and email through an on-campus organization. Black students at Savannah State were recruited through the distribution of emails and flyers by volunteer faculty, and a campus organization on the Savannah State campus. Participants were required to be full-time students, at Georgia Southern or Savannah State. A G*power analysis was run using .8 power to detect a medium effect size of .01 eta-square at the standard .05 alpha error probability. The goal was to recruit 200 participants across both campuses. We preregistered exclusionary criteria for the participant sample. The goal was to only analyze the data of participants between the ages of 18-25 who were not married and did not have children. These exclusions were deemed necessary because being older, married, or having children might significantly affect the everyday experiences of a student, and how susceptible they are to stereotype threat, anxiety, and feelings of inauthenticity.

Out of the 115 participants that participated in the study, only 31 self-identified as the target demographic (Black Women in an undergraduate program). The exclusion criteria that were preregistered expressed that only participants who completed the survey, self-reported that

they took the study seriously, correctly recalled the stereotype threat instructions, and selected

certain demographic criteria (identify as Black and female, be unmarried, have no children, and

be between the ages of 18-25), would be retained for data analysis. However, due to the small

sample size, we found it prudent to dismiss certain exclusionary criteria (answering the

stereotype threat memory item correctly, marital status, age range, and having children) to

increase the sample size for exploratory analyses. Of the 31 Black women who participated in

the study, 26 self-reported that they took the study seriously. We included the data of these 26

participants in our analyses; 73.1 % of participants attended Georgia Southern (N = 19) and 26.9

% participants attended Savannah State (N = 7). Of the 26 participants 26.9 % reported having

children, 7.7 % reported being married, 26.9% identified as freshmen, 7.7 % identified as

sophomores, 19.2 % identified as juniors, and 46.2 % identified as seniors. The ages of

participants ranged from 18-39 ($M = 21.96$, $SD = 5.41$).

Design

The primary research design of this study is a 2 (stereotype threat: present vs. not) x 2 (school type: PWI vs. HBCU) between subjects, experimental design. Of the 26 participants who were retained for data analysis, 19 participants were Black women at a PWI and 7 participants were Black women at an HBCU. Of the PWI participants, 13 were randomly assigned to the stereotype threat condition and six were randomly assigned to the control group. Of the HBCU participants, four were randomly assigned to the stereotype threat condition and three were randomly assigned to the control group.
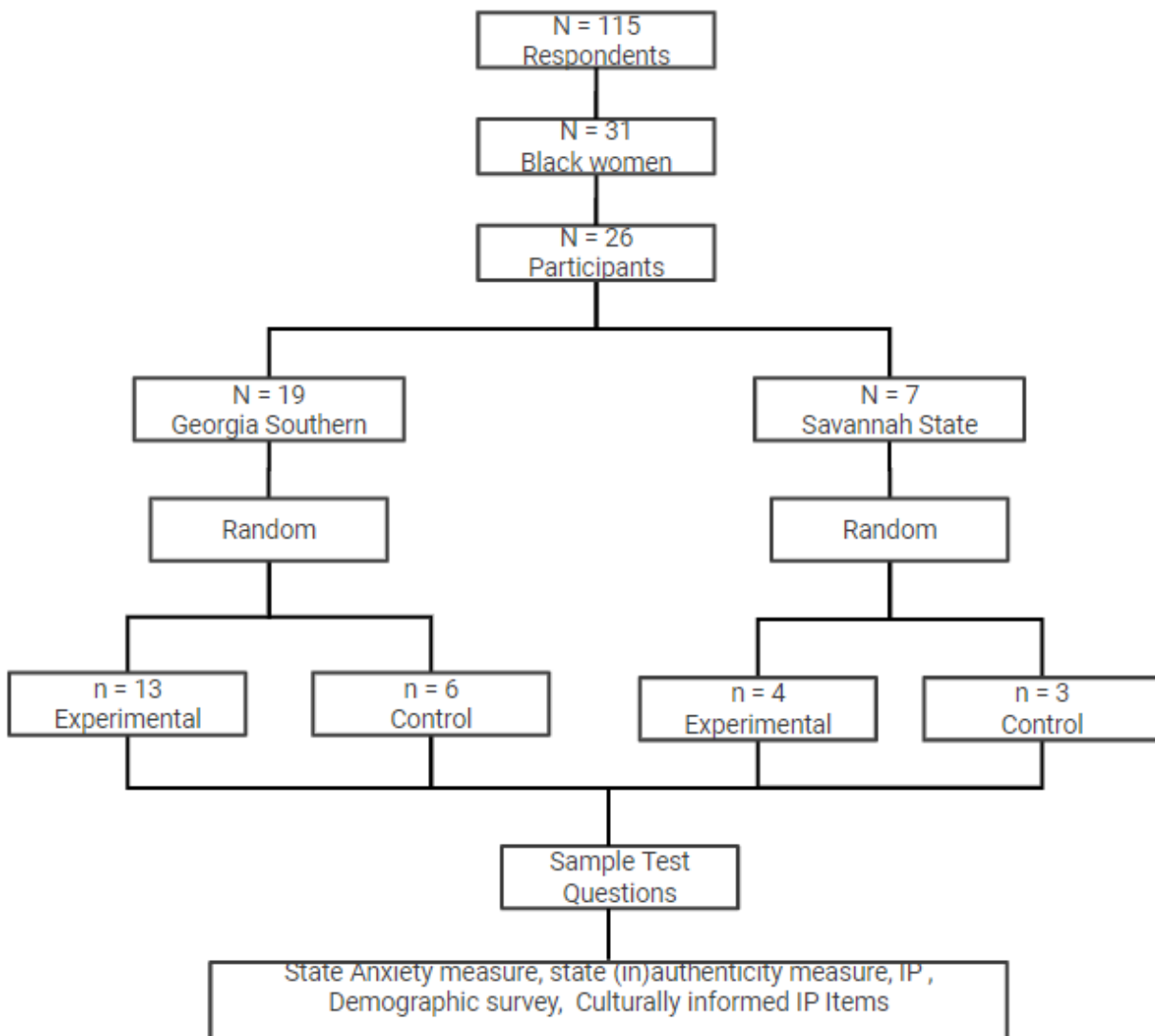
Stereotype Threat Manipulation

To manipulate stereotype threat, Steele and Aronson's (1995) process in study 3 was used. Research supports that academic tests are adequate at inducing stereotype threat in Black participants (VanLandingham et al., 2022). Steele and Aronson found that stereotype threat can be induced in Black college students from the anticipation of completing a test diagnostic of intelligence, even if the test is not taken. Participants read that the study would be examining higher verbal reasoning (HVR) and abstract reasoning about the meaning of words. Participants read that they would complete the HVR task, and the manipulation for stereotype threat was provided as instructions per Steele and Aronson:

> Diagnostic: Because we want an accurate measure of your ability in this domain, we want to ask you to try as hard as you can to perform well on this task. At the end of the study, we can give you feedback that may be helpful by pointing out your strengths and weaknesses.
>
> Nondiagnostic: Even though we are not evaluating your ability on this task, we want you to ask you to try as hard as you can on this task. If you want to know more about your HVR performance, we can give you feedback at the end of the study.

The participants viewed sample items for the HVR task, which included difficult verbal GRE problems (Steele & Aronson, 1995). The researchers explained that the reason for providing the participants with sample questions was to show the difficulty of the problems and to alert them to the possibility of performing poorly, thus activating the relevance of racial stereotypes in diagnostic conditions (Steele & Aronson, 1995). Right before the participants

expected the test to begin, participants completed all dependent measures, trait impostorism measures, and demographics.

Measures

      State Inauthenticity Scale. The Real-Self Overlap Scale (RSOS) measures the extent to which a participant feels close to their real/true self at a specific moment and has been used as a measure of state inauthenticity (Sedikides et al., 2017). The RSOS contains seven pairs of circles, in different ranges of overlap. In each pair, the circle on the left represents who the person is at that specific moment, and the circle on the right represents the person's real or true self. Responses on the scale represent the extent to which one feels distanced from their true self, ranging from no overlap between the current self and real self to a complete overlap between the current self and the real self.

      Brief State Anxiety Measure. The State-Trait Anxiety Inventory is a widely used and verified instrument of measuring state and trait anxiety in adults. A brief version of the STAI was developed in a pilot study for use in the Berg, Shapiro, Chambless, and Ahrens (1998) research pertaining to fear of emotion, interpersonal conflict, and panic onset. Six items (relaxed, steady, strained, comfortable, worried, tense) with the highest item-to-item-remainder correlations were selected from the original STAI measure to construct the Brief STAI-S (Berg et al., 1998). The measure demonstrated good internal consistency in Berg's pilot study, $\alpha = 0.83$, and in Berg et al. (1998), $\alpha = 0.86$. This brief state anxiety measure was highly correlated with the original STAI 20-item scale, $r = 0.93$, demonstrating convergent validity. For the current study, we used a modified version of the Brief STAI-S, and included the seventh item, "I feel nervous." Participants rated the extent to which they felt relaxed, steady, strained, comfortable, tense, and

nervous right now, at this moment, on a scale from 1 (not at all) to 4 (very much so). The seven items were administered in random order and demonstrated good internal reliability ($\alpha = .85$).

Culturally Informed Impostor Items. Using themes (awareness of low racial representation, expectations, questioning intelligence, psychosocial costs, explaining success externally) and subthemes found by Stone and colleagues (2018), a 20-item culturally informed impostor survey was created to assist in determining feelings of impostorism in Black undergraduate students. Each theme and subtheme was evaluated in order to form each item in the survey. The theme of awareness of low social representation contained two subthemes: awareness via discussion and observation. Awareness via discussion and observation refers to the method by which participants were made aware of low social representation. The culturally informed items derived from these sub-themes include "there is a lack of physical representation of Black people on my campus" and "Because of the lack of physical representation of Black people on my campus, I am uncomfortable." Self and in-group expectations and outgroup expectations belonged to the theme of expectations. The items derived from these themes include "I have to hold myself to a higher standard than my White counterparts" and "In order to be considered just as competent as my White counterparts, I have to work twice as hard." The theme of questioning intelligence held sub themes of questioning self and questioning others. Items derived from these themes include "I constantly question my right to attend the college/university that I attend" and "My intellectual abilities are constantly questioned by others." Psychosocial costs included sub themes of racial isolation and feelings of otherness. Items derived from these themes included "Because of the lack of physical representation of Black people on my campus, I feel lonely" and "There is a lack of social support for me on campus." The final theme was explaining success externally. Items derived from this theme

included statements such as "When asked, I do not attribute my success to my own abilities" and "I am uncomfortable stating that I am successful because of my own abilities."

The survey asked participants how much they agree with each statement with a range from 1 "not at all true" to 5 "very true." The items demonstrated good internal reliability (α = .81) and were summed and averaged for data analysis. See Appendix for the 20 items.

Leary Impostorism Scale. Leary, Patton, Orlando, and Funk (2000) created a scale to measure impostor feelings. The scale consists of seven statements that can be answered on a 5 point scale, with 1 being "not at all characteristic of me and 5 being "extremely characteristic of me." The Leary et al. impostor phenomenon scale was used along with the culturally sound impostor measure, and the state (in)authenticity scale to assess impostorism. Sample items include "Sometimes I am afraid I will be discovered for who I really am," "I'm afraid people important to me may find out I'm not as capable as they think I am," and "In some situations, I feel like an impostor" (α = .93). The items were summed and averaged for data analysis.

Procedure

Through Qualtrics, eligible participants received instructions that informed them that the purpose of the study was to examine higher verbal reasoning in Black female college students. Participants were randomly assigned to either the diagnostic (experimental), or the nondiagnostic (control) variable. Participants in both conditions were told that the ratings taken were used to provide a better understanding of the higher verbal reasoning process. Participants received sample items from the HVR (difficult GRE verbal questions). The participants in the diagnostic condition were given instructions that alluded to the HVR task being diagnostic of intellectual ability, while the nondiagnostic group received instructions that informed them that while their

performance will not be evaluated, they should try their best. Right before participants expected to take the test they were asked to complete the state anxiety measure and the state inauthenticity scale, in counterbalanced order. Next, all participants completed Leary's impostor feelings measure. Participants then completed the demographic survey, and those that self-identified as Black or African American received the new culturally informed impostor items. Finally, participants completed questions about the stereotype threat instructions they received, and whether or not they took the survey seriously.

CHAPTER 3

RESULTS

Data Analysis Plan

Due to an insufficient number of participants we conducted exploratory analyses instead of conducting confirmatory hypothesis testing, in order to prevent the occurrence of Type 1 and Type 2 errors.

In order to explore whether Black female college students who attend Georgia Southern (PWI) are more susceptible to stereotype threat and if stereotype threat affects state anxiety and state inauthenticity versus Black, female students who attend Savannah State (HBCU) two 2 x 2 ANOVAs were conducted. The null hypothesis is that stereotype threat will have no significant effect on state anxiety and state inauthenticity, and there will be no significant difference in Black female students between GSU and Savannah state. ANOVA was used because the dependent variables (state inauthenticity and state anxiety) are continuous variables; the two independent variables (stereotype threat v. no stereotype threat and GSU v. Savannah) are each categorical, independent groups. Additionally, Pearson's Correlation Coefficient was used to assess the relation between scores on the new culturally informed impostor items, the Leary Impostor Scale, and state inauthenticity. An independent samples *t*-test was conducted to explore whether Black females who attend a PWI have higher levels of trait impostorism than Black females who attend an HBCU.

Hypothesis 1. It was predicted there would be a correlation between campus type and state inauthenticity and state anxiety such that Black female students who attend a PWIs would have higher levels of state inauthenticity and state anxiety than Black female students who attend an HBCU.

State Anxiety. In order to explore whether campus type is related to state anxiety, a 2 x 2 (Condition x Campus Type) between-groups ANOVA on state anxiety was conducted. There was not a statistically significant correlation of campus type Those who attend a PWI reported similar levels of state anxiety (n =19; M = 2.18, SD =.62) as those who attend an HBCU (n = 7; M = 2.59, SD = .81) $F(1, 22)$ = .86, p = .36, η_p^2 = .04..

State Inauthenticity. In order to explore whether campus type is related to state inauthenticity, a 2 x 2 (Condition x Campus Type) between-groups ANOVA on the Real-Self Overlap Scale was conducted. There was not a statistically significant correlation of campus type. Those that attend a PWIs reported similar levels of feeling like their real self (n = 19; M = 4.21, SD = 1.69) as those who attend an HBCU (n = 7; M = 4.29, SD = 2.21), $F (1, 22)$ = .07, p = .79, η_p^2 = .003.

Hypothesis 2. It was predicted there would be a main effect of stereotype threat condition on state inauthenticity and state anxiety such that Black female students who experienced stereotype threat will have higher levels of state inauthenticity and state anxiety than Black females in the control condition.

State Anxiety. In order to explore whether there was an effect of stereotype threat on state anxiety, a 2 x 2 (Condition x Campus Type) between-groups ANOVA on state anxiety was conducted. Those in the stereotype threat condition reported similar levels of state anxiety (n = 17; $M = 2.28$, $SD = .71$) as those in the control group (n = 9; $M = 2.32$, $SD = .67$), $F(1, 22) = 1.18$, $p = .29$, $\eta_p^2 = .05$.

State Inauthenticity. In order to explore whether there was an effect of stereotype threat on state inauthenticity, a 2 x 2 (Condition x University Type) between-groups ANOVA on the Real-Self Overlap scale was conducted. Those in the stereotype threat condition reported similar levels of feeling like themselves (n = 17; $M = 4.41$, $SD = 1.46$) as those in the control group (n = 9; $M = 3.89$, $SD = 2.37$) $F (1, 22) = .17$, $p = .68$, $\eta_p^2 = .008$.

Hypothesis 3. It was predicted there would be a significant interaction between campus type and stereotype threat condition such that Black female college students who attend a PWIs and experience stereotype threat will have the highest levels of state inauthenticity and state anxiety than participants in any other condition.

State Anxiety. In order to explore this hypothesis a 2 x 2 (Condition x University Type) between-groups ANOVA on state anxiety was conducted. There was a statistically significant interaction of campus type and condition $F(1, 22) = 7.01$, $p = .015$, $\eta_p^2 = .24$.

In order to explore the nature of the interaction found between campus type and condition, simple effects testing was conducted. Inconsistent with our hypothesis, those in the stereotype threat condition who attended a PWIs reported lower rates of state anxiety (n = 13; $M = 2.04$, $SD = .64$), than those in the stereotype threat condition who attended an Hisorically Black College/university (n = 4; $M = 3.03$, $SD = .18$), $t(15) = -3.00$, $p = .009$ Cohen's $d = -2.10$. Participants in the control condition who attended a PWIs reported similar levels of state anxiety

(n = 6; *M* = 2.48, *SD* = .48) as those in the control condition who attended an Hisorically Black College/university (n = 3; *M* = 2.00, *SD* = 1.00), *t(7)* = -1.00, *p* = .35, Cohen's *d* = .61.

State Inauthenticity. A 2 x 2 (Condition x University Type) between-groups ANOVA on the Real-Self Overlap scale was conducted to test the interaction between condition and university type. There was not a statistically significant interaction of campus type and condition on Real-Self Overlap scores, F (1, 22) = .26, p = .61, η_p^2 = .01.

Hypothesis 4. It was predicted there would be a positive association between responses on the culturally informed impostor items and scores on a validated trait impostorism scale.

In order to explore this hypothesis, a bivariate correlation was used to analyze the data. There was a small positive relationship between the Leary Impostor Scale and the culturally informed impostor items, though it was not statistically significant $r(24)$ = .24, p = .23. See Table One for the bivariate correlations between the Leary Impostor Scale, the culturally informed impostor items, the state anxiety measure, and the Real-Self Overlap Scale and Table Two for the means, standard deviations, and minimum and maximum scores for each variable

Table 1

Summary of Intercorrelations for the Leary Impostor Scale, Culturally Informed Impostor Scale,

State Anxiety Scale, and the Real-Self Overlap Scale

	LIS	CIIS	BSAM	RSOS
LIS	--	.24	.33	-.01
CIIS		--	.40*	-.31
BSAM			--	-.39*
RSOS				--

*. Correlation is significant at the 0.05 level (2-tailed).

Note. LIS = Leary Impostor Scale. CIIS = Culturally Informed Impostor Scale. BSAM = Brief

State Anxiety Measure. RSOS = Real-Self Overlap Scale.

Table 2

Descriptive Statistics

	Minimum	Max	Mean	SD
CIIS	1.35	3.80	2.55	0.58
LIS	1.00	5.00	2.13	1.16
BSAM	1.00	3.57	2.29	0.68
RSOS	1.00	7.00	4.23	1.79

Note. LIS = Leary Impostor Scale. CIIS = Culturally Informed Impostor Scale. BSAM = Brief

State Anxiety Measure. RSOS = Real-Self Overlap Scale.

Hypothesis 5. It was predicted that Black female students who attend a PWI will have higher levels of trait impostorism and report higher endorsement of culturally informed impostorism than Black females who attend a HBCU.

In order to explore this hypothesis, a series of independent sample *t*-tests were conducted to analyze the data. Women who are Black and who attended a PWI reported similar scores on the culturally informed impostor items ($M = 2.68$, $SD = .60$) as those who attended an HBCU ($M = 2.22$, $SD = .38$), $t(24) = 1.87$, $p = .07$, Cohen's $d = .91$.

Those who attended a PWIs reported similar levels of trait impostorism on the Leary Impostorism Scale ($M = 2.01$, $SD = 1.02$) as those who attended an HBCU ($M = 2.47$, $SD = 1.53$), $t(24) = -.89$, Cohen's $d = -.35$.

CHAPTER 4

DISCUSSION

The purpose of the current study was to investigate stereotype threat and the role of

campus type on state inauthenticity and state anxiety and to initiate work on culturally informed

impostor phenomenon items. Specifically in this study, participants were randomly assigned to

experience stereotype threat or not, and completed measures of state anxiety, state inauthenticity,

and impostorism. The participants in the stereotype threat condition were given instructions that

alluded to the HVR task being diagnostic of intellectual ability, while the nondiagnostic control

group received instructions that informed them that while their performance will not be

evaluated, they should try their best. Participants then completed the state anxiety measure and

the state inauthenticity scale in counterbalanced order, followed by the Leary impostor feelings

measure. Participants then took the demographic survey, and those that self-identified as Black

or African American received the new culturally informed impostor items.

First, it was predicted but not supported that there would be a correlation between

campus type and state inauthenticity and state anxiety such that Black female students who

attend a PWIs would have higher levels of state inauthenticity and state anxiety than Black

female students who attend an HBCU. However, Black female college students from a PWI and

an HBCU reported similar levels of state inauthenticity and state anxiety. Although this

nonsignificant association between campus type and state inauthenticity and state anxiety could

be due to low sample size with inadequate statistical power, it is also possible that there is no

difference in levels of state anxiety and feelings of inauthenticity in Black women who attend a

PWI instead of an HBCU. Both students at the PWI and students at the HBCU reported, on

average, feeling moderately close to their real selves, and students at both campuses reported feeling levels of state anxiety that were on average in-between the ratings of "somewhat" and "moderately so," and this may be due to the inherently stressful nature of attending a college/university.

Second, it was predicted but not supported that there would be an effect of stereotype threat condition on state inauthenticity and state anxiety such that Black female students who experienced stereotype threat would have higher levels of state inauthenticity and state anxiety than Black females in the control condition. It is possible the presence of stereotype threat does not affect feelings of state anxiety and feelings of state inauthenticity or the nonsignificant result could be due to low sample size with inadequate statistical power. However, it is also possible that stereotype threat was not effectively activated online, a possibility which will be later discussed.

Third, it was also predicted but not supported that there would be a significant interaction between campus type and stereotype threat condition such that Black female college students who attend a PWI and experience stereotype threat will have the highest levels of state inauthenticity and state anxiety than participants in any other condition. Contrary to expectations, Black female college students who attended an HBCU and experienced stereotype threat reported higher levels of state anxiety than Black female college students who attended a PWI and experienced stereotype threat. On average, the HBCU students reported feeling "moderately" anxious after experiencing the diagnostic stereotype threat instructions, and the PWI students reported feeling "somewhat" anxious after experiencing the diagnostic stereotype threat instructions. This may be related to an unknown stressor present on the HBCU campus, or possibly in the specific participants that attended the HBCU. It is also possible that the HBCU

students felt more evaluation apprehension since the researcher was from Georgia Southern University. In other words, I was an outgroup member to the HBCU students, but an ingroup member to the PWI students. However, the sample size of the HBCU students who experienced stereotype threat was very small, and the results may not be valid.

Fourth, it was predicted but not supported that there would be a positive association between responses on the culturally informed impostor items and scores on a validated trait impostorism scale. Although scores on the culturally informed impostor items and scores on the Leary impostor scale had a small positive correlation, the correlation did not reach statistical significance. The outcome was congruent with the hypothesis despite its lack of statistical significance. This could be an indication that the culturally informed impostor items were successful at measuring impostorism in Black female college students, but that the culturally informed impostor items and the Leary impostor scale measure different aspects of impostorism.

Finally, it was predicted but not supported that Black female students who attend a PWI will have higher levels of trait impostorism and report higher endorsement of culturally informed impostorism than Black females who attend an HBCU. This could suggest that trait impostorism does not differ in Black female students who attend a HBCU or PWI. An exploratory examination of the responses to each question item on the culturally informed scale showed some differences in our sample between the Black female students who attend a PWI and the Black female students who attend a HBCU. For example, the Black women who attend a PWI reported the highest endorsement with "I adjust my style of speech and tone of voice to better fit in with the style of speech of those around me," and "Issues concerning Black people are not discussed enough on my campus." On the other hand, Black women in our sample who attend a HBCU reported the highest endorsement of "I must be a representative of the Black community,"

"I am uncomfortable stating that I am successful because of my own abilities," and "I have to hold myself to a higher standard than my White counterparts." These differences in levels of endorsement of different item types suggest that while overall levels of culturally informed impostorism are similar between the Black women in our sample who attend a PWI and who attend a HBCU, there are campus type differences in how such impostorism is felt. This could be because there may be different internal and external expectations that are placed on the students who attend each type of university, possibly due to the different cultures. However, because of the small sample size, drawing any conclusions would not be prudent. The limitations of our sample will be discussed in the following section.

Limitations

Because of the small sample size, there are extreme limitations created as it pertains to drawing conclusions from the current research. Small sample sizes tend to have low statistical power, and this creates a problem with finding results in support of the hypotheses and can also increase the likelihood of Type 1 error (Vanvoorhis & Morgan, 2007). Thus, with a sample size of 26, it is difficult to draw any conclusions from either supported or unsupported hypotheses.

One of the reasons for the sample size being so small, had to do with many of the respondents not being a part of the target demographic (Black female college students). The majority of the sample included White male and female college students. Only thirty-one Black female college students participated in the study. One possibility of the recruitment of Black female participants students failing could be due to the failure of access and connection to the community of Black female participants on both campuses.

The mode of data collection (online Qualtrics survey) did not seem to induce stereotype threat in Black female students. The manipulation (a statement about the HVR task being

indicative of intelligence) may not have been salient enough to produce a state of threat. It is likely that the induction of stereotype threat could become more salient if presented during an in-person study. Interestingly, the manipulation may have affected White female students, in that White female participants in the stereotype threat condition reported significantly higher levels of state inauthenticity than White female participants in the control condition. It is unclear whether this difference reflects a true impact of stereotype threat on state inauthenticity in White female college students or whether this result is a Type I error. If White female students are affected by the online stereotype threat instructions whereas the Black female students in the sample were not affected, there may be several possible explanations.

According to Lewis and Michalak (2019), there are certain conditions that are required in order for stereotype threat to be invoked, these include activating a sequence of negative thoughts, negative assessments, and negative feelings in the direction of the negative stereotype. Once these events take place three things occur: the triggering of a physiological stress response, which can lead people to monitor their performance, which can lead to a person's attempt to suppress the negative thoughts, appraisals, and emotions (Lewis & Michalak, 2019). This information suggests that the White female participants experienced something similar to these conditions while the Black female participants did not. It is unclear why this would be the case. Perhaps a more effective trigger is needed to induce a stress response in Black women, however, due to the small sample size, it is unclear if the differences between the White and Black women are reliable.

Future Directions

It is imperative that this type of study has an adequate sample size, in order to produce a clearer picture of how campus type and stereotype threat might relate to state anxiety and

inauthenticity, as well as provide support, either for or against, the culturally informed impostor items. There are many validated impostor measures that are currently in circulation, however, none consider the cultural implications that can affect the day-to-day lives of Black people. This study's aim was to contribute to the current body of research that specifically addresses impostorism in Black women. Because of the small sample size in the current study, it is not possible to make accurate generalizations. Any future research must recruit a large enough sample to decrease the likelihood of Type 1 and Type 2 statistical errors and for the results to be generalizable in order to effectively contribute to the construction of a valid culturally informed impostor measure.

It would be very interesting to see this type of study be conducted with multiple PWIs and HBCUs, however, it would be prudent to take into account cultural considerations. Conducting a study across multiple campuses would increase the likelihood of generalizability to the general populace, but culture varies from region to region and even campus to campus. It is important for future researchers to understand that this could affect participant response and susceptibility across campuses.

Conclusions

Despite the fact that no conclusions can be drawn from the current research, it is arguably an important contribution to the literature concerning the creation of a validated culturally informed impostor phenomenon test, as well as to the literature concerning stereotype threat specifically affecting Black female college students. Changes should be made to address the aforementioned limitations, but this research could help in the creation of a new impostor scale as well as address a gap in the stereotype threat literature.

Stereotype threat and impostorism have been studied in many demographics. However, more and more Black women are going into higher education and are rising into leadership spaces in which they are paving the way for others. What an amazing progression, but what about the things they will experience that can significantly affect their mental well-being? We don't know enough. My research aims to fill this gap. The pursuit of this knowledge is a call to action, for "knowledge and action combined can win over any adversity known to man" (Hawking, 2010, p.1).

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APPENDIX

CULTURALLY INFORMED IMPOSTER ITEMS

Please indicate how true each statement is by selecting a number above the answer you most agree with.

1	2	3	4	5
not at all true	rarely true	somewhat true	often true	very true

Note: The response box was presented to participants after each item. Items should be presented in random order when used for research purposes.

1) **There is a lack of physical representation of Black people on my campus.**

2) **Because of the lack of physical representation of Black people on my campus, I am uncomfortable.**

3) **Issues concerning black people are not discussed at all on my campus.**

4) **Issues concerning Black people are not discussed enough on my campus.**

5) **When discussing issues concerning Black people with my White counterparts, I feel forced to be a spokesperson for the Black community.**

6) **I have to hold myself to a higher standard than my White counterparts.**

7) **Others consider me to be less competent than my White counterparts.**

8) **I must be a representative of the Black community.**

9) **I worry about confirming negative stereotypes about Black people.**

10) I doubt my own intellectual abilities.

11) I question my right to attend my college/university.

12) I second guess the quality and accuracy of my schoolwork.

13) I seek validation from my peers.

14) My intellectual abilities are questioned by others.

15) Because of the lack of physical representation of Black people on my campus, I feel lonely.

16) There is a lack of social support for me on campus.

17) I adjust my style of speech and tone of voice to better fit in with the style of speech to those around me.

18) I hesitate to be assertive for fear of confirming a negative stereotype about Black people.

19) I do not attribute my success to my own abilities.

20) I am uncomfortable stating that I am successful because of my own abilities.