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A Comparison of Traditional and Nontraditional Students Attending Historically Black or Predominantly White Institutions

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**A COMPARISON OF TRADITIONAL AND NONTRADITIONAL STUDENTS
ATTENDING HISTORICALLY BLACK OR PREDOMINANTLY WHITE
INSTITUTIONS**

by

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ABSTRACT

A COMPARISON OF TRADITIONAL AND NONTRADITIONAL STUDENTS ATTENDING HISTORICALLY BLACK OR PREDOMINANTLY WHITE INSTITUTIONS

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The Virginia Consortium Program in Clinical Psychology, 2009
Chair: Dr. Desideria Hacker

Previous studies have demonstrated that there are benefits for some African American students in attending an Historically Black College or University (HBCU) over a Predominantly White Institution (PWI); however, studies have not considered how results might be impacted by student status, traditional vs. nontraditional, or the degree to which a student is considered to be nontraditional (minimally, moderately, or highly nontraditional). The current study addressed this gap in research by examining differences between the HBCU and PWI environments for 336 African American traditional and nontraditional students for the following variables: social support, academic self-concept, self-esteem, self-efficacy, role strain, ethnic identity, perception of faculty support, and satisfaction with college experience. The classification of student status was addressed using several pathways, including a categorical definition for nontraditional status (i.e., minimally, moderately, or highly nontraditional). The study yielded several important findings. First, the benefits reported by HBCU students compared to PWI students for self-esteem, increased faculty support, and positive academic self-concept were also found within the nontraditional population. Second, using different pathways for the classification of nontraditional students yielded significant changes in group membership and speaks to the need to further explore differences in the types of nontraditional students attending a PWI vs. an HBCU. Results

between schools remained fairly consistent despite the different pathways for defining nontraditional status suggesting that differences between the HBCU and the PWI are independent of student status. However, results differed between nontraditional groups (i.e., minimally, moderately, or highly nontraditional) between schools for faculty support and self-esteem. The combination of school type and student status using a categorical approach has not been considered before and the results, although useful for better understanding the modern college population and differences between an HBCU and a PWI, are best viewed as a foundation for further research.

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INTRODUCTION

The benefits of attending an Historically Black College or University (HBCU) for African American students have been well examined over the past few decades (Brower & Ketterhagen, 2004; Cokley, 2002; Harper, Carini, Bridges, & Hayek, 2004; Kim, 2002; Outcalt & Skews-Cox, 2002; Phelps, Tranakos-Howe, Dagley, & Lyn, 2001)¹. Several studies have supported HBCUs as being a better college environment for African Americans due to increased social support (Brower & Ketterhagen, 2004; Negga, Applewhite, & Livingston, 2007), availability of professors and relationships with faculty (Kim, 2002), satisfaction with college environment and college experience (Outcalt & Skews-Cox, 2002), racial and ethnic identity enhancement (Phelps et al., 2001), and higher academic self-concept (Cokley, 2002). Some studies suggest that some African American students who attend Predominantly White Institutions (PWIs) might suffer emotional isolation and campus alienation (Brower & Ketterhagen, 2004), have higher rates of attrition (Outcalt & Skews-Cox, 2002), and express lower levels of overall satisfaction when compared with African American students attending HBCUs (Outcalt & Skews-Cox, 2002). The majority of studies (Baldwin, Duncan, & Bell, 1987; Brower & Ketterhagen, 2004; Cheatham, Slaney & Coleman, 1990; Cokley, 1999, 2002) propose that the benefits of attending an HBCU are the result of receiving an education from racially congruent instructors among peers with shared cultural experiences, in that minorities become the majority on campus.

Although the literature has strongly supported the benefits of attending an HBCU over a PWI, additional research is needed to understand if these benefits extend to the

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growing population of individuals classified as “nontraditional students.” Between 1986 and 2000, tuition fees increased by 240% (Butler, 2007) forcing many students to delay full time enrollment, or take time off, in order to work to offset educational costs, which has resulted in an older college population. Forty percent of college students, approximately 6 million individuals, are 25 years old or older (Chao & Good, 2004). Factors such as increased age, marital status, enrollment status, number of dependents, employment, income, and responsibilities to family members, such as caring for an ill parent (Kinsella, 1998), have created a population that differs from the traditional 18-22 year old college student. Because the nontraditional student is often in a different stage of life compared with the traditional 18-22 year old student, he or she must juggle multiple roles such as spouse, parent, employee, while navigating his or her educational track.

Due to increased enrollment of nontraditional students over the past decade (Kinsella, 1998; Taniguchi & Kaufman, 2005), researchers have begun to acknowledge the importance of these unique circumstances in changing the traditional college community in that the needs of nontraditional students may differ from the needs of the traditional student. Current research explores factors differentiating the traditional and nontraditional student including managing multiple roles (Carney-Crompton & Tan, 2002; Dill & Henley, 1998; Home, 1998; Prohaska, Morrill, Atilas, & Perez, 2000), interactions between faculty and nontraditional students (Medved & Heisler, 2002), psychological health (Bye, Pushkar, & Conway, 2007; Carney-Crompton & Tan, 2002), and the types of services required to meet the unique needs of this population (San Miguel Bauman, Wang, DeLeon, Kafentzis, Zavala-Lopez, & Lindsey, 2004).

Despite rather extensive research examining differences for African American students attending either HBCUs or PWIs and differences between traditional and nontraditional students, the two areas have not been examined in concert. The current study seeks to link these two areas of research by examining whether differences found between the HBCU and PWI educational environment for African American students extend to nontraditional African American students. The examination of this issue will include the following variables: ethnic identity, social support, satisfaction with college experience, self-esteem, self-efficacy, academic self-concept, role strain, and perception of faculty support.

Review of HBCU and PWI Differences

Prior to the landmark 1954 case of *Brown vs. The Board of Education*, African Americans had few choices but to attend Historically Black Colleges or Universities to meet higher educational needs (Brower & Ketterhagen, 2004; Freeman & Thomas, 2002). Compared to the number of African American graduates from the 1960s, there are two to three times the number of African American graduates now (Zirkel & Cantor, 2004). The increase in educational options has resulted in the number of African Americans attending HBCUs to decline steadily (Freeman & Thomas, 2002; Kim, 2002; Palmer & Gasman, 2008), though some African Americans still choose to attend HBCUs rather than PWIs. Close to one-fifth of the bachelor degrees awarded to African Americans are from HBCUs (Palmer & Gasman, 2008). The benefits to African Americans for making such a choice have been well examined over the past few decades (Brower & Ketterhagen, 2004; Cokley, 2002; Harper et al., 2004; Kim, 2002; Outcalt & Skews-Cox, 2002; Phelps et al., 2001). Several studies have supported HBCUs as being a better

college environment for some African Americans due to racial and ethnic identity enhancement (Phelps et al., 2001), increased social support (Brower & Ketterhagen, 2004; Palmer & Gasman, 2008), satisfaction with college environment and college experience (Outcalt & Skews-Cox, 2002), self-esteem (Oates, 2004; van Laar, 2000), self-efficacy (Okech & Harrington, 2002), academic self-concept (Cokley, 2002; Zirkel & Cantor, 2004), and availability of professors and relationships with faculty (Kim, 2002; Palmer & Gasman, 2008).

Racial and Ethnic Identity

Racial and ethnic identity researchers argue that individuals differ in the degree to which they identify with their racially ascribed group and that membership in a particular race group may not be sufficient to influence one's sense of self (Carter, 1991). For many individuals, adolescence marks a period when the individual begins to question his or her identity, particularly ethnic and racial identity (Tatum, 2004). Tatum (2004) points out that for some African Americans, given limited opportunities to connect with racially similar peers in predominantly White high schools, the development of a racial identity is often postponed until college. Researchers have asserted that choosing an HBCU over a more racially diverse and/or academically superior institution is a declarative, perhaps even political, decision based on a desire to connect with racially similar peers, avoid minority status (Brower & Ketterhagen, 2004), or to embrace a historical tradition (Freeman & Thomas, 2002) while seeking a degree. Freeman (1999) found that African American students who considered themselves isolated from their heritage were more motivated to attend an HBCU in order to connect with racial roots and further develop a racial identity. Freeman and Cohen (2001) reported the HBCU environment to be

culturally empowering for African Americans due to education facilitating understanding of the cultural and historical accomplishments of African Americans, acceptance and reinforcement of students' sense of self, and opportunities to develop professional and personal networks. In addition, students are empowered by becoming prepared to negotiate issues involving race in education and employment.

Conversely, research has shown that African American students attending predominantly White schools may experience race-based difficulties compared with African American students at HBCUs (Greer & Chwalisz, 2007). Greer and Chwalisz (2007) report that "some African American students attending [PWIs] may experience person-environment incongruence that puts them at risk for potentially detrimental emotional, psychological, social, and academic outcomes" (p. 389). The authors note that in addition to the typical stressors of college (i.e., papers and exams), African American students may experience additional stressors related to discrimination and stereotypes. Greer and Chwalisz point to the stress caused by racial incongruence to explain why African American students, as well as other minority students, appear to benefit more from the HBCU environment. In their study of 203 African American undergraduate students, PWI respondents reported significantly more stress related to minority status than those participants from the HBCU. Furthermore, PWI students reported significantly more interpersonal stress, environmentally-related stress, and intragroup stress than respondents from the HBCU.

Walker, Wingate, Obasi, and Joiner (2008) report that the transition to college for many African Americans may involve unique contextual factors, such as an increase in perceived discrimination if feeling disconnected from one's own culture. The authors

state that, “In college populations, identity resolution may be particularly salient as students separate from families of origin and venture independently into a new stage of life” and that “ethnic identity buffers potentially negative mental health outcomes” (p. 76). In their study of 452 undergraduates, the researchers found that for African American college students who reported low attachment to an ethnic group, there was a significant relationship for depression and suicidal ideation than for those with strong attachments to an ethnic group. Similar findings were not found among White respondents.

Similar to racial identity, Okech and Harrington (2002) propose that African Americans develop a Black consciousness, a set of beliefs and attitudes regarding the self, one’s race, and White individuals as a result of their own experiences of being African American. In their study of 120 African American males at a predominantly Black University, Black consciousness was positively and significantly related to self-esteem.

Findings in the area of racial and ethnic identity have historically been mixed as researchers approach the measurement of racial identity with differing definitions, possibly outdated paradigms, or psychometrically unsound scales (Ponterotto & Mallinckrodt, 2007). In a special issue dedicated to the discussion of issues with the measurement of racial and ethnic identity, Cokley (2007) details the difficulty in capturing these constructs. Racial identity models, most often attributed to the development of Cross’s 1971 Nigrescence Theory, propose varying levels of race saliency at different stages of life experience (Helms & Parham, 1996; Worrell, Vandiver, & Cross, 2000). Cokley argues that the historically used stage approach may

no longer be representative of today's society and that many instruments, particularly the popularly used Racial Identity Attitude Scale (RIAS), are psychometrically unsound. One argument in the literature appears to be advocating for the use of a measure of ethnic identity rather than racial identity. Cokley states, "When researchers are interested in how individuals see themselves relative to their cultural beliefs, values, and behaviors, ethnic identity is the more appropriate construct to study" (p. 225).

Because there is not a shared consensus for the type of beliefs or values that would reflect a racial group, constructing a measure of identity that will encompass all individuals of a particular race is difficult (Ponterotto & Mallinckrodt, 2007). Phinney and Ong (2007) define ethnic identity to reflect "a shared sense of identity with others who belong to the same ethnic group" (p. 275). Phinney developed the Multicultural Ethnic Identity Measure (MEIM) in 1992 as a global measure to capture an individual's sense of belonging and commitment to one's ethnic group. Widely used (Cokley, 2007), the MEIM has been psychometrically validated as a measure free of the type of values and beliefs that might differ within racial groups and produce the type of inconsistencies cited within this literature.

Social Support and Satisfaction with College Experience

Transitioning from high school to college requires some degree of adaptation on behalf of all students, regardless of race; however, some environments require more change than others. For example, an African American student who attended a predominantly African American high school may have greater difficulty adapting to a predominantly White college campus compared to the same type of student who attends an HBCU. The African American student on the PWI campus may face a social

adaptation challenge (Brower & Ketterhagen, 2004), whereas the African American at the HBCU may begin his or her college pursuit more socially acclimated, given there is more of a match between student and previously experienced environment. Some researchers have pointed to the mismatch between student and environment (i.e., African American students at PWIs) as the reason for lower graduation rates of African Americans compared with White students (Brower & Ketterhagen, 2004). Bello-Agumu (1997) argued that African American students on predominantly White campuses face multiple problems including lack of African American role models and mentors, decreased social support (compared to HBCUs), prejudicial behaviors from sections of the campus community, and low representation within student organizations; all of which produces feelings of loneliness and alienation.

Brower and Ketterhagen (2004) reported that African Americans at PWIs develop a sense of “belonging within alienation,” meaning that African Americans connect with other African Americans, and as a group remain isolated from the majority of the student body as a result of perceived or actual rejection. In a qualitative pilot study, Bristow (2002) recorded the experiences of African Americans on both HBCU and PWI campuses. The author reported that none of the respondents from the HBCU campus expressed feelings of isolation; however, based upon her interviews with students from PWIs, Bristow reported feedback from students that “it appeared that if a student did not assimilate into the mainstream or get deeply involved in campus activities, social interaction with other students seemed almost impossible” (p. 9).

Astin (1975) reported that African American students experienced alienation and isolation at predominantly White college campuses. Building upon Astin’s study,

Fleming (1984) surveyed 2,591 African American students for a comparative study of experiences between PWIs and HBCUs. Students from HBCUs demonstrated higher levels of academic achievement, better developed relationships with faculty, and a higher degree of satisfaction, both academically and socially, with the college environment when compared with their PWi counterparts. In another comparative study, Davis (1991) found that almost twice as many students from HBCUs reported that campus activities matched their interests, with a majority of the African American students at PWIs reporting rare participation with campus activities. Davis concluded that HBCU students were additionally benefited by social networks compared with students at PWIs. Allen (1992) commented that students at HBCUs are more successful due to the supportive environment, an environment in which they were less likely to experience alienation, overt racism, and isolation. Palmer and Gasman (2008) reported that “numerous participants explained that their peer groups significantly influence their academic achievement” and that many strive “to create a community of peers who are motivated, persistent, and work diligently toward their educational aspirations” (p. 66).

Allen (1992) and Fleming (1984) reported that African Americans attending HBCUs perceived higher levels of academic and support services compared with African Americans attending PWIs. In a sample of 443 African American students at HBCUs and 443 African American students from PWIs, Outcalt and Skews-Cox (2002) compared satisfaction levels for a variety of factors. Compared with students at PWIs, students from HBCUs reported feeling either “satisfied” or “very satisfied” with the ethnic/racial diversity of faculty (64% vs. 24%), ethnic/racial diversity of students (66% vs. 35%), sense of community on campus (57% vs. 45%), and interaction with other students (87%

vs. 78%). Outcalt and Skews-Cox reported that the results of the study demonstrate “that even after controlling for relevant variables such as involvement, individual satisfaction, and academic performance, attending an HBCU almost doubles an undergraduate’s chances of being satisfied with his or her college experience” (p. 344). The authors concluded that the supportive climate of an HBCU provides greater opportunities for student involvement than the environment of the PWI.

In a study examining the relationship between stress, self-esteem, and social support between students attending either an HBCU or a PWI, Negga, Applewhite, and Livingston (2007) reported that lower stress levels among African American students at an HBCU were significantly associated with higher levels of self-esteem, social support, and sense of control compared to their PWI counterparts. Among African American students at the PWI, only self-esteem was found to be significantly correlated with stress. Reported social support was found to be significantly correlated with reported stress for all 509 respondents (both White and African American), except for those African American students attending a PWI. African American respondents from the PWI reported less social support than White peers attending the same school and their HBCU counterparts. The authors concluded that, “African American PWI students may need additional intervention or counseling services. . .that are culturally sensitive to issues of racial discrimination, isolation and coping. . .” (p. 826). Furthermore, the authors hypothesized that the social support often associated with attending an HBCU may be why lower levels of stress were reported by the HBCU participants.

Self-esteem and Self-efficacy

Self-esteem and self-efficacy are defined in a study by Oates (2004) as two concepts representing important dimensions of one's self-concept. Both are a reflection of how capable and secure one feels about the self and his or her abilities. Beliefs regarding self-esteem and self-efficacy are highly correlated in most cases as they are two concepts reflecting beliefs about one's self. However, in the study of these two areas of the self-concept, researchers have established the need to differentiate self-esteem, feelings and beliefs about one's self, from self-efficacy, feelings and beliefs about one's abilities, for African Americans (Oates, 2004; van Laar, 2000). Self-esteem has been found to be commensurate, if not greater, among African Americans compared to White respondents (van Laar, 2000) yet self-efficacy beliefs tend to be lower among African American college students compared to White college students (Oates, 2004). Porter and Washington (as cited in Oates, 2004) explained that lower levels of self-efficacy reflect a healthy response to the reality that society "systematically and reliably undermines blacks' progress" (p. 18), which then lowers aspirations but not necessarily beliefs regarding the self (i.e., self-esteem).

Oates (2004) performed a study examining how racially consonant academic environments, meaning the extent to which the individual is surrounded by others of a similar ethnicity, impact the self-esteem and self-efficacy of African American students. This study was based on Rosenberg's (1979) theory that racially congruent environments may serve to protect the individual from prejudiced behavior including "slurs, epithets, jokes" and other malicious comments and bolster one's sense of belonging (p. 18). Oates hypothesized that being in a consonant environment would decrease the likelihood that African Americans would feel inferior compared to peers thereby also decreasing the

likelihood of developing negative self appraisals. Oates reported “solid if not unequivocal support for Rosenberg’s ‘consonance’” theory in that racially consonant experiences in college increase self-esteem, but not self-efficacy, compared to environments where the individual perceives him or her to be the minority (p. 23).

Chung (2002) defined self-efficacy to reflect “a person’s belief in his/her ability to successfully complete a behavior or set of behaviors” (p. 278). Self-efficacy may be lower for African Americans due to societal and historical realities of discrimination toward African Americans, particularly with regards to employment; therefore, a positive self-image may leave self-esteem intact whereas perceptions of discrimination and/or prejudice may negatively impact one’s belief that a goal may be successfully completed, regardless of ability. According to van Laar (2000), a separation between self-esteem and self-efficacy or academic achievement is necessary given that many African Americans do not receive the same educational opportunities prior to attending college. As stated by van Laar, “Such structural differences lead to African American students entering college on average less academically prepared than White students” (p. 36) though the students enter college with equally high self-efficacy beliefs regarding academic ability as White students. Additionally, van Laar proposes that when African American students do not perform as well as anticipated, an attributional search begins to detect a reason often leading to a perception of discrimination and/or bias. As reported by van Laar, “Data show that African American college students experience increasing doubts that their efforts will be rewarded in ways equivalent to those of White students, and they make increasingly external attributions [to compensate]” (p. 46). Steele (as cited in Okech & Harrington, 2002) proposed a “disidentification hypothesis” to explain the separation of

self-esteem from academic outcomes. Steele proposed that the separation occurs so as to protect one's self-esteem from potential failures, including academic failures in college. Researchers propose that students separate self-esteem from self-efficacy as a means of protecting self-esteem as well as expectations for their future. According to van Laar (2000), "Student's expectations of what he or she will actually achieve will be constrained by his or her perception of discrimination" (p. 46) and that "beliefs about their future become dissociated from their evaluations of themselves" (p. 38).

To better assess the aspects of the global construct of self-efficacy that is producing racial discrepancies in the literature, many researchers targeted specific beliefs about one's abilities with regards to future employment (Chung, 2002) and academic abilities (van Laar, 2000). Chung (2002) sampled 165 undergraduates and found that African Americans scored significantly higher than the White respondents on the short form version of the Career Decision-Making Self Efficacy Scale, a scale tapping self-efficacy beliefs regarding ability to make career decisions. Although this study was not a comparison of African Americans attending an HBCU compared to those attending a PWI, Chung reported that self-efficacy beliefs regarding future career goals among African Americans, particularly women, from predominantly Black campuses may be higher than those at a PWI due to the greater availability of positive African American role models.

Research has consistently reflected lower self-efficacy beliefs, specifically self-efficacy with regards to academic ability, among African American students compared to White students (van Laar, 2000). Although this finding is consistent in studies between HBCUs and PWIs, there is evidence that the racially congruent environment of the

HBCUs may aid in keeping self-esteem and self-efficacy beliefs stable if not bolstering them (Chung, 2002) compared to PWIs. It would appear that choice of educational institution may influence self-efficacy beliefs. Okech and Harrington (2002) noted in their study that experiences of inequality and discrimination influence personal self-efficacy through the deprivation of opportunities that would foster positive self-efficacy beliefs.

Academic Self-concept and Student-Faculty Interactions

Academic self-concept is considered part of one's overall identity development pertaining to aspects of one's identity that relate to academic factors such as perception of academic ability, satisfaction with school, self-confidence in academics, self-doubt, academic effort and grades (Cokley, 2002). In a sample of 396 African American students (252 attending a PWI and 144 attending a HBCU), Cokley (2002) found institutional differences for African American students for academic self-concept and the quality of interactions between faculty and students. Students at the HBCU reported higher academic self-concept than those attending a PWI, which may be an effect of the reportedly more positive interactions between faculty and students on the HBCU campus. Cokley found that positive student-faculty interaction, such as encouragement from professors to continue educational pursuits, was the best predictor of academic self-concept for those at HBCUs while grade point average was the best predictor of academic self-concept for those at PWIs. These findings may reflect a possible deficit in mentoring relationships for African Americans at PWIs. Wenglinsky (1996) examined the effect of attending a PWI versus a HBCU for five student outcome factors: leadership potential, grade point average, occupational aspirations, educational aspirations, and involvement

with community service. Results indicated that HBCU students expressed higher educational aspirations than African American students attending the PWI.

In a sample of 273 African American students, Berger and Milem (2000) reported that compared to students at PWIs, African American students at HBCUs had developed higher academic self-concepts and attributed this finding to academic support from faculty. In their sample of 1079 students, Brower and Ketterhagen (2004) reported that those African Americans that remained enrolled at PWI campuses reported that they had limited social networks and spent more time on their studies than those who remained enrolled at HBCUs. In an effort to explain the perseverance of students at PWI, the authors stated, “The ‘threat’ of failure is certainly ‘in the air’ for Black students at PWIs, and they may be adopting a defensive pessimism strategy [i.e., developing the belief that others do not expect them to succeed as well as lowering expectations for their own success due to perceptions of discrimination] as one way to simultaneously protect themselves against failure and motivate themselves to succeed” (p. 111).

In a qualitative study of ten African American males attending an HBCU, Palmer and Gasman (2008) reported that faculty supported students by showing concern for both the student’s personal wellbeing and their academic success. Participants described feeling as though the professors helped to maximize student potential through empathy and the development of personal relationships.

An argument has been made in the literature that African Americans feel a greater sense of belonging in racially congruent environments and therefore better utilize the educational experience (Booker, 2007). In a qualitative study comparing student experiences at HBCUs versus PWIs, Booker (2007) reported that students felt less likely

to engage in discussion and voice opinions if they were in the racial minority. One student commented hating “attending some classes . . . because I’m the only Black student” (p. 4). The results of the Booker study stated that the most salient factor for African American students in terms of developing a sense of belonging in the classroom were faculty characteristics and instructional style. Feedback from students stressed the importance of flexible, approachable faculty who are able to connect with students.

Faculty and administrators are also aware that minority students are impacted by the lack of diversity on campus. Quarterman (2008) found in a study of 51 university administrators from a PWI regarding retention and recruitment of diverse students, that the student’s experience of isolation, alienation, and loneliness, the perception that the academic environment is non-supportive, and the lack of role models and mentors among faculty and staff were cited as barriers to retaining a diverse population of students. Furthermore, respondents felt that faculty needed to serve as mentors and role models and that more personal visits to HBCUs were needed in order to recruit a population of diverse graduate students.

Initiatives are in place at many predominantly White campuses to raise awareness regarding the needs of diverse student populations. The lack of literature comparing the experiences of African Americans from HBCU and PWI over the past decade compared with the 1970s and 1980s may be a reflection of the diminishing differences between the two environments; however, the current, though sparse (Palmer & Gasman, 2008), literature would suggest that differences still exist, which may be impacting the student’s choice of University.

In Quarterman's (2008) list of considerations for greater retention of diverse students on predominantly White campuses, much of what the literature suggests as benefits of the HBCU campus were represented. For example, Quarterman cited the development and maintenance of a community for minorities where "efforts must be made to reduce their isolation from faculty through increased mentoring and sponsoring activities" (p. 956), the establishment of an Office of Minority Academic Affairs, establishing relationships with HBCUs to attract diverse students, and hiring minority staff because it is an "important symbol of the institution's commitment for the acquisition of minority faculty and students" (p. 256).

Efforts toward creating a better academic environment for minority students may be impacting how the HBCU is viewed. Despite positive reports regarding benefits of HBCUs, the fact remains that less people are enrolling and fewer graduating compared to previous decades. According to an analysis conducted by the Associated Press (Pope, 2009) of government data across 83 HBCUs, only 37% of students completed their degree within six years. Pope (2009) also points to the disproportionate number of females (approximately 60%) on HBCU campuses as a reflection of the HBCUs' inability to draw young African American males. The article cites Dr. Walter Kimbrough, President of Philander Smith College, as saying, "I think HBCUs have gotten lazy. That was our hallmark 40, 50 years ago. We still say 'nurturing, caring, the president knows you.' That's a lie on a lot of campuses" (p. 4).

Although research has reflected high success rates for some African Americans in the HBCU setting over the PWI setting, the majority of the research was not performed with consideration for the changing demographics in higher education. Changes in

HBCU retention rates may be linked to student characteristics that have changed over the past decade. Little is known if these findings would extend to nontraditional students whose needs differ from that of the traditional 18-22 year old students.

Review of Nontraditional Student Research

In the literature, the term “nontraditional student” represents a wide variety of factors that separate a population of students from traditional students, or those students that enter college directly after high school and complete their degree in the traditional four year time frame. In a special analysis of characteristics most often associated with nontraditional students, the National Center for Educational Statistics (National Center for Educational Statistics [NCES], 2002) listed the following factors based on a 1996 study by Horn: delay in enrollment in college following high school of at least one year, part-time enrollment in college, classification as a full-time employee (35 hours or more per week) while enrolled in college, financial independence from family of origin for financial aid purposes, primary caretaker of a dependent (either child or family member) other than a spouse, single parenthood, and recipient of a GED rather than traditionally completing high school via diploma. The NCES reported that 73% of undergraduates in a 1999-2000 sample met at least one of these criteria.

The 73% of undergraduate students reported as nontraditional by NCES's is not a consistently reported number. The majority of studies classify nontraditional status based upon a single criterion, being older than the traditional 18 to 22 year-old student in the cohort, which resulted from delaying college enrollment or taking time off after enrolling (Carney-Crompton & Tan, 2002; Chao & Good, 2004; Gary, Kling, & Dodd, 2004; Geiger, 2004; Kinsella, 1998; Prohaska et al., 2000; San Miguel Bauman et al., 2004). A

small portion of studies reviewed identified nontraditional populations indirectly through the study of managing multiple roles (Butler, 2007; Dill & Henley, 1998; Home, 1998); however, the majority of current research appears to rely mostly on age. It is thus difficult to interpret findings when the term “nontraditional” may in fact represent much within-group differences, as suggested by Horn (1996). For example, a student who classifies as nontraditional based only on age may differ greatly from a nontraditional student who is a single parent and works full time. Current literature does not differentiate students based upon the degree to which he or she is nontraditional.

The following section is a review of factors associated with nontraditional student status aside from age, such as academics, role strain, self-esteem, self-efficacy, student-faculty interactions, and perception of social and institutional support. Overall, the literature reviewed in the area of nontraditional students has not differentiated findings based upon race. It should be noted that the results include a review of the available literature and are applicable to nontraditional students in general, regardless of race, unless specifically noted.

Academics

Geiger (2004) reported that nontraditional students prefer diverse classroom settings, have higher self-efficacy ratings, and achieve better academic performances (despite fewer resources in many cases) compared to traditional students. Kinsella (1998) conducted a study comparing the motivation for choosing a major between traditional and nontraditional students. The majority of traditional students stated that their choice of major had been decided on by their parents (i.e., parental pressure to become a doctor or a lawyer). Nontraditional students had, for the most part, chosen their major based on a

life event. For example, many individuals had chosen majors in the human service field due to personal or familial experiences with addiction, illness, depression, or death of a loved one. San Miguel Bauman et al. (2004) found that nontraditional students, having had some experience in the work force, returned to school with the intention of becoming more marketable or to change career fields. Kinsella (1998) cited Erickson's (1963) theory of psychosocial maturation as a possible explanation for the apparent clear focus found with nontraditional students. This theory "suggests that adults work through issues of social roles, spiritual values, work, finances, death of loved ones, relationships, and aging and then choose to transmit their acquired skills and values to the young" (p. 535).

Chao and Good (2004) report that nontraditional students experience a greater connection between educational and career goals. In a study of nontraditional undergraduate students, the authors found "a sense of hopefulness that participants held toward their decision, struggles, and perceptions about the future" (p. 9). Chao and Good commented that many nontraditional students return to school after a major life transition, which creates a deeper motivation to complete their degree. In this study, nontraditional students possessed a sense of self-efficacy and resilience that created the belief that their difficulties could be managed and overcome.

Role Strain, Self-esteem, and Self-efficacy Beliefs

Research reflects that the biggest challenge for nontraditional students is managing multiple roles and often being forced by uncontrollable circumstances (i.e., child illness, financial obligations) to prioritize one role above another (Butler, 2007; Home, 1998). Home (1998) stated that role conflict results from incompatible simultaneous demands. While trying to meet the demands placed on them by school,

nontraditional students may also be struggling to meet the demands of their job and families. Efforts made to meet these demands often result in role overload and the realization that there is not enough time to meet all demands effectively. Even when roles are not conflicting, nontraditional students suffer from role contagion, the preoccupation with one role while performing another. Prohaska et al. (2000) found that role overload was the leading reason why nontraditional students had a tendency to procrastinate on weekly assignments.

The perception alone that one is burdened can be a better predictor of strain than actual circumstances (Home, 1998). In a study comparing traditional and nontraditional students' perception of responsibilities, Kinsella (1998) found that nontraditional students cited significantly more responsibilities than traditional students and reported that their roles often overlapped. Of the traditional students, 33% could not identify with any of the responsibilities on the survey such as family and employment responsibilities. Interestingly, despite the presence of multiple roles in the case of the nontraditional students, both traditional and nontraditional students cited homework as their primary responsibility. Traditional students rated employment as being more of a priority to them than the nontraditional students did.

Research has produced mixed results regarding the psychological effects of increased role demands. Some researchers believe that nontraditional students are at a greater risk for higher levels of depression, anxiety and stress due to increased role demands compared with traditional students (Carney-Crompton & Tan, 2002; Gary, Kling, & Dodd, 2004). Returning after an absence from school may cause some students

to doubt their ability to compete with younger and more technically savvy students. This doubt may lead to anxiety and insecurity (Gary, Kling, & Dodd, 2004).

Cultural characteristics also influence one's degree of self-efficacy in managing multiple roles. Minority, international, female, and first-generation students "may experience cultural messages that reflect the impact of familial, community, and historical influences of their particular ethnic or racial groups" (p. 18, Gary, Kling, & Dodd, 2004). Women in particular have a disproportionate amount of household responsibilities and are culturally pressured to fill the role of mother, making higher educational goals difficult to achieve. Issues related to family is a frequently cited reason for taking a leave of absence or delaying one's education, such as having a child (Carney-Crompton & Tan, 2002). Home (1998) reported that the age of one's child influences one's perception of stress due to multiple roles. Single mothers of adolescents were more at-risk for role overload than mothers of children who had not yet reached adolescence. Balancing multiple roles may be more difficult for women in general. Women have a tendency to blame themselves and feel that they have failed rather than question whether their role expectations were reasonable (Home, 1998).

Research supports that nontraditional students experience benefits from balancing multiple roles, such as increased opportunities to experience success as well as increased personal well being (Carney-Crompton & Tan, 2002). Carney-Crompton and Tan (2002) suggest that nontraditional students engage in "anticipatory restructuring." The individual expects the role of student to alter his or her identity and copes with this threat by restructuring and anticipating his or her expectations before beginning the new task. The

authors also note that the type of student who would return to school and create multiple roles is likely to possess many personal strengths, such as motivation and self-esteem.

The discrepancy in findings may be a result of mediating factors, such as social support and the student's perception of self-efficacy. In the Dill and Henley (1998) study of 94 traditional and nontraditional students, nontraditional students regarded attending class and completing assignments more favorably than traditional students.

Nontraditional students worried less about academic performance and perceived a greater impact from the poor performance and competency of a teacher, compared to their traditional counterparts who also similarly perceived the teacher to be less competent.

The researchers concluded that the nontraditional student might have a greater desire or enthusiasm for learning. It is possible that the role of student has more meaning for the nontraditional student and thus contributes more to the student's beliefs of self-efficacy and autonomy. Traditional students have a tendency to feel obligated to their parents for their education due to their financial support (Dill & Henley, 1998).

Student-Faculty Interactions

In order to manage multiple roles, nontraditional students often have to seek out the support of their professors by disclosing personal circumstances. Medved and Heisler (2002) conducted a study regarding nontraditional student-professor interactions in order to research the reasons and result of nontraditional students seeking assistance from professors. The reasons for initiating contact with a professor were divided into seven categories: family illness, child illness, financial difficulties, lapse in daycare, difficulty paying daycare expenses, inability to get daycare (short-term), and "other." The most frequently reported incident triggering the necessity to contact a professor was child

illness. Nontraditional students who had a child with an illness were found to approach teachers far more readily and ask for a change in deadline or an excused absence from class than those nontraditional students with issues in the other six categories. Despite reporting several reasons for preferential treatment, most of the nontraditional students sampled felt they had little to no options, especially with regard to childcare issues. The students felt their options in these types of circumstances included dropping the class, accepting a lower grade, or going over the faculty member's head. Forty-seven percent of the 39 students sampled reported accepting a negative consequence as a result of the demands of other roles in their lives.

Social and Institutional Support

Home (1998) conducted a study examining the effects various kinds of support have in alleviating or predicting the perception of role strain. The study included 443 women enrolled in at least nine hours of coursework who were also employed and reportedly had family responsibilities. The three areas of support studied were workplace support (i.e., an employer allowing flexible schedules and tuition reimbursement), university support, and family, friend, and spousal support. The majority of the participants (57%) reported receiving the most support from family and friends and only 13% reported receiving university support. Home reported "these mature learners often feel marginal and face diverse obstacles in universities designed around a central student role" (p. 85).

Carney-Crompton and Tan (2002) conducted a study examining the relationship between role strain, support systems, and psychological functioning, specifically anxiety and depression, among female students. Results indicated that the differences between

traditional and nontraditional students may be an issue of the quantity and quality of the support received, which then influences psychological functioning. Traditional students report a greater number of people available for instrumental and emotional support. Nontraditional students generally have much smaller social networks and rely more on family members for support. Traditional students frequently listed a parent as a primary source of support while nontraditional students listed a spouse or child. Poor psychological functioning was associated with poor qualities of support. While traditional students have a larger network of friends and are less isolated on college campuses, those relationships may not be as developed and intimate as those in the networks of nontraditional students.

Much of the current literature (Carney-Crompton & Tan, 2002; Home, 1998) focuses on benefits of familial support for nontraditional students and overlooks the needs of those that do wish to employ university support services. Familial support cannot always meet the student's instrumental (i.e., financial assistance), informational (i.e., academic advisement), and appraisal needs (i.e., academic validation) leading students to seek support from their academic institution. San Miguel Bauman et al. (2004) conducted a study to determine what types of services are needed to support nontraditional students. The authors were prompted by research indicating that nontraditional students are less satisfied with advising and counseling services compared with traditional students. Results indicated that many of the nontraditional students would employ academic services if they were offered. For example, of the 53 nontraditional students sampled, 57% stated they would attend stress management workshops. However, the students sampled reported they would be less likely to engage

in traditional counseling services. Forty-two percent reported they would seek university counseling services and 40% stated they would attend a support group for returning students.

Issues in the Classification of Nontraditional Student Status

The current body of literature appears to utilize a dichotomous classification system of being either nontraditional or traditional rather than a continuum, or the degree to which a student is nontraditional. In review, the National Center for Educational Statistics (NCES, 2002) identified seven factors, such as a delay of one year post high school prior to enrolling in college (i.e., age), financial independence, working full time while enrolled in college, etc., to define a student as being nontraditional. Identifying a student as being nontraditional based on age alone, as does the majority of the literature reviewed for the current study (Carney-Crompton & Tan; 2002; Chao & Good, 2004; Gary, Kling, & Dodd, 2004; Geiger, 2004; Kinsella, 1998; Prohaska et al., 2000; San Miguel Bauman et al., 2004), may be misrepresenting the population and obfuscating information that could truly reflect the needs of different types of nontraditional students.

Horn (1996) proposed that there are degrees to which a student is considered nontraditional. For example, if a student meets only one of the aforementioned nontraditional factors, he or she is “minimally nontraditional,” whereas students with two to three factors are “moderately nontraditional,” and those with four or more are considered “highly nontraditional.” The NCES (2002) reported close to three quarters of all college students as meeting the definition of nontraditional; however, there are multiple operational definitions in the literature to describe what nontraditional might represent. The current study addressed this issue by using multiple pathways to define

nontraditional status when applicable for the analyses under investigation. The current study also included exploratory review of nontraditional students based upon the continuum structure defined by Horn (1996) to examine if the degree to which a student is nontraditional impacts results.

Current Study

The Journal of Blacks in Higher Education (“Black Student Graduation Rates,” 2007) reported that the graduation rate nationwide for African American students is 43%, whereas the rate is approximately 63% for White graduates. Daire, LaMonthe, and Fuller (2007) reported that 14% of African Americans over the age of twenty-five have a bachelor’s degree compared with 26% of Whites. Statistics such as these suggest that underlying factors may be causing students to delay completion or withdraw from school, factors that may be influenced by the environment of the educational institution. Although little is known about African American nontraditional students, research has established that the institutional environment of an HBCU, compared to a PWI, positively impacts African American undergraduate students, a population who also have a historically high attrition rate (van Laar, 2000), in terms of racial and ethnic identity enhancement (Phelps et al., 2001), social support (Brower & Ketterhagen, 2004), satisfaction with college environment and college experience (Outcalt & Skews-Cox, 2002), self-esteem (Oates, 2004; van Laar, 2000), self-efficacy (Okech & Harrington, 2002), academic self-concept (Cokley, 2002; Zirkel & Cantor, 2004), and availability of professors and relationships with faculty (Kim, 2002). Given that the literature supports the HBCU environment as facilitating African American student success, it is important

to examine if similar results are found within the subpopulation of students defined as nontraditional.

The extant literature has established environmental differences between HBCUs and PWIs and has established differences between traditional and nontraditional students; however, there is a deficit in the literature examining the effects of these factors combined. Research appears to have demonstrated that the HBCU environment is more advantageous for the African American student, but the majority of studies fail to consider if these benefits are also found for the population of nontraditional students. The current study was designed to expand upon current literature and address this question. The following hypotheses were applied to a participant pool of both traditional and nontraditional African American undergraduate students from a southeastern HBCU and a PWI to determine differences that may exist between institution types and within institutions for traditional and nontraditional students:

1. Both traditional and nontraditional students from the HBCU will report greater satisfaction with their college experience, greater social support, stronger academic self-concept, higher levels of self-esteem and self-efficacy, report more faculty support, and perceive less role strain than students attending a PWI.
2. Nontraditional students will report higher levels of social support, faculty support, self-efficacy, academic self-concept, role strain, and self-esteem compared with traditional students.
3. Nontraditional students from HBCUs will report significantly higher levels of social support, faculty support, self-efficacy, academic self-concept, and self-esteem, and perceive less role strain than nontraditional students at PWIs.

4. Both traditional and nontraditional students from HBCUs will report stronger ethnic identity than students at a PWI. A stronger relationship with ethnic identity will be found for nontraditional students compared to traditional students.
5. An exploratory analysis will be conducted to examine how the number of nontraditional factors impacts the variables of interest to the current study based on institution type.

Method

Participants

Seven hundred and thirty-eight participants were recruited; however, only African American respondents were used for the purpose of the current study yielding a total of 348 participants. Ten participants were identified as outliers and excluded, except during the exploratory analyses, and will be discussed later. Two additional participants were identified as graduate students and also excluded, leaving a total sample of 336 participants. Two hundred and twelve respondents attended the HBCU, and 124 respondents attended the PWI. Restrictions regarding participation for the current study included: (1) race, all participants must have classified themselves as African American or Black; (2) age, participants must have been at least 18 years of age; and (3) student status, students had to be currently enrolled in college with at least one academic semester completed.

Both the HBCU and the PWI are located in the same urban city of a southeastern state. The PWI reported the enrollment of White students to be 65.5% and 20.8% for African Americans. The HBCU reported African American enrollment to be 86% and White enrollment to be 7%. Both institutions reported a 17:1 student-faculty ratio. Both

universities had a higher concentration of female students, 64% within the HBCU and 59% within the PWI. Within the HBCU, 92% of students were reported to be receiving financial aid and 22% were enrolled on a part-time basis. Within the PWI, close to three-quarters of the students receive financial aid and 27% reported part-time enrollment status (NCES, 2002).

Of the 336 participants, 82% were female and 18% were male. Both schools report a higher proportion of female students overall, particularly within the department of psychology. Age of participants ranged from 18 to 49, with a mean age of 22 years old. Age ranged from 18 to 49 for participants from the HBCU, 16% were male and 84% were female. Age ranged from 18 to 42 for participants from the PWI, 21% were male and 79% were female. The mean age for HBCU participants was 23 and the mean age for PWI participants was 20. Additional demographical information, including analyses of the demographic differences between the HBCU and PWI participants, are presented in the Results section.

Participants from the HBCU were identified through convenience sampling from the classes of consenting HBCU faculty, whom were contacted via a written proposal requesting volunteers. Participants from the HBCU may or may not have received compensation depending upon the discretion of the course instructor. Participants from the PWI were sampled from a pool of research volunteers from the Psychology department and compensated with research credit for their participation, reflecting the standard practice of research participation within this University. Students from both institutions were provided a URL address and directed to the same web-based materials.

All Institutional Review Board (IRB) and APA (2002) ethical guidelines were followed.

Procedure

Online survey software (i.e., Inquisite, 2004) was used to collect data in the current study. An announcement for this study (see Appendix A) provided participants with instructions for accessing the measures on the web. The measures took participants approximately 30 minutes to complete. Participants read an informed consent form included among the online measures, which informed participants that all identities would be kept anonymous and that participation was considered voluntary. The participants could omit any questions they did not wish to answer and/or withdraw from participation in the current study at any point without penalty. The students received research credit and/or extra course credit (depending on the discretion of their instructor) for their participation in the study. Participants were prompted in a separate form to list their name and the course in which credit should be applied. HBCU students were able to print this form to use as verification of their participation whereas the electronic verification form automatically downloaded into a system designed to award research credit for PWI students. This form could not be linked to survey responses ensuring that anonymity is protected.

Measures

The following measures were available online for participants:

Demographic Questionnaire. A demographic questionnaire (See Appendix B) developed by the researcher was used to collect information regarding age, gender, household income, use of academic loans, relationship status, family composition, and

finances. The questionnaire also assessed for the factors that would be used to identify a student as being nontraditional.

The Multigroup Ethnic Identity Measure (MEIM). This 12-item scale (See Appendix C) was used to assess participants' ethnic identification and his or her sense of affirmation and belonging to an ethnic group. In the initial validation of the measure, Phinney (1992) reported an internal consistency of .90 within a college sample with ethnic identity representing a unitary construct. Participants were asked to respond to each statement using a 4-point likert scale ranging between "Strongly Agree" and "Strongly Disagree." An example of this scale would be "I think a lot about how my life will be affected by my ethnic group membership." The MEIM had a reliability (Chronbach's Alpha) of .84 in the current study.

Multidimensional Scale of Perceived Social Support. The 12-item scale (See Appendix D) was used to assess participants' perception of social support (Zimet, Dahlem, Zimet & Farley, 1988). The scale is designed to identify the source of support (or lack of support) as being from a family member, a friend, or significant other, as well as producing a global score for perceived social support. Dahlem, Zimet, and Walker (2006) reported strong factorial validity and a Chronbach's alpha of .91 for this measure. Participants were asked to respond to each statement using a 4-point likert scale ranging between "Strongly Agree" and "Strongly Disagree." An example of this scale would be "My family really tries to help me." The Multidimensional Scale of Perceived Social Support yielded an alpha of .91 in the current study.

Measure of Role Strain. This 5-item scale (See Appendix E) was adapted from Markel and Frone's (1998) measure of work-family conflict, which the authors generated

to examine school-work conflict. The authors reported a coefficient alpha of .86 for this measure. Participants were asked to respond to each statement using a 5-point likert scale ranging between “Never” and “Very Often.” An example of an item would be “My job and/or family demands and responsibilities interfere with my school work.” The Measure of Role Strain yielded an alpha of .89 in the current study.

Rosenberg's Self-Esteem Scale (RSE). The 10-item scale (See Appendix F) was used to assess participants' level of self-worth and self-acceptance (Rosenberg, 1965). Rosenberg (1979) established construct validity and reported the RSE to have a Test-Retest reliability of .88. Participants were asked to respond to each statement using a 4-point likert scale ranging between “Strongly Agree” and “Strongly Disagree.” An example of this scale would be “I feel that I have a number of good qualities.” Rosenberg's Self-Esteem Scale yielded an alpha of .83 in the current study.

Satisfaction with College Experience. This 15-item scale (See Appendix G) was generated by the author to assess student satisfaction with his/her college experience with regards to global satisfaction, satisfaction with campus interests, diversity on campus, and social connections. Participants were asked to respond to each statement using a 4-point likert scale ranging between “Strongly Agree” and “Strongly Disagree.” An example of this measure would be “I feel that I am getting what I expected from my college experience.” The Satisfaction with College Experience Scale yielded an alpha of .91 in the current study.

Perception of Faculty Support. This 8-item scale (See Appendix H) was adapted from the Perceived Organizational Support measure (Eisenberger, Huntington, Hutchison, & Sowa, 1986) and used to assess a student's perception of faculty support.

Shanock and Eisenberger (2006) reported a reliability of .87 for this measure. Several studies that have established strong internal consistency and validity for the Perceived Organizational Support measure (Eisenberger et al., 1986; Shore & Tetrick, 1991; Shore & Wayne, 1993). Participants were asked to respond to each statement using a 6-point likert scale ranging between “Strongly Agree” and “Strongly Disagree.” An example of this scale would be “Even if I did the best job possible, faculty would fail to notice.” The Perception of Faculty Support Scale yielded an alpha of .89 in the current study.

Measure of Self-Efficacy. This 4-item scale (See Appendix I) measures one’s perception of capability to complete tasks and was developed by Oates (2004) in a study similar to the current investigation and for use among African American students. Reliability and validity were not reported, though Oates stated that items were “very similar to items found in the Rotter index of ‘internal-external locus of control’” (p. 20), a widely used and validated measure (Tong & Wang, 2006). Participants were asked to respond to each statement using a 5-point likert scale ranging between “Strongly Agree” and “Strongly Disagree.” An example of this scale would be “Every time I try to get ahead, something or somebody stops me.” The Measure of Self-Efficacy Scale yielded an alpha of .60; therefore, results were interpreted with caution.

Academic Self-Concept Scale (ASCS). This 40-item scale (See Appendix J) measures students’ perception of their academic ability and their identity as a student. The measure was developed by Reynolds, Ramirez, Magrina, and Allen (1980) for use among college populations. In a study comparing institutional types and African American students, Cokley (2002) reported a test-retest reliability of .88 and a Chronbach’s alpha of .92 for the scale. Additionally, Cokley reported acceptable

construct validity of the ASCS in samples of African American men and women.

Participants are asked to respond to each item using a 4-point likert scale ranging from “Strongly Agree” to Strongly Disagree.” An example of the measure would be “Being a student is a very rewarding experience.” The ASCS yielded an alpha of .94 in the current study.

Use of Campus Services. This 12-item questionnaire (see Appendix K) developed by the researcher asked participants to identify use and satisfaction with the services in which they have used since enrolling in the university. Students indicated their satisfaction based on a likert scale ranging from Very Satisfied to Very Dissatisfied. Participants were given an additional option to indicate that they have not utilized that particular service.

Introduction to Study. A notification form (see Appendix L) described the study as anonymous and informed the participant of their right to cease participation at any point in the study without penalty. Acceptance of the information in the notification letter served as participant consent. The notification form also contained a description of the study and contact information to address any questions or concerns the participant may have had as a result of his or her participation.

RESULTS

Prior to conducting the primary analyses, the data were examined with frequency and descriptive statistics to identify any problems with normality. Normality of distribution was established through acceptable levels of skewness and kurtosis within the data set. Outliers were found for age among the participants. Of the 348 participants, 10 cases were identified as being three standard deviations from the mean age and were deleted from the data set except for the exploratory analysis based on nontraditional student status, which was analyzed in consideration with and without the outliers. Two additional cases were identified as graduate students and were also deleted, leaving a total sample of 336 participants. None of the variables had significant problems with nonnormality. Next, variables of interest were correlated with one another to determine redundancy (i.e., $|r| > .70$). Using this criterion, none of the variables were redundant.

Demographic Characteristics of the Sample

Thirty-three percent of the participants were freshman, 26% sophomores, 23% juniors, and 18% seniors. There were no differences in academic level between schools, $\chi^2(3, N = 336) = 3.11, ns$. Differences between participants attending the HBCU and those attending the PWI were examined using chi square analyses for categorical variables and anovas for continuous variables.

Use of campus services. Use of campus services by school are presented in Table 1. Nearly all participants reported use of library services, 39% of the participants reported use of athletic facilities, 35% reported use of the career center, 21% enrolled in distance-learning/web-based classes, 16% utilized counseling services, and 11% reported using

Table 1
Use of Campus Services by School

Service	HBCU		PWI		Total Sample	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Academic Advising***	141	67.8	115	92.7	256	77.1
Financial Aid Office**	193	92.8	102	82.3	295	88.9
Counseling Center	40	19.2	14	11.3	54	16.3
Tutoring*	62	29.8	54	43.5	116	34.9
Athletic Facilities	74	35.6	54	43.5	128	38.6
Career Center	67	32.2	49	39.5	116	34.9
Distance Learning/Web Based	50	24.0	19	15.3	69	20.8
Library	189	90.9	105	84.7	294	88.6
Student Health Insurance	23	11.1	13	10.5	36	10.8
Health Center***	77	37.0	72	58.1	149	44.9
GI Bill*	7	3.4	0	0	7	2.1

Note. $N = 332$

* $p < .05$, ** $p < .01$, *** $p < .001$.

student health insurance. There were no significant differences between schools among these variables. A significantly greater percentage of PWI students utilized academic advising $\chi^2(1, N = 332) = 27.45, p < .001$; student health services $\chi^2(1, N = 332) = 13.91, p < .001$; and tutoring services $\chi^2(1, N = 332) = 6.45, p < .05$. A significantly greater percentage of HBCU students utilized services connected with the financial aid office $\chi^2(1, N = 332) = 8.70, p < .01$ and services associated with the GI Bill $\chi^2(1, N = 332) = 4.26, p < .05$.

Education-related characteristics. Education-related characteristics by school are presented in Table 2. Almost all students were enrolled full-time, attended a public high school, and graduated with a high school diploma. Collapsed across school, the racial composition of high schools was fairly evenly distributed with 29% reporting a majority group different from their own race, 33% reporting the majority group to be congruent with their own race, and 38% reporting a racially diverse high school population. Among the education-related demographic variables, a significant difference emerged for time taken off prior to entering college or after enrolling in college $\chi^2(5, N = 324) = 22.94, p < .001$. Although 82% of the overall sample attended college directly after high school and had not taken any time off, this represented 95% of the PWI students and 74% of the HBCU students. A significant difference was also found for type of course enrollment $\chi^2(2, N = 331) = 6.47, p < .05$. Although the majority of participants attended classroom-based courses, 7% of HBCU participants were enrolled in some web-based courses compared with .8% of PWI students.

Financially-related characteristics. Financial characteristics by school are presented in Table 3. In the overall sample, most students receive loans to help finance

Table 2
Education-Related Demographic Variables by School

Variable	HBCU		PWI		Total Sample	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Enrollment Status						
Full-Time	200	96.2	119	96.0	319	96.1
Part-Time	8	3.8	5	4.0	13	3.9
College Environment*						
Main Campus	192	92.8	122	98.4	314	94.9
Web-Based Courses	14	6.8	1	.8	15	4.5
Auxiliary Campus	1	.5	1	.8	2	.6
High School Graduate						
Diploma	202	97.6	124	100	326	98.5
G.E.D.	4	1.9	0	0	4	1.2
Other	1	.5	0	0	1	.3
Public	191	92.3	116	93.5	307	92.7
Private	5	2.4	3	2.4	8	2.4
Both	11	5.3	5	4.0	16	4.8
High School Racial Composition						
Racial Incongruence with Majority	57	27.4	39	32.0	96	29.1
Racial Congruence with Majority	75	36.1	33	27.0	108	32.7
Racially Diverse	76	36.5	50	41.0	126	38.2
Delay of College Enrollment/Time Off***						
No Delay	152	74.1	113	95.0	265	81.8
6-11 Months	13	6.3	3	2.5	16	4.9
1-2 Years	18	8.8	2	1.7	20	6.2
3-4 Years	10	4.9	1	.8	11	3.4
5-7 Years	5	2.4	0	0	5	1.5
7+ Years	7	3.4	0	0	7	2.2

Note. *N* = 336

* $p < .05$, *** $p < .001$.

Table 3
Financially-Related Demographic Variables by School

Variable	HBCU		PWI		Total Sample	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Method of Tuition Payment⁺⁺						
With Personal Income	4	1.9	4	3.2	8	2.4
Subsidized by loans/Financial aid	65	31.4	30	24.2	95	28.7
Solely with Loans/Financial aid	93	44.9	35	28.2	128	38.7
Partially Paid by Someone else	6	2.9	6	4.8	12	3.6
Entirely Paid by Someone Else	28	13.5	40	32.3	68	20.5
Entirely by Scholarship/GI Bill	11	5.3	9	7.2	20	6.0
Responsible for Expenses/Bills						
Yes	81	39.1	42	34.1	123	37.3
No	65	31.4	49	39.8	114	34.5
Some Expenses	61	29.5	32	26.0	93	28.2
Estimated Nuclear Family Income^{**}						
Less than \$25,000	45	21.7	26	21.0	71	21.5
\$25,000-\$35,000	57	27.5	19	15.3	76	23.0
\$35,000-\$45,000	33	15.9	17	13.7	50	15.1
\$45,000-\$55,000	28	13.5	12	9.7	40	12.1
\$55,000-\$65,000	15	7.2	12	9.7	27	8.2
\$65,000+	29	14.0	38	30.6	67	20.2
Employment Status⁺⁺						
Not Currently Employed	79	38.3	61	49.6	140	42.6
0-10 Hours/Week	16	7.8	12	9.8	28	8.5
11-20 Hours/Week	44	21.4	31	25.2	75	22.8
21-34 Hours/Week	35	17.0	17	13.8	52	15.8
35+ Hours/Week	32	15.5	2	1.6	34	10.3

Note. *N* = 336

** *p* < .01, ++ *p* = .001.

their education and are partially or fully responsible for their educational expenses and bills. Differences between the HBCU and PWI students emerged regarding method of paying tuition, $\chi^2(6, N = 331) = 22.16, p = .001$, with 45% of the HBCU students paying solely with financial aid compared to 28% of the PWI students. A significant difference also emerged for estimation of family income prior to entering college $\chi^2(5, N = 331) = 17.43, p < .01$ with 49% of the HBCU families earning under \$35,000 per year compared to 36% of the PWI families. Similarly, in the higher income bracket, over 30% of the PWI families were estimated to earn more than \$65,000 compared to 14% of the HBCU families. A significant difference was also found for employment status while in school, $\chi^2(4, N = 329) = 18.05, p = .001$. Almost half of the PWI students were not currently employed compared to 38% of the HBCU students. Importantly, 15% of the HBCU students worked more than 35 hours per week compared to less than 2% of the PWI students.

Additional demographic characteristics. Additional demographic characteristics are presented in Table 4. The majority of participants at both schools were single. However, there was a significant difference between HBCU students and PWI students, $\chi^2(3, N = 331) = 12.69, p = .01$, with 93% of PWI students reporting their status as single compared to 84% of the HBCU students. There was also a significant difference between schools for individuals providing financial support for members of their household or family, $\chi^2(1, N = 329) = 5.32, p < .05$, with 27% of the HBCU respondents and 16% of PWI respondents providing financial assistance. Univariate ANOVAs revealed that HBCU students were significantly older $F(1, 319) = 17.97, p < .001$, had more children $F(1, 319) = 10.10, p < .01$, and had spent more time in school $F(1, 319) = 7.29, p < .01$.

Table 4
Additional Demographic Variables by School

Categorical Variables	HBCU		PWI		Total Sample	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Relationship Status**						
Single	175	84.1	114	92.7	289	87.3
Married	18	8.7	3	2.4	21	6.3
Divorced/Separated	10	4.8	0	0	10	3.0
Living with a Partner	5	2.4	6	4.9	11	3.3
Provides Financial Support for Family Member/Other*						
Yes	57	27.5	20	16.4	77	23.4
No	150	72.5	102	83.6	252	76.6
Estimated Post-graduate Income						
\$20,000-\$30,000	31	14.9	22	17.7	53	16.0
\$31,000-\$35,000	58	27.9	24	19.4	82	24.7
\$36,000-\$40,000	53	25.5	22	17.7	75	22.6
\$41,000-\$50,000	35	16.8	29	23.4	64	19.3
\$51,000+	31	14.9	27	21.8	58	17.5
Continuous Variables						
	HBCU		PWI		Total Sample	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Age in years***	22.71	6.71	20.01	2.69	21.68	5.68
Number of Children**	.61	1.17	.24	.68	.47	1.03
Total Years in School**	2.86	2.51	2.20	1.28	2.61	2.15

Note. $N = 336$

* $p < .05$, ** $p < .01$, *** $p < .001$.

Differences between Students Attending a PWI vs. an HBCU

To test hypothesis 1, students from the HBCU were compared along a number of dimensions to students from the PWI. A one-way Multivariate Analysis of Variance (MANOVA) (HBCU vs. PWI) was done with the following dependent variables: satisfaction with college experience, social support, academic self-concept, self-esteem, self-efficacy, perception of faculty support, and role strain. A violation of the homogeneity of variance was detected, indicating that variance between groups cannot be assumed to be equal. Based on Tabachnick and Fidell (2001), the compensatory measure of Pillai's Trace was used to determine multivariate statistical significance. Follow-up univariate analyses were performed with consideration of unequal variances where applicable.

A significant multivariate main effect of school was found, $F(7, 324) = 8.35, p < .001, \eta^2 = .15$. Follow-up one-way univariate ANOVAs (see Table 5) revealed that HBCU students reported greater self-esteem, $F(1, 330) = 10.90, p = .001$ and faculty support, $F(1, 330) = 4.13, p < .05$, and a better academic self concept, $F(1, 330) = 36.66, p < .001$ compared to the PWI students.

Differences between Traditional and Nontraditional Students

To replicate previous findings using a common definition within the research (e.g., Carney-Crompton & Tan, 2002; Chao & Good, 2004; Gary, Kling, & Dodd, 2004; Geiger, 2004; Kinsella, 1998; Prohaska et al., 2000; San Miguel Bauman et al., 2004), nontraditional status was determined initially by whether or not the student delayed college by at least one year following high school or took at least a one semester break after enrolling. Hypotheses 2 through 4 were tested using this definition. Based on this

Table 5
Dependent Variables by School

Variable	HBCU		PWI		<i>F</i> (1, 330)
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Social Support	4.05	.73	4.09	.61	.26
Self-Esteem	2.43	.48	2.25	.51	10.90 ⁺⁺
Faculty Support	3.64	.73	3.49	.51	4.13*
Academic Self Concept	2.94	.38	2.68	.36	36.66***
Satisfaction with school	3.60	.64	3.61	.67	.02
Self-Efficacy	3.84	.71	3.76	.60	1.06
Role Strain	2.47	1.06	2.57	1.01	.73

Note. *N* = 332

* $p < .05$, *** $p < .001$, ++ $p = .001$.

classification, 82% of respondents were classified as traditional students and 18% were classified nontraditional (see Table 6). A 2 (traditional vs. nontraditional student status) by 2 (HBCU vs. PWI) chi square analysis revealed a significant difference, $\chi^2(1, N = 324) = 21.90, p < .001$, with 74% of the HBCU students classified as traditional compared to 95% of the PWI students.

To test hypothesis 2, a one-way MANOVA (traditional vs. nontraditional student status) was done with the seven dependent variables. A significant multivariate main effect of student status was found, $F(7, 318) = 3.86, p < .001, \eta^2 = .08$. Follow-up univariate ANOVAs revealed (see Table 7) that traditional students, collapsed across schools, reported significantly more social support $F(1, 324) = 8.67, p < .01$ than nontraditional students. Nontraditional students reported significantly more role strain, $F(1, 324) = 8.21, p < .01$ compared to traditional students. There were no significant differences for satisfaction with perception of faculty support, self-esteem, college experience, and self-efficacy, or academic self-concept, though a trend toward significance was found for academic self-concept, $F(1, 324) = 3.48, p < .07$, with nontraditional students reporting a stronger self-concept than traditional students.

Hypothesis 3 would have been tested with a one-way MANOVA using only nontraditional students (HBCU vs. PWI) and the seven dependent variables as in Hypothesis 1. Group comparisons could not be made as only six PWI participants were defined as nontraditional using the criterion of attending college directly after high school vs. taking time off. This classification issue will be discussed more thoroughly below in the context of various pathways to becoming a nontraditional student.

Table 6

Traditional vs. Nontraditional Student Status via Different Pathways by School

Variable	HBCU		PWI		Total Sample	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Status (Age/Time Off)***						
Traditional	152	74.1	113	95.0	265	81.8
Nontraditional	53	25.9	6	5.0	59	18.2
New Status (One Criterion)***						
Traditional	24	11.5	35	28.2	59	17.8
Nontraditional	184	88.5	89	71.8	273	82.2
Group (Multiple Criteria)***						
Traditional	24	11.5	35	28.2	59	17.8
Minimally Nontraditional	89	42.8	59	47.6	148	44.6
Moderately Nontraditional	50	24.0	26	21.0	76	22.9
Highly Nontraditional	45	21.6	4	3.2	49	14.8

Note. $N = 336$

*** $p < .001$.

Table 7
Dependent Variables by Status

Variable	Traditional		Nontraditional		<i>F</i> (1, 324)
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Social Support	4.13	.65	3.84	.79	8.67**
Self-Esteem	2.36	.49	2.39	.54	.25
Faculty Support	3.58	.62	3.67	.80	.91
Academic Self Concept	2.83	.37	2.93	.43	3.48
Satisfaction with School	3.62	.64	3.55	.68	.59
Self-Efficacy	3.80	.63	3.85	.82	.21
Role Strain	2.44	.99	2.86	1.19	8.21**

Note. *N* = 326

** *p* < .01.

Hypothesis 4 examined the dependent variable of ethnic identification as measured by the MIEM. A one-way ANOVA (HBCU vs. PWI) revealed no difference as a function of school, $F(1, 330) = .31, ns$ ($M = 3.11$ for HBCU vs. $M = 3.09$ for PWI). Similarly, a one way ANOVA (traditional vs. nontraditional student status) revealed no difference in ethnic identification, $F(1, 324) = .05, ns$, ($M = 3.11$ for traditional students vs. $M = 3.10$ for nontraditional students).

Issues in the Classification of Nontraditional Students

Much of the previous literature has utilized the single criterion of age (i.e., delaying college by at least one year or time off after enrollment) to determine nontraditional student status. Based on Horn's 1996 study, additional indicators of nontraditional status were also considered. An alternative approach to classifying students as nontraditional was employed such that if a student had any one of the seven factors proposed by Horn, he or she was considered nontraditional. Those factors included delay of college enrollment following high school of at least one year, part-time enrollment in college, classification as a full-time employee (35 hours or more per week) while enrolled in college, financial independence from family of origin for financial aid purposes, primary caretaker of a dependent (either child or family member) other than a spouse, single parenthood, and recipient of a GED rather than traditionally completing high school via diploma. Each main hypothesis described above was also tested with this alternative classification system. This definition was considered commensurate with the historical use of a single criterion (i.e., age) to establish nontraditional status. Review of Table 6 reveals that this alternative classification (labeled "new status") categorized only 18% of respondents as being traditional students and 82% as being nontraditional

students. When this classification was considered as a function of school, a significant difference in student status was found, $\chi^2(1, N = 332) = 14.80, p < .001$, with 88% of HBCU students classifying as nontraditional compared to 72% of PWI students.

Hypothesis 2 stated that nontraditional students will report higher levels of social support, satisfaction with college experience, faculty support, self-efficacy, academic self-concept, role strain, and self-esteem compared with traditional students. The hypothesis was addressed with a one-way MANOVA (traditional vs. nontraditional student status) using the seven dependent variables. A significant multivariate main effect for student status was found, $F(7, 328) = 5.35, p < .001, \eta^2 = .10$. As presented in Table 8, follow-up univariate ANOVAs revealed that traditional students, across schools, reported significantly more social support, $F(1, 334) = 8.81, p < .01$ and significantly less role strain, $F(1, 334) = 22.86, p < .001$ compared with nontraditional students. There were no significant differences found for satisfaction with college experience, faculty support, self-efficacy, academic self-concept, or self-esteem.

Hypothesis 3 was tested with a one-way MANOVA using only nontraditional students (HBCU vs. PWI) and the seven dependent variables as in Hypothesis 1. A significant multivariate main effect for school was found $F(7, 265) = 6.59, p < .001, \eta^2 = .15$. As presented in Table 9, follow-up univariate ANOVAS revealed that nontraditional HBCU students reported significantly higher self-esteem $F(1, 271) = 10.14, p < .01$, faculty support $F(1, 271) = 6.42, p < .05$, and academic self-concept $F(1, 271) = 35.93, p < .001$ compared with nontraditional PWI students. No significant differences were found for social support, satisfaction with college experience, self-efficacy, or role strain.

Table 8
Dependent Variables by New Status

Variable	Traditional		Nontraditional		<i>F</i> (1, 334)
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Social Support	4.29	.64	3.99	.72	8.81**
Self-Esteem	2.33	.51	2.36	.50	.20
Faculty Support	3.55	.69	3.59	.65	.23
Academic Self Concept	2.81	.35	2.84	.40	.49
Satisfaction with School	3.68	.59	3.58	.67	1.19
Self-Efficacy	3.76	.64	3.81	.68	.32
Role Strain	1.95	.76	2.63	1.05	22.86***

Note. *N* = 336

** *p* < .01, *** *p* < .001.

Table 9
Dependent Variables by School for New Status Nontraditional Students

Variable	HBCU		PWI		<i>F</i> (1, 271)
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Social Support	4.01	.74	4.01	.63	.00
Self-Esteem	2.43	.48	2.23	.52	10.14**
Faculty Support	3.66	.71	3.45	.47	6.42*
Academic Self Concept	2.94	.38	2.65	.37	35.93***
Satisfaction with School	3.61	.65	3.53	.70	1.04
Self-Efficacy	3.85	.72	3.74	.59	1.42
Role Strain	2.57	1.05	2.76	1.05	1.89

Note. $N = 273$

* $p < .05$, ** $p < .01$, *** $p < .001$.

Hypothesis 4 stated that students from the HBCU would report stronger ethnic identity than students at a PWI, with nontraditional students reporting more than traditional students. Earlier analyses revealed no significant differences between schools for ethnic identification $F(1, 330) = .31, ns$ ($M = 3.11$ for HBCU vs. $M = 3.09$ for PWI). Similarly, a one way ANOVA (traditional vs. nontraditional student newstatus) revealed no difference between student groups based upon status $F(1, 334) = 2.50, ns$ ($M = 3.18$ for traditional students vs. $M = 3.09$ for nontraditional students).

Using a Categorical Approach to Define Nontraditional Status

The exploratory portion of the current study used a categorical definition of nontraditional status defined by Horn (1996). The exploratory question was designed to examine how the degree to which a student is considered nontraditional would impact comparisons made among the dependent variables. This question may shed light upon differences within the population of nontraditional students or demonstrate that student status (i.e., traditional versus nontraditional) is a dichotomous variable and if there are differences between these groups, those differences apply to all nontraditional students as previously assumed in the research. Each main hypothesis described above was also tested with this categorical classification system.

Participants identified as meeting criteria proposed by Horn (1996) were classified as being either minimally nontraditional (i.e., possessing only one of the seven criteria), moderately nontraditional (i.e., possessing two to three of the seven criteria), or highly nontraditional (i.e., possessing four or more of the seven criteria). Using this system, within the HBCU population, 11% were traditional, 43% minimally nontraditional, 24% moderately nontraditional and 22% highly nontraditional. Within the

PWI population, 28% were traditional, 48% minimally nontraditional, 21% moderately nontraditional, and 3% highly nontraditional (see Table 6). When this classification was considered as a function of school, a significant difference in students status was found, $\chi^2(3, N = 332) = 30.73, p < .001$. The distribution of nontraditional factors between schools is presented in Table 10 and the frequency of factors is presented in Table 11. In terms of what designated students as being nontraditional, significant differences were found between the HBCU and PWI nontraditional populations. Significantly more HBCU students delayed college enrollment $\chi^2(1, N = 324) = 21.90, p < .001$, worked full-time while enrolled $\chi^2(1, N = 329) = 16.08, p < .001$, reported financial independence from family for the purpose of financial aid $\chi^2(1, N = 315) = 13.50, p < .001$, provided financial assistance to a dependent or family member $\chi^2(1, N = 329) = 5.32, p < .05$, and reported themselves to be single parents $\chi^2(1, N = 314) = 10.32, p = .001$ compared to the nontraditional students at the PWI.

A one-way MANOVA (traditional vs. minimally nontraditional vs. moderately nontraditional vs. highly nontraditional) was used to compare differences among the nontraditional groups and traditional students in terms of the variables used in the current study: social support, satisfaction with college experience, faculty support, self-efficacy, academic self-concept, role strain, and self-esteem compared with traditional students. A significant multivariate main effect for student status was found $F(21, 984) = 4.95, p < .001, \eta^2 = .10$. Follow-up univariate ANOVAs revealed that significant differences were found for social support $F(3, 332) = 4.68, p < .01$, academic self-concept $F(3, 332) = 3.94, p < .01$, and role strain $F(3, 332) = 22.68, p < .001$.

Table 10
Nontraditional Factors by School

Factor	HBCU		PWI		Total Sample	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Delay in college enrollment by at least 1 year/time off***	53	25.9	6	5.0	59	18.2
Part-time enrollment status	8	3.8	5	4.0	13	3.9
Full-time employment***	32	15.5	2	1.6	34	10.3
Financially independent for the purpose of financial aid***	174	87.4	82	70.7	256	81.3
Primary caretaker of a dependent or family member*	57	27.5	20	16.4	77	23.4
Single parenthood ⁺⁺	50	25.8	13	10.8	63	20.1
Recipient of a G.E.D./Other	5	2.4	0	0	5	1.5

Note. $N = 336$

* $p < .05$, *** $p < .001$, ⁺⁺ $p = .001$.

Table 11
Frequency of Nontraditional Factors by School

Factor	HBCU		PWI		Total Sample	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Traditional (No Factors)	24	11.5	35	28.2	59	17.8
Minimally Nontraditional						
One Factor	89	42.8	59	47.6	148	44.6
Moderately Nontraditional						
Two Factors	35	16.8	17	13.7	52	15.7
Three Factors	15	7.2	9	7.3	24	7.2
Highly Nontraditional						
Four Factors	14	6.7	3	2.4	17	5.1
Five Factors	21	10.1	1	.8	22	6.6
Six Factors	6	2.9	0	0	6	1.8
Seven Factors	4	1.9	0	0	4	1.2

Note. $N = 336$

Post-hoc analyses were performed to identify group differences among the four categories of student status. As presented in Table 12, traditional students reported significantly more social support ($M = 4.29, SD = .64$) than minimally ($M = 4.05, SD = .69$), moderately ($M = 4.01, SD = .67$), and highly ($M = 3.79, SD = .85$) nontraditional students. In terms of academic self-concept, highly nontraditional students reported significantly stronger self-concept ($M = 3.01, SD = .35$) than traditional students ($M = 2.81, SD = .35$). There were no significant differences between traditional students and minimally ($M = 2.83, SD = .39$) or moderately ($M = 2.77, SD = .43$) nontraditional students for the measure of academic self-concept. With respect to role strain, each of the nontraditional groups, minimally ($M = 2.29, SD = .89$), moderately ($M = 2.94, SD = 1.10$) and highly nontraditional ($M = 3.16, SD = 1.03$), reported significantly more role strain than the traditional group ($M = 1.95, SD = .76$).

To better understand within-group differences for nontraditional students, a one-way MANOVA (minimally vs. moderately vs. highly nontraditional) was performed using the seven dependent variables. A significant multivariate main effect for nontraditional group was found $F(14, 536) = 4.73, p < .001, \eta^2 = .11$. Follow-up ANOVAS revealed that significant differences were found for academic self-concept $F(2, 273) = 5.45, p < .01$, and role strain $F(2, 273) = 19.69, p < .001$.

Post-hoc analyses were performed to identify group differences among the categories of nontraditional student status. As presented in Table 13, highly nontraditional students ($M = 3.00, SD = .35$) reported significantly stronger academic self-concept than minimally ($M = 2.83, SD = .39$) and moderately nontraditional students ($M = 2.77, SD = .43$). Minimally nontraditional students did not differ significantly from

Table 12

Differences Between Traditional and Minimally, Moderately, and Highly Nontraditional Students for Dependent Variables

Variable	Traditional		Minimally Nontraditional		Moderately Nontraditional		Highly Nontraditional		<i>F</i> (3, 332)
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Social Support	4.29 _a	.64	4.05 _b	.69	4.01 _{bc}	.67	3.79 _c	.85	4.68**
Self-Esteem	2.33	.51	2.37	.52	2.28	.52	2.44	.44	1.21
Faculty Support	3.55	.69	3.63	.60	3.47	.59	3.69	.84	1.54
Academic Self Concept	2.81 _a	.35	2.83 _a	.39	2.77 _a	.43	3.00 _b	.35	3.94**
Satisfaction with School	3.68	.59	3.61	.70	3.47	.56	3.67	.69	1.52
Self-Efficacy	3.76	.64	3.83	.62	3.72	.77	3.89	.67	.88
Role Strain	1.95 _a	.76	2.29 _b	.89	2.94 _c	1.10	3.16 _c	1.03	22.68***

Note. Groups sharing the same subscript are not statistically different. Differences found with a Tukey LSD post-hoc analysis, $p < .05$.

** $p < .01$, *** $p < .001$.

Table 13

Mean Differences Between Minimally, Moderately, and Highly Nontraditional Students for Dependent Variables

Variable	Minimally Nontraditional		Moderately Nontraditional		Highly Nontraditional		<i>F</i> (2, 273)
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Social Support	4.05	.69	4.01	.67	3.79	.85	2.49
Self-Esteem	2.37	.52	2.28	.52	2.44	.44	1.72
Faculty Support	3.63	.60	3.47	.59	3.69	.84	2.26
Academic Self Concept	2.83 _a	.39	2.77 _a	.43	3.00 _b	.35	5.45**
Satisfaction with School	3.61	.70	3.47	.56	3.67	.69	1.62
Self-Efficacy	3.83	.62	3.72	.77	3.89	.67	1.13
Role Strain	2.29 _a	.89	2.94 _b	1.10	3.16 _b	1.03	19.69***

Note. $N=276$, Groups sharing the same subscript are not statistically different. Differences found with a Tukey LSD post-hoc analysis, $p < .05$.

** $p < .01$, *** $p < .001$.

moderately nontraditional students. With respect to perception of role strain, moderately ($M = 2.94$, $SD = 1.10$) and highly nontraditional students ($M = 3.16$, $SD = 1.03$) both perceived significantly more role strain than minimally nontraditional students ($M = 2.29$, $SD = .89$). Moderately and highly nontraditional students did not differ significantly in their report of role strain.

Analyses were performed to examine differences between the HBCU and PWI for each nontraditional group. This set of analyses was used to identify whether group differences existed between categories of nontraditional students as a function of school.

A one-way MANOVA (PWI vs. HBCU) was conducted for minimally nontraditional students using the seven dependent variables identified in Hypothesis 1. The sample included 89 students from the HBCU and 59 students from the PWI. A significant main effect was found for school $F(7, 140) = 2.93$, $p < .01$, $\eta^2 = .13$. Follow-up univariate ANOVAs revealed that minimally nontraditional HBCU students reported significantly more faculty support $F(1, 146) = 6.13$, $p < .05$, higher academic self-concept $F(1, 146) = 16.30$, $p < .001$, and higher self-esteem $F(1, 146) = 4.44$, $p < .05$ than minimally nontraditional PWI students. Mean differences among these groups are presented in Table 14.

A one-way MANOVA (PWI vs. HBCU) was conducted for moderately nontraditional students only using the seven dependent variables identified in Hypothesis 1. The sample consisted of 50 HBCU students and 26 PWI students. A significant multivariate main effect was found for school, $F(7, 68) = 3.05$, $p < .01$, $\eta^2 = .24$. Follow-up univariate ANOVAs revealed that moderately nontraditional HBCU students reported significantly higher self-esteem, $F(1, 74) = 6.90$, $p = .01$, and academic self-

Table 14

Dependent Variables by School for Minimally Nontraditional Students

Variable	HBCU		PWI		<i>F</i> (1, 146)
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Social Support	4.10	.70	3.98	.66	1.18
Self-Esteem	2.45	.49	2.26	.53	4.44*
Faculty Support	3.72	.64	3.48	.50	6.13*
Academic Self Concept	2.93	.36	2.68	.38	16.30***
Satisfaction with School	3.66	.64	3.53	.78	1.26
Self-Efficacy	3.87	.65	3.78	.58	.75
Role Strain	2.25	.92	2.36	.86	.52

Note. *N* = 148

* $p < .05$, *** $p < .001$.

concept, $F(1, 74) = 10.89, p = .001$, than moderately nontraditional PWI students.

Moderately nontraditional PWI students reported significantly more role strain, $F(1, 74) = 7.73, p < .01$, than moderately nontraditional HBCU students. Mean differences among these groups are presented in Table 15.

Group comparisons could not be made for the highly nontraditional students as only four PWI participants were defined as highly nontraditional compared to 45 HBCU participants.

Age and Outliers. Several participants were omitted from the dataset used for the analyses because their age classified them as outliers; however, this was considered potentially problematic given that the participant was being excluded for a factor that also defined them as being nontraditional. Given that this portion of the study was considered exploratory in nature, the participants, all of whom were from the HBCU sample, were returned to the dataset for examination and the analyses were again performed. Of the ten, three participants were considered minimally nontraditional, one participant was moderately nontraditional, and six participants were considered highly nontraditional. The results of the analyses comparing differences between the HBCU and the PWI based on nontraditional group membership (i.e., minimally, moderately, highly nontraditional) were unaffected by these participants; however, there were significant differences for the comparison between nontraditional groups across schools.

A one-way MANOVA (minimally vs. moderately vs. highly nontraditional) was performed using the seven dependent variables. A significant multivariate main effect for nontraditional group was found $F(14, 556) = 5.37, p < .001, \eta^2 = .12$. Follow-up ANOVAS revealed that significant differences were found for social support $F(2, 283) =$

Table 15

Dependent Variables by School for Moderately Nontraditional Students

Variable	HBCU		PWI		<i>F</i> (1, 74)
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Social Support	4.05	.61	4.09	.59	.05
Self-Esteem	2.41	.49	2.10	.48	6.90 ⁺
Faculty Support	3.50	.68	3.40	.43	.45
Academic Self Concept	2.89	.43	2.57	.35	10.89***
Satisfaction with School	3.50	.59	3.47	.52	.06
Self-Efficacy	3.79	.85	3.60	.62	.95
Role Strain	2.71	1.13	3.43	.97	7.73**

Note. *N* = 76** *p* < .01, ⁺ *p* = .01, *** *p* = .001.

3.84, $p < .05$, faculty support $F(2, 283) = 3.26, p < .05$, academic self-concept $F(2, 283) = 6.81, p = .001$, and role strain $F(2, 283) = 18.33, p < .001$. A trend toward a significant difference was found for satisfaction with college experience $F(2, 283) = 2.83, p = .061$.

Post-hoc analyses were performed to identify group differences among the categories of nontraditional student status. As presented in Table 16, highly nontraditional students ($M = 3.74, SD = .86$) perceive significantly less social support than both minimally ($M = 4.05, SD = .69$) and moderately nontraditional students ($M = 4.01, SD = .66$). Minimally and moderately nontraditional students did not differ significantly in amount of perceived social support. With respect to perceived faculty support, moderately nontraditional students ($M = 3.45, SD = .60$) reported significantly less faculty support than minimally nontraditional students ($M = 3.63, SD = .59$) and highly nontraditional students ($M = 3.72, SD = .84$). Highly nontraditional students did not differ significantly from minimally nontraditional students in their perception of faculty support. With respect to academic self-concept, highly nontraditional students ($M = 3.02, SD = .35$) reported significantly stronger academic self-concept than minimally ($M = 2.82, SD = .39$) and moderately nontraditional students ($M = 2.78, SD = .43$). Minimally nontraditional students did not differ significantly from moderately nontraditional students. With respect to perception of role strain, moderately ($M = 2.93, SD = 1.10$) and highly nontraditional students ($M = 3.11, SD = 1.03$) both reported significantly more role strain than minimally nontraditional students ($M = 2.31, SD = .89$). Moderately and highly nontraditional students did not differ significantly in their report of role strain. A trend toward a significant difference ($p = .061$) was found for satisfaction for college experience between moderately and highly nontraditional groups,

Table 16

Mean Differences Between Minimally, Moderately, and Highly Nontraditional Students for Dependent Variables Including Outliers

Variable	Minimally Nontraditional		Moderately Nontraditional		Highly Nontraditional		<i>F</i> (2, 283)
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Social Support	4.05 _a	.69	4.01 _a	.66	3.74 _b	.86	3.84*
Self-Esteem	2.36	.53	2.29	.52	2.47	.44	1.97
Faculty Support	3.63 _a	.59	3.45 _b	.60	3.72 _a	.84	3.26*
Academic Self Concept	2.82 _a	.39	2.78 _a	.43	3.02 _b	.35	6.81 ⁺⁺
Satisfaction with School	3.61	.70	3.47	.56	3.74	.69	2.83
Self-Efficacy	3.83	.62	3.73	.77	3.97	.68	1.99
Role Strain	2.31 _a	.89	2.93 _b	1.10	3.11 _b	1.03	18.33***

Note. *N* = 276, Groups sharing the same subscript are not statistically different. Differences found with a Tukey LSD post-hoc analysis, *p* < .05.

* *p* < .05, ** *p* < .01, ⁺⁺ *p* = .001, *** *p* < .001.

with highly nontraditional students ($M = 3.74, SD = .69$) reporting more satisfaction than moderately nontraditional students ($M = 3.47, SD = .56$).

DISCUSSION

Past research has demonstrated that there are benefits for some African American students attending an HBCU over a PWI, such as increased social support (Brower & Ketterhagen, 2004; Negga, Applewhite, & Livingston, 2007), self-esteem (Oates, 2004; van Laar, 2000), increased academic self-concept and higher post-graduate employment expectations (Cokley, 2002), mentoring opportunities and faculty support (Kim, 2002; Palmer & Gasman, 2008), increased self-efficacy beliefs (Okech & Harrington, 2002), and in overall satisfaction with one's college experience (Outcalt & Skews-Cox, 2002). Despite these benefits, the majority of HBCU students are not graduating within a four year traditional time frame (Pope, 2009).

In addressing the question of differences between college environments, it is important to also consider how characteristics of the student might influence these variables, which has been a deficit in previous studies. Research has demonstrated that a large portion of college students now fit the definition of being nontraditional (Chao & Good, 2004; NCES, 2002), which indicates that there are fewer of the traditional 18 to 22-year-old students on campuses than there were one to two decades ago when much of the research comparing differences between HBCU and PWI was conducted (Allen, 1992; Astin, 1975; Davis, 1991; Fleming, 1984; Steele, 1992; Wenglinsky, 1996). The goal of this study was to better understand how student status (i.e., traditional vs. nontraditional) might impact the differences that previous literature has established as existing between the PWI and the HBCU settings. The current study was designed to address these two areas of interest in order to better understand the characteristics and needs of today's college students, specifically African American students.

Demographics

The current sample consisted of 336 African American students, 124 of which were attending a PWI and 212 were attending an HBCU. There was no difference between schools for academic classification; however, there were significant differences in terms of age, reported number of children in the household, and in the total number of years spent in pursuit of one's degree. The HBCU population was found to have a wider distribution of age and was a significantly older group, had more children, and reported significantly more time spent in pursuit of their degree when compared to the PWI students. These three factors are some of those used to define one as being nontraditional; therefore it was not surprising that the HBCU population had significantly more nontraditional students compared with the PWI population. Additionally, differences were found in several categories including use of campus services, financially-related characteristics, and education-related characteristics.

The HBCU population reported significantly less use of academic advising services, which was surprising given the emphasis on faculty support and guidance (Cokley, 2002) within the HBCU environment. One explanation may be that students meet advising needs more informally at a HBCU via faculty contact rather than seeking out formal advising services. Another possible explanation might be linked with student status in that traditional students, perhaps less certain of their academic goals, might seek more formal advising compared with nontraditional students. The HBCU population also reported significantly higher use of financial aid resources despite the fact that HBCUs are historically a less economically taxing option for students (Freeman & Cohen, 2001). However, depending on the factors that define a student as being nontraditional, financial

assistance may be necessary if undertaking school as well as supporting a family. Notably more students within the HBCU population compared with the PWI population reported being responsible for paying tuition, as opposed to tuition being paid for by a family member, and that they provided financial assistance to either a dependent or family member. This could explain the higher percentage of HBCU students utilizing financial aid resources compared to students from the PWI. Despite the fact that HBCU tuitions are historically less expensive, the students that attended the HBCU appeared to have greater financial needs compared to PWI students. The Associated Press's review of HBCU statistics (Pope, 2009) reported that HBCUs have a disproportionate number of low-income students, which appears to be the case in the current sample.

Related to the use of financial services for the current study, significantly more HBCU students paid their tuition solely with financial aid, which might be a reflection of nuclear family income. Almost half of the HBCU students reported family income (upon entering college) to be under \$35,000 per year, whereas almost half of the PWI students reported family income to be greater than \$41,000 per year. HBCU students were also found to have a significantly higher percentage of students working while in college compared to PWI students, 15% of which were working over 35 hours per week. This is consistent with the use of financial aid services and again highlights the presence of more nontraditional students in the HBCU community compared to the PWI.

Despite the presence of more nontraditional demographic factors for students attending the HBCU, the populations of the two schools were similar in that most students were enrolled full-time, had attended a public high school, and had graduated with a high school diploma. One reported reason for choosing HBCU enrollment over a

PWI has been a desire for racial congruence following a high school experience of incongruence (Freeman, 1999), but in the current sample, the reported racial composition of the students' high schools were fairly evenly and similarly distributed between both schools and not significantly different from one another. Interestingly, given the similar educational backgrounds, a significant difference between schools was found for the amount of time taken off following high school and prior to enrolling in college or time taken off after enrolling. Almost all of the PWI students reported entering college directly after high school and remained enrolled compared with only three-quarters of the HBCU sample. Additionally more HBCU students reported use of web-based classrooms, which might also explain the higher number of HBCU students entering college after a period of time off. It would be expected that a higher concentration of nontraditional students would be associated with less traditional pathways for education.

Differences between the HBCU and the PWI: Replicating previous findings

Based on earlier studies, it was hypothesized that HBCU students would report greater satisfaction with their college experience, greater social support, stronger academic self-concept, higher levels of self-esteem and self-efficacy, more faculty support, and less perceived role strain than students attending a PWI. Results of the current study supported previously established connections between attending an HBCU with higher self-esteem, higher levels of perceived faculty support, and increased academic self-concept compared to the PWI; however, there were no differences found for social support, satisfaction with college experience, self-efficacy, or degree of role strain between schools. Each variable is addressed below and then again discussed in subsequent sections with consideration of student status, traditional vs. nontraditional.

Academic self-concept and faculty support. HBCU students in the current comparison reported a significantly more positive academic self-concept, a measure of one's ability for academic success, consistent with results reported by Cokley (2002) and Berger and Milem (2000). Cokely and Berger and Milem indicated that higher academic self-concept may be the result of reported faculty relationships and support, which was also found to be significantly stronger within the HBCU population compared with the PWI population. The authors argued that the supportive environment of the HBCU, including smaller faculty-student ratio and mentoring opportunities, fostered a positive belief among students regarding their ability to be academically successful. Palmer and Gasman (2008) proposed that HBCU students' academic success was the result of the concern faculty demonstrated for both the personal well-being and the academic achievement of the student.

Self-esteem and self-efficacy. Self-esteem and self-efficacy are often viewed as the dual dimensions of one's self-concept (Oates, 2004). Although previous studies confirm the difficulty in assessing self-efficacy (Oates, 2004), it remains surprising that there were no significant differences found between schools for self-efficacy given that researchers have connected the supportive atmosphere of the HBCU environment to increased academic self-concept (Cokley, 2002; Berger & Milem, 2000; Palmer & Gasman, 2008) and self-esteem (van Laar, 2000). Researchers have indicated the need to separate self-esteem from self-efficacy as being separate constructs, though both represent views one hold towards the self (Oates, 2004; van Larr, 2000) due to the fact that some African Americans might feel that their ability to be successful is less a measure of how they might view themselves and more a reflection of the existence of

racial discrimination. Porter and Washington (as cited in Oates, 2004) reported that lower levels of self-efficacy are typically found among African Americans and reflect a response to the reality that society “undermines blacks’ progress” (p. 18). Therefore, it would seem that the self-efficacy of African Americans attending a PWI would be less than that of African Americans in a racially congruent environment with the support of faculty serving as positive African American role models. As in the current study, Oates (2004) found that African Americans at a HBCU reported significantly higher levels of self-esteem, but no significant differences were found for self efficacy. This finding might suggest the continued need to separate self-esteem from self-efficacy for African Americans, but might also suggest that the HBCU environment, believed to have a bolstering effect on African Americans’ self-concept, may only serve to maintain current levels of self-efficacy rather than improve upon them (Chung, 2002). However, these findings should be interpreted cautiously given the lack of strong reliability for this sample on the self-efficacy measure.

Social Support and Role Strain. Brower and Ketterhagen (2004) proposed that African Americans attending a PWI may face more of a challenge connecting with their peers if they had attended a predominantly African America high school and then perceived a mismatch with the college environment. The lack of findings in terms of social support and role strain may be because respondents indicated, for the most part, having attended ethnically diverse or ethnically incongruent high schools and therefore did not feel out of place as proposed by Brower and Ketterhagen. The lack of findings for these two variables in the current study can certainly be interpreted as a positive indicator, at least for the current sample, that there may be a decrease in feelings of

alienation and isolation (Astin, 1975) and perceived lack of social support (Negga, Applewhite, & Livingston, 2007) previously reported by African American students attending a PWI. Although it is encouraging to find that students from both school types have commensurate perceptions of social support and role strain, it is important to note that when analyzed with consideration for student status (traditional vs. nontraditional), differences were found between schools, which will be further discussed in the following section. It may no longer be the case that social support and role strain differ as a function of school but rather as a function of student status, which may be indirectly affected by school type.

Satisfaction with College Experience. Much of the literature reported that HBCU students had higher satisfaction ratings of their college experience when compared to PWI students (Bristow, 2002; Brower & Ketterhagen, 2004; Davis, 1991; Outcalt & Skews-Cox, 2002). This finding was not replicated in the current study. Previous studies proposed that lower satisfaction ratings at PWIs were connected to feelings of alienation (Austin, 1975; Brower & Ketterhagen, 2004), lack of role models and social support (Bello-Agumu, 1997), and fewer resources for academic support (Fleming, 1984). The lack of a significant difference in the current study for satisfaction with college experience may be evidence of a decrease in the perception of isolation on campus and of an upward trend in satisfaction for African Americans attending a PWI. Davis (1991) found that African Americans at a PWI were less satisfied due in part to the lack of compatible activities on campus and that HBCU students had an additional benefit of social networks on campus. With new university diversity initiatives (Quarterman, 2008),

there may be more activities on PWI campuses that result in African American students feeling satisfied and connected with their college environment.

Ethnic Identity. One reason cited as an explanation behind the choice of attending a HBCU over a PWI has been a desire to connect with individuals of the same race and develop one's racial identity (Brower & Ketterhagen, 2004; Freeman, 1999), so it was expected that participants in the current study from the HBCU would have a stronger ethnic identity when compared to individuals who had chosen a PWI. Analyses for the current study involving the participants' ethnic identity yielded no significant results. In fact, respondents from the PWI had relatively commensurate identity scores with respondents from the HBCU, though the distribution for the HBCU was concentrated at the mean compared to the more even distribution of scores from the PWI. This might be a reflection of a relatively uniform sense of identity within the HBCU group compared to individuals that vary along a continuum within the PWI group; however, again, the results were not significantly different.

Phinney and Ong (2007) define ethnic identity as reflecting a sense of shared belonging to a racial group. The lack of results indicating any difference in ethnic identity between the HBCU and the PWI participants may be a reflection that identity is developed or maintained independent of an academic institution. Historically, the area of racial and ethnic identification has been regarded as a difficult construct to measure and research has met with mixed results (Cokley, 2007; Phinney, 1992). It should also be considered that one's ethnic identity is not as salient to choice of college as other factors, such as mentoring opportunities, smaller class size, and financial issues, might have recently become. It is also possible that an HBCU environment does not serve to

strengthen one's ethnic identity over time as much as it does bolster self-esteem and academic self-concept, which might be indirect avenues toward ethnic identity.

Perhaps a better measurement for the purposes of detecting HBCU and PWI differences would be a measure of the perception of racial discrimination or the degree of perceived stress resulting from minority status. Greer and Chwalisz (2007) report that African American students, particularly on PWI campuses, experience a form of minority status related to perceived discrimination. African Americans on HBCU campuses, although on a mostly racially congruent campuses, also experience stress in the form of racial stereotypes and biases. Assessing for a construct, such as stress related to minority status, resulting from minority status rather than assessing for stage of identity may be a better indicator of how African Americans perceive the HBCU and PWI environments differently.

There were no significant findings for ethnic identity as a variable in any of the additional analyses performed, across schools, within schools, or for student status, and therefore it is not addressed in subsequent sections.

Differences between Traditional and Nontraditional Students

In addition to attempting to replicate previous findings that indicated HBCU vs. PWI differences, the current study examined how student status (i.e., traditional vs. nontraditional) might impact results. In conceptualizing the current study, the method of determining nontraditional status appeared problematic. Much of the research in the area utilized a single construct, age, to identify nontraditional students. It was proposed that this definition may cause many students who are in fact nontraditional by different criteria, such as single parenthood or full-time employment, to be overlooked.

Examination of within-group differences was approached via three pathways, all of which involved using a different definition of what “nontraditional” might represent.

Perhaps one of the most interesting results of the current study was how drastically the composition of traditional and nontraditional groups changed based upon the definition used, which has important implications for future research and the manner in which student status is defined in research. The change in distribution of participants based on the definition used would indicate that far more than delaying college enrollment, or age, should be considered when examining nontraditional populations. The results for each pathway are addressed below.

Traditional vs. Nontraditional Status. The first approach, and arguably the most conservative, involved defining nontraditional status based on a criterion generally used in past research, age. Classification as nontraditional indicated that the college student was older than the traditional student within the cohort due to delaying college enrollment or taking time off after enrollment, without consideration for other factors that might classify a student as being nontraditional. Based upon this classification, 82% of the sample were considered to be traditional students and 18% were considered to be nontraditional. The group distribution under this definition was found to be inconsistent with reports that close to 40% of college students are now considered to be nontraditional based upon increased age (Chao & Good, 2004). In the current study, a significant difference was found between schools, with the PWI having a higher concentration of traditional students compared with the HBCU.

Results indicated that when the overall sample was tested across schools, traditional students reported significantly more social support than nontraditional

students. Nontraditional students reported significantly higher levels of role strain. A trend towards significance was found for academic self-concept (ACSC), with nontraditional students reporting a higher ACSC than traditional students. This trend for a higher academic self-concept among nontraditional students is consistent with previous studies that demonstrate greater dedication to toward one's degree (Chao & Good, 2004) and confidence after real life experience in the work force prior to returning to school (San Miguel Bauman et al., 2004).

Researchers have indicated that the deficit in perceived support for nontraditional students is a result of attitudes towards their institution (Carney-Crompton & Tan, 2002; Home, 1998). The literature has reported higher levels of social support among traditional students; however, it was expected in the current study that the supportive environment of the HBCU would serve as a mediating factor for nontraditional students and minimize the impact of areas where nontraditional students perceive a lack of support. However, this expectation was not supported; overall, traditional students reported significantly more social support.

Given that results of the current study indicate lower levels of perceived social support among nontraditional students, it is not surprising that nontraditional students also reported a significantly higher degree of role strain. This finding is consistent with previous studies (Carney-Crompton & Tan, 2002; Home, 1998; Kinsella, 1998; Prohaska et al., 2000) in that nontraditional students are more likely to be managing multiple roles while pursuing their degree and thus experiencing a higher degree of role strain.

Using this criterion for nontraditional status, it became clear that almost all of the nontraditional students assessed in these analyses were from the HBCU and, therefore,

the result (i.e., increased role strain and less social support) should be attributed mostly to HBCU nontraditional students. With this sample, examination of differences between schools was not performed due to low number of nontraditional students identified in the PWI sample. The criterion of age identified 26% of HBCU participants as being nontraditional compared to just 5% of the PWI population. It is interesting to note that significantly more HBCU students met the criterion of delaying enrollment or taking time off after enrolling than did within the PWI population. An addition to the literature identifying differences between HBCUs and PWIs may be that the HBCU environment might be more supportive for students delaying enrollment or taking a break after enrolling, though more research is needed.

In summary, using the historically single criterion of age to identify nontraditional students resulted in very low nontraditional presence within the PWI. Interpretation of these results would indicate that nontraditional students rarely attend predominantly White schools, which is unlikely. A more likely interpretation would indicate the definition is not capturing nontraditional students very effectively. This has an important implication for research in this area and for schools more likely to serve students who graduated high school and went directly to college and who may be nontraditional due to other criteria.

Traditional vs. Nontraditional: New Status. The second pathway also involved use of a single criterion to define a new nontraditional status (referred to in the text as “new status”); however, students possessing any one of the seven nontraditional factors proposed by Horn (1996), which included delay in enrollment, were classified as being nontraditional. By using the new status, students who are nontraditional, but who may not

have delayed college, were not overlooked. Based upon this classification, the inverse of the previous distribution occurred in that 18% of all participants were now classified as being traditional and 82% were classified as being nontraditional. Results based upon the new status are consistent with current statistics of nontraditional students currently enrolled in college (NCES, 2002). Review of the distribution of participants possessing nontraditional factors revealed that delay in enrollment, or time taken off, was fourth in frequency of the possible factors (see Table 10). Of nontraditional students, the majority met the definition due to reported financial independence from his or her family for the purpose of financial aid, 23% provided financial assistance for a child or a family member, and 20% were single parents.

Interestingly, despite the change in classification, the results were the same. Using the new status, traditional students reported perceiving significantly more social support than nontraditional students whereas nontraditional students perceived higher levels of role strain. It would be expected that the results might change given that a majority of what had been considered traditional with the first pathway became nontraditional in the second pathway. The fact that the results remained the same might indicate that these findings can be associated with students on the extremes of student status (traditional vs. moderately or highly nontraditional) and not impacted by those students that are marginally traditional or nontraditional and fluctuated groups depending upon the definition used. A more accurate understanding of the influence of student status on the variables under consideration may be gleaned from the discussion of differences between minimally, moderately, and highly nontraditional students below.

Analysis of nontraditional students between schools was possible given the distribution under the new status definition for nontraditional. Results revealed that among nontraditional students only, HBCU participants reported significantly higher self-esteem, faculty support, and academic self-concept. These results were consistent with results from hypothesis one, a comparison of HBCU participants with PWI participants across student classification. In part, the replication of results is not surprising given that 82% of the sample was considered to be nontraditional by the new status definition. Replication of results might indicate that these findings are a function of school rather than a function of student classification.

It would seem that using the new status pathway for defining nontraditional students allows for a more accurate picture of the student population. This definition allows for the fact that a student might possess other factors, such as single parenthood, that would make him or her a nontraditional student and that not all nontraditional students delayed enrollment or take time off after enrollment. This definition also allows for the possibility that a student entered college as a traditional student (i.e., did not delay enrollment or take time off), but became nontraditional by having a child, becoming financially responsible for tuition, working full-time, etc. Utilization of this pathway significantly changed the number of nontraditional students identified. For example, using the criterion of age identified only 5% of PWI students as being nontraditional; however, 72% of the PWI population met at least one of the criterion proposed by Horn (1996) and were identified as being nontraditional. This result would suggest that the majority of nontraditional students at PWIs are nontraditional for a reason other than age, and may be less likely to take time off or delay enrollment. The criterion of age identified

approximately a quarter of the HBCU population as being nontraditional. When using Horn's seven criteria, it becomes clear that an equal number of participants report being the primary caregiver or single parent, which are also nontraditional factors that might be independent of age.

Results from this pathway indicate that there is something different about nontraditional students from the HBCU compared to nontraditional students at the PWI. The differences found among the nontraditional population are consistent with overall differences found between the HBCU and the PWI in that HBCU students report higher self-esteem, increased faculty support, and a higher academic self-concept compared with their PWI counterparts. This pathway may allow for more accurate identification nontraditional students within the school, but it fails to address differences that might exist within the nontraditional group.

Traditional vs. Nontraditional: Nontraditional Groups. A third pathway was used for the exploratory portion of the current study to better understand how the degree to which a student might be nontraditional would impact results. Again, Horn's (1996) seven nontraditional factors were used to classify students as being a traditional student or a minimally, moderately, or highly nontraditional student. Based upon this classification system, 18% of the total sample remained traditional, 44% were minimally nontraditional, 23% were moderately nontraditional and 15% were highly nontraditional.

There was a significant difference between schools for the distribution of groups. The distribution was fairly similar between schools for minimally and moderately nontraditional students; however, a higher concentration of traditional students attended the PWI (28% vs. 11%) whereas a higher concentration of highly nontraditional students

attended the HBCU (22% vs. 3%). It would appear that the majority of students in the current sample are nontraditional, but by only one of the seven factors, and more students are moderately nontraditional (i.e., possessing 2-3 nontraditional factors) than traditional.

Similar to results found using the other two pathways, significant group differences were found for social support, role strain and academic self-concept. Results indicated that traditional students reported significantly more social support than all three nontraditional groups. All three of the nontraditional groups reported significantly more role strain than the traditional group. These findings indicate that these differences exist between traditional and nontraditional students regardless of the degree to which the student is nontraditional. It could be assumed that role strain is so highly correlated with nontraditional status that, independent of the number of factors making one nontraditional, any nontraditional student will report higher levels of role strain compared to a traditional student. The same can be said with respect to social support for traditional students, meaning that differences in the degree to which a student is nontraditional did not impact perception of social support. It might have been assumed that the more similar a nontraditional student is to a traditional student (i.e., they are minimally nontraditional), the more likely their perception of social support would be similar to traditional student reports. Results of the current study do not support that assumption. It appears that, as with role strain, there is something about the nontraditional population as a whole that feels less supported and that difference does not appear to be impacted by the degree to which one is nontraditional.

Academic self-concept was a factor that did depend on the degree to which the student was nontraditional. Only highly nontraditional students differed from traditional

students with respect to academic self-concept, with highly nontraditional students reporting significantly higher academic self-concept than traditional students. Although academic self-concept has been fairly stable as a variable that significantly differed between groups, it was not found to be a significant variable when the new status was used. One possible reason for this finding is that the narrow and conservative status definition actually captured the highly nontraditional group given the strong likelihood that if one delayed college by a year or took time off, one would also possess other factors defining them as being nontraditional (i.e., single parent, financially independent, etc.). Once the second pathway was used and there were seven factors by which a student could meet the definition of nontraditional, the group was far more likely to include all three categories of nontraditional students and the strength of the highly nontraditional students' academic self-concept was obscured. For academic self-concept, viewing student classification dichotomously (i.e., traditional or nontraditional) would not lead to an accurate understanding of the differences between traditional and nontraditional students as only highly nontraditional students differ significantly for this variable from traditional students.

Significant group differences were found within the nontraditional groups when examined across schools. Highly nontraditional students reported higher academic self-concept than both minimally and moderately nontraditional students. Although highly and moderately nontraditional students reported significantly more role strain compared to minimally nontraditional students, there was not a significant difference between moderately and highly nontraditional students in their report of role strain. Although all three groups reported significantly more role strain than traditional students, this result

might indicate that there is little difference between students possessing more than one nontraditional factor (i.e., at least moderately nontraditional).

It is interesting that highly nontraditional students, despite increased role strain, report more confidence regarding their academic self-concept. Perhaps this confidence provides some protection from the stressors of multiple roles that they manage. This finding makes sense in the context of the HBCU, known for providing faculty support, as Cokley (2002) reported that faculty interactions were the best predictor for positive academic self-concept for HBCU students. It would appear that the support resulting from faculty interactions might negate the effects of the role strain that would have otherwise damaged the perception of one's academic ability. However, this finding was found for highly nontraditional students across schools, without consideration for how these nontraditional groups differed between schools. The exploratory section of the study addresses this issue, but more research in this area is definitely warranted.

Differences within Categories of Nontraditional Students between Schools

Thus far, the current study has replicated some, but not all, of the factors that the literature has established as differentiating HBCUs from PWIs for African American students. Furthermore, results have also shed light upon how those differences might be interpreted based upon student status (traditional vs. nontraditional). The advantage of the current study was the ability to combine these areas and examine student status and type of school.

Within the total sample, 43% of the HBCU population and 48% of the PWI population were classified as being minimally nontraditional. Minimally nontraditional HBCU students reported significantly more faculty support and significantly higher

academic self-concept than those minimally nontraditional students from the PWI. The results approached significance for self-esteem, with HBCU students also reporting higher levels than PWI students. These three variables were also identified as being significantly higher for HBCU students in the original comparison between schools based upon new status. Given that only a trend towards significance for self-esteem was found in this analysis, self-esteem may be a stronger factor within other nontraditional groups.

Within the HBCU population, 24% of participants were classified as moderately nontraditional compared to 21% of the PWI population. Both self-esteem and academic self-concept were found to be significantly higher within the HBCU population. Moderately nontraditional participants from the PWI reported significantly more role strain than their HBCU counterparts. It is interesting that once a student becomes more nontraditional (i.e., meets criteria for several nontraditional factors), there is no longer a significant difference for faculty support. It is possible that minimally nontraditional students have a different perception of faculty support than moderately nontraditional students, or that the HBCU is better at meeting the needs of minimally nontraditional students in terms of faculty support.

Comparisons between schools could not be made for highly nontraditional students as only 3% of the PWI population were found to be highly nontraditional compared with 22% of the HBCU population. Any within-group results found for highly nontraditional students should be attributed to HBCU students only. Given the fairly even distribution of nontraditional students across the other two groups between schools, results are considered to be a representation of the type of school as well as the type of student status.

Based upon the results, there are differences between the HBCU and the PWI for different categories of nontraditional students. Consistent with literature supporting the HBCU environment, minimally nontraditional HBCU students reported significantly more faculty support and a higher academic self-concept, with a trend towards higher self-esteem when compared with minimally nontraditional PWI students. Although all three classifications of nontraditional students reported more role strain than traditional students, there were no differences reported among minimally nontraditional students between schools. There was, however, a difference for moderately nontraditional students. Moderately nontraditional PWI students reported significantly more role strain compared to their HBCU counterparts. And similar to minimally nontraditional students, moderately nontraditional HBCU students reported significantly higher self-esteem and academic self-concept. Overall, there is more variation in the degree to which a student is nontraditional within the HBCU population. For example, close to 10% of the HBCU participants met criteria for five of the seven nontraditional factors compared to .8% of the PWI population. These results indicate that there are overall differences between the HBCU and the PWI as well as differences between levels of nontraditional student status between schools.

Horn's (1996) study proposing the classification of nontraditional students with a categorical approach was designed to better understand how the nontraditional factors themselves affected persistence toward attainment of a degree and not as an examination of how the different types of nontraditional students perceive themselves and their academic environment. The factors under examination have not been examined using such a categorical approach, and therefore, interpreting why differences exist between

degrees of nontraditional status can only be based upon the existing literature for nontraditional students as a unitary group. Similarly, inferences cannot be made for why differences might exist between nontraditional categories between school types as there is also deficit in this area of study. For example, there is no literature to date to explain why there is a difference in the perception of faculty support between the HBCU and the PWI for minimally nontraditional students but not for moderately nontraditional students. The advantage of the current study is that it allows for the consideration that there is a difference within the student population for factors typically considered to be a benefit of the HBCU over the PWI, such as academic self-concept and perception of faculty support. The current study included the exploratory section to introduce this as a new area of examination within both nontraditional student research and for studies comparing HBCU and PWI differences.

Age and outliers. Several participants were excluded due to an age identified to be an outlier. For the overall purpose of the study, it was considered important to omit those participants to ensure that results were not skewed; however, it is important to note that those individuals were omitted for a factor considered to be defining of nontraditional classification. Therefore, it was also considered potentially problematic to have omitted several participants because of age. It was possible that inclusion of those individuals might impact results and help to clarify where differences existed between nontraditional groups. Because the question of differences between nontraditional groups was considered to be an exploratory question, those participants were included and the exploratory analyses were conducted again. The participants were distributed across nontraditional groups. Three participants were minimally nontraditional, one was

moderately nontraditional, and six were highly nontraditional. The distribution was somewhat surprising as it had been previously assumed that significantly increased age would increase the likelihood of possessing multiple nontraditional factors, yet three of the ten only possessed one nontraditional factor. Results comparing nontraditional groups between schools were not affected; however, comparisons across schools for the nontraditional groups did yield different results.

When the outliers were excluded, differences were found between groups for academic self-concept and role strain. When the outliers were included, additional within-group differences were detected for social support and faculty support, and a trend toward a significant difference was found for satisfaction with college experience. Highly nontraditional students perceived less social support than minimally and moderately nontraditional students, which may be an indication that members of their support structure do not relate to the difficulties of managing an academic role in addition to the many personal roles. Carney-Crompton and Tan (2002) reported that nontraditional students typically seek support from a child or spouse vs. friends, which may be counterproductive if the student role is straining the personal role (i.e., marital or parental).

Interestingly, highly nontraditional students perceived more faculty support than moderately nontraditional students. It may be the case that highly nontraditional students feel less supported by friends and family and turn to faculty, or that highly nontraditional students have to disclose personal information to faculty in order to get special accommodations to successfully matriculate through the college. Medved and Heisler (2002) reported that of seven possible reasons, child illness is the factor that best predicts

interacting with faculty. There was no difference between highly and minimally nontraditional students in terms of faculty support, yet minimally nontraditional students perceived more social support than highly nontraditional students. Further exploration of the basis for seeking support, both social and faculty support, is needed. The trend for satisfaction with college experience would indicate that highly nontraditional students are more satisfied than moderately nontraditional students, which would support assertions made by researchers that nontraditional students' perception of academic success or level of satisfaction is different than that of traditional students (Chao & Good, 2004; Kinsella, 1998; San Miguel Bauman et al., 2004). This may be in part due to a more positive perception of faculty support or a reflection of differing priorities.

Implications for Application of Results

The current study had two main goals: replicating previous findings differentiating HBCUs from PWIs and exploring how traditional vs. nontraditional student status might impact results. The implications of the findings are useful contributions to both bodies of research (e.g., school type and student status), as well as for university faculty and staff that strive to promote and maintain enrollment and meet the ever-changing needs of college populations. This study helped to shed light on what nontraditional populations might look like at these two settings, how they might be similar and how they might differ.

As indicated in previous studies, there do seem to be advantages for some African Americans to choose an HBCU over a PWI. HBCU students reported significantly higher self-esteem, faculty support, and academic self-concept. The lack of findings for social support, self-efficacy, role strain, and satisfaction with college experience may be a

positive indication that there might not be as many differences as there were once reported by researchers. The additional component of comparison based upon student status helped to illustrate which populations were being impacted by the differences between college environments. This was an important addition as some variables were not found to differ between the PWI and the HBCU, but were found to differ between the schools when nontraditional status was considered, such as role strain. These findings have an important implication for researchers interested in HBCU vs. PWI differences as it may be more accurate to consider student type when making inferences for the differences that exist between the school types. For example, perception of faculty support is typically higher within HBCU populations when compared to PWI populations, but within nontraditional students, this was only found to be true for minimally nontraditional students.

The PWI population had less variation than the HBCU population in the degree to which the students were considered nontraditional. There were significantly more highly nontraditional students with the HBCU population. More research is needed to understand why the HBCU environment has a higher concentration of highly nontraditional students and if efforts are in place to specifically attract this type of students. It may be helpful for PWI faculty and administration to view nontraditional status as existing in degrees so that efforts can be made to support those students that are highly nontraditional.

The literature reflecting nontraditional students has historically treated traditional and nontraditional students as dichotomous categories. Findings indicate that there are within-group differences for nontraditional students. Academic self-concept and role

strain were found to be variables that differed between categories of nontraditional status. When the students identified as outliers were again included, the additional variables of social support and faculty support were also found to be significantly different between categories of nontraditional students. The examination of within-group differences indicates some nontraditional students are more vulnerable or more robust than others. For example, all nontraditional students experience more role strain than traditional students, but moderately and highly nontraditional students report significantly higher levels and may be more at risk for depression and anxiety (Carney-Crompton & Tan, 2002; Gary, Kling, & Dodd, 2004). Of the nontraditional students, only highly nontraditional students have a significantly higher academic self-concept than traditional students, meaning that minimally or moderately nontraditional students may require more reassurance academically.

Limitations and Future Research

Generalizability of the results should be done with consideration for geographic location and racial composition of the school. The schools used for the current study were located in an urban city in the southeast, and were within 10 miles of each other. It is expected that making comparisons between rural schools could affect results. It is also important to note that despite a White majority, there was a significant minority presence within the PWI used for this study. There are PWIs that have less than 5% minority enrollment, which could be experienced very differently for an African American student compared to a PWI that has 20-30% minority enrollment.

Eighty-two percent of the sample was female, which raises the question of whether or not the results should be considered reflective of males. Other studies have

made inferences between HBCUs and PWIs based upon samples with similar gender disparities without consideration for how the difference in gender might impact results. For example, Phelps et al. (2001) reported their sample to be 85% female, Negga et al. (2007) reported an 80% female sample, and Harper et al. (2004) reported a 79% female sample in a study of 12 HBCUs. The high concentration of females in the study of HBCU is not surprising given that the NCES (2002) reported that women comprise two-thirds of the HBCU population. It is possible, however, that males experience some of the variables under review in the current study, such as single parenthood and role strain, differently than females. More research is needed to better understand how these variables are experienced by gender and if results from a significantly greater female sample can be generalized to males.

The use of multiple pathways illustrated that there are differences within the nontraditional group based upon the degree to which the student is nontraditional. Differentiating between categories of nontraditional status was viewed as an advantage of the study; however, it may be the case that there are further differences within each level to explore. Classification was based upon the total number of nontraditional factors the student possessed, but there might be a difference in the degree of subjective psychological effects produced by that factor. The assumption was made that differences would emerge depending on the degree to which a student is nontraditional, but it must be noted that perception of these factors is subjective. For example, if a student meets only one criterion and is therefore classified as nontraditional, there might be a difference between that student who is minimally nontraditional because he or she is a single parent and the minimally nontraditional student that is enrolled part-time in school. Further

exploration of differences between nontraditional factors, between nontraditional groups, and the impact of the nontraditional factors on a student's perception of college experience and academic ability is needed.

Classifying students via different pathways was considered to be important for fully understanding the differences within the nontraditional group; however, the multiple pathways resulted in an inability at times to carry out certain analyses. For example, analysis of differences between traditional and nontraditional students between the PWI and the HBCU using the most conservative pathway, status as a definition (i.e., age) resulted in too few nontraditional students at the PWI. This has an important implication for how the definition of nontraditional student used might impact research the identification of populations in need within the total college population. Given that so many of the participants changed status groups when the new status definition (i.e., meeting any one of Horn's seven criteria) was used might reflect age as being a too conservative estimate of nontraditional status. For this reason, approaching research with a categorical system appears to be the best solution for accurately identifying and understanding differences between traditional and nontraditional students.

The perception of ability, support, and satisfaction was considered to be the primary focus of the study; however, it may be the case that students perceive benefits when in fact performance would not support reported success. Therefore, the omission of a measure of academic performance could be considered a limitation of the current study. A comparison of PWI vs. HBCU student performance may have further illuminated the accuracy of the student's evaluation of the college experience.

Measurement of internal evaluations, such as self-esteem, self-efficacy, perception of support, and satisfaction are easily confounded by a variety of factors. In further addressing the variables under examination in the current study, a long-term assessment of changes in these variables throughout each of the years of university study would be recommended. It may be the case that these factors are perceived differently at different academic levels, which is an important consideration. It is also possible that as a student matriculates, he or she may shift from traditional status to nontraditional status, or become more nontraditional. It is also unknown to what degree the college environment actually affects these factors, or if life experience prior to entering college was more of a factor in why students pick the PWI environment over the HBCU and vice versa.

Results would indicate that age as a factor should be further addressed. The inclusion of these ten participants changed the results for social and faculty support, and marginally for satisfaction with college experience. The participants were distributed across the nontraditional groups, which indicates that the results are not necessarily a function of nontraditional classification and perhaps associated with age or a function of the type of school. In the examination of nontraditional students, addressing age as an outlier or approaching age as a covariate is also a useful debate. It may be the case that significantly older students differ from younger nontraditional students between nontraditional categories.

Little is known about the differences that may exist between the categories of nontraditional groups, which is an important area for future study. Although conjectures were made, it is difficult to understand if results of the current study are the function of

the type of school or the status of the student as there are no other studies of its kind. Further examination of these two areas of research is important. For example, little is known as to why significantly more highly nontraditional students attended the HBCU and more traditional students attended the PWI, when both are four year urban institutions. More research is needed to better understand how the two factors, choice of college institution and student status, interact. This area of research will help administrators and faculty retain students, particularly nontraditional students, who are at risk for premature attrition.

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APPENDIX AIRB/COSHSC #: (00809013)**Project COLLEGE EXPERIENCE**

Abstract: This is an external online study. Your answers are anonymous. When you sign up, immediately click “View Website” to begin the survey.

Description: This online survey consists of questions that ask about day to day behaviors, beliefs, and feelings, as well as satisfaction with your college experience. All responses are anonymous.

Participants: Students of Old Dominion University and Norfolk State University who are 18 years of age or older.

Time Requirements: The survey takes about 30 to 45 minutes.

Web Study: This is an online study. Participants are not given the URL until after they sign up.

Research Participation Credits: In the event that you are eligible, you will receive 1 Psychology Department research credit for your participation in this study.

Researchers' Contact Information:

**Primary Investigator
& Faculty Supervisor** Robin Lewis, Ph.D., Professor
Department of Psychology, ODU
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Student Investigator Courtney Podesta, M.S. (Psy.D. student)
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APPENDIX B**DEMOGRAPHIC QUESTIONNAIRE**

The following questions are designed to better understand your college experience. Please answer the following questions to the best of your knowledge. Think only about the university you are CURRENTLY attending when answering the questions. Your answers will remain anonymous and cannot be connected to you.

1. How old are you? _____
2. What is your gender?
 - a. Male
 - b. Female
3. What is the ethnicity you **most** identify with?
 - a. African American
 - b. Caucasian
 - c. American Indian or Alaska Native
 - d. Asian
 - e. Pacific Islander
 - f. Hispanic or Latino/a
 - g. Biracial
 - h. Other
4. Did you graduate from high school with a:
 - a. Diploma
 - b. G.E.D.
 - c. Other

5. After high school, did you:
 - a. I went directly on to college.
 - b. I took at least one year off before enrolling in college.
6. If you took time off between high school and college (or a period of time off after you enrolled), how much time did you take?
 - a. No time, I went directly on to college after high school without ever taking a semester off (excluding summer break).
 - b. 6-11 months
 - c. 1-2 years
 - d. 3-4 years
 - e. 5-7 years
 - f. 7+ years
7. What is your enrollment status?
 - a. Full-time (i.e., at least 9 credits per semester)
 - b. Part-time (i.e., less than 9 credits per semester)
8. What year are you in school?
 - a. Freshman
 - b. Sophomore
 - c. Junior
 - d. Senior
 - e. Graduate Student
9. How many years have you been in pursuit of your current degree (round to the nearest whole number)? _____

10. I am a student at:

- a. Norfolk State University
- b. Old Dominion University

11. What do you estimate to be your family's (i.e., head of household, parent(s))
income when you applied to this university?

- a. Less than \$25,000 per year
- b. Between \$25,000 and \$35,000
- c. Between \$35,000 and \$45,000
- d. Between \$45,000 and \$55,000
- e. Between \$55,000 and \$65,000
- f. Above \$65,000

12. The majority of my classes are:

- a. Internet/web-based classes that I can take at home
- b. On the main campus and in a classroom
- c. At an auxiliary campus such as the Virginia Beach Higher Education Center

13. Are you responsible for your tuition?

- a. Yes, I pay my tuition with my own income
- b. Yes, I pay my own tuition solely with loans and/or financial aid.
- c. Yes, I pay part of my own tuition and also receive loans, partial scholarship, and/or financial aid
- d. I pay part of my tuition but someone (i.e., parent, significant other, relative) helps pay the rest.

- e. My tuition is paid for by someone else (i.e., parent, significant other, relative)
- f. My tuition is entirely covered by scholarship.
- g. My tuition is paid in part of entirely with funds from a GI Bill.

14. Do you receive loans to attend college?

- a. Yes
- b. No

15. How often do you work?

- a. I do not currently have a job
- b. 0-10 hours per week
- c. 11-20 hours per week
- d. 21-34 hours per week
- e. 35+ hours a week

16. Are you responsible for your own living expenses (i.e., rent, food, bills)

- a. Yes
- b. No
- c. I pay for some of my bills, but not all of them.

17. How much do you **expect** to earn with your first job after graduation?

- a. \$20,000-30,000
- b. \$31,000-35,000
- c. \$36,000-40,000
- d. \$41,000-50,000
- e. \$51,000+

18. Do you finically support other members of your household or family?
- a. Yes
 - b. No
19. How many children live in your household to which you contribute financially and/or emotionally to their care (enter 0 if you do not have any dependents)?
- _____
20. What is your relationship status?
- a. Single
 - b. Married
 - c. Divorced/Separated
 - d. Widowed
 - e. Living with partner
21. What was the racial composition of your high school?
- a. The majority of students were of a different race
 - b. The majority of students were of the same race
 - c. My school was racially diverse and there were large groups of many different races with no one race being the obvious majority
22. Did you attend:
- a. Only public high school
 - b. Only private high school
 - c. I attended both private and public high schools

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APPENDIX E**MEASURE OF ROLE STRAIN**

Please respond to each question using the key below. These questions are designed to better understand what it is like for students who either work, support family members, or both. If you do not have a job or family members that you support and feel the questions do not relate to your current situation, mark (C) Neutral.

(A) Never (B) Almost Never (C) Neutral (D) Often (E) Very Often

1. Because of my job and/or family, I go to school tired.
2. My job and/or family demands and responsibilities interfere with my school work.
3. I spend less time studying and doing homework because of my job and/or family.
4. My job and/or family responsibilities takes up time I'd rather spend at school or on school work.
5. When I am at school, I spend a lot of time thinking about my job and/or family.

APPENDIX F**ROSENBERG'S SELF-ESTEEM SCALE**

Please respond to each question using the key below:

(A) Strongly Agree (B) Agree (C) Disagree (D) Strongly Disagree

1. I feel that I am a person of worth, at least on an equal plane with others.
2. I feel that I have a number of good qualities.
3. All in all, I am inclined to feel that I am a failure.
4. I am able to do things as well as most other people.
5. I feel that I do not have much to be proud of.
6. I take a positive attitude toward myself.
7. On the whole, I am satisfied with myself.
8. I wish I could have more respect for myself.
9. I certainly feel useless at times.
10. At times, I think I am no good at all.

APPENDIX G

SATISFACTION WITH COLLEGE EXPERIENCE

The following questions relate to the experience you are having in your CURRENT school and not experiences you might have had at other schools. Please respond to each question using the key below:

Please respond to each question using the key below:

(A) Strongly Disagree (B) Disagree (C) Neutral (D) Agree (E) Strongly Agree

1. Overall, I am satisfied with my college experience.
2. I feel that I am getting what I expected from my college experience.
3. I feel that I am being well prepared and will be able to get a job in my field after college.
4. I feel that I am able to connect with others on campus and in class.
5. Looking back, I wish I had chosen a different school.
6. My college experience matches the expectations I had for college.
7. I feel that there are many people like me on campus with similar life situations.
8. I have made many social connections while I have been enrolled in school.
9. This school has plenty of opportunities for activities that I am interested in.
10. This is the school I really wanted to attend and I considered it to be my first choice.
11. I feel that I am part of the campus community and that I belong here.
12. I feel satisfied with the resources (i.e., computers, library facilities, career services, counseling center) made available to me as a student.
13. I am satisfied that I made the right choice to attend this school.
14. I feel that I can be totally myself on this campus.

(A) Strongly Disagree (B) Disagree (C) Neutral (D) Agree (E) Strongly Agree

15. I can be just as successful as the other students enrolled here.

16. I feel that faculty is available for me when I need extra assistance.

17. I find it hard to connect with others at this school.

APPENDIX H

PERCEPTION OF FACULTY SUPPORT

The following questions relate to relationships you have at your CURRENT school and not those from other schools you might have attended. Please answer the following questions using the key below:

Please answer the following questions using the key below:

(A) Strongly Disagree (B) Disagree (C) Neutral (D) Agree (E) Strongly Agree

1. Faculty value my contribution to the educational program in which I am enrolled.
2. Faculty fail to appreciate any extra effort from me.
3. Faculty would ignore any complaint from me.
4. Faculty really cares about my well-being.
5. Even if I did the best job possible, faculty would fail to notice.
6. Faculty care about my general satisfaction with my education.
7. Faculty show very little concern for me.
8. Faculty takes pride in my accomplishments in school.

APPENDIX I**MEASURE OF SELF-EFFICACY**

Listed below are a number of statements concerning thoughts or feelings you might have about yourself or the world around you. Rate each item as it pertains to you personally. Base your ratings on how you feel most of the time. Use the following scale to rate each statement:

(A) Strongly Disagree (B) Disagree (C) Neutral (D) Agree (E) Strongly Agree

1. Good luck is more important than hard work for success.
2. Every time I try to get ahead, something or somebody stops me.
3. Planning only makes a person unhappy since plans hardly ever work out anyway.
4. People who accept their condition in life are happier than those who try to change things.

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APPENDIX K**USE OF CAMPUS SERVICES**

Please respond to the following questions regarding your use and level of satisfaction with the following campus services at your CURRENT school.

1. Since I have been enrolled in this university, I have utilized the following services (check all that apply):

- Academic advising
- Financial Aid Office
- Counseling Center
- Writing Lab and/or Tutoring
- Athletic Facilities
- Career Services
- Distance Learning/Web-based Classroom
- Library
- Student Health Center
- Student Health Insurance
- GI Bill (I am a veteran)

Please rate your satisfaction with the following services using the scale: **(A) Very Satisfied (B) Satisfied (C) Dissatisfied (D) Very Dissatisfied**. If you have not used the services please mark **(E) I have not used this service**.

2. How satisfied have you been with academic advising?
3. How satisfied have you been with financial aid services?
4. How satisfied have you been with counseling center services?
5. How satisfied have you been with writing lab and/or tutoring services?
6. How satisfied have you been with the athletic facilities?
7. How satisfied have you been with career services?
8. How satisfied have you been with distance learning/web-based classrooms?
9. How satisfied have you been with library services?
10. How satisfied have you been with student health services?
11. How satisfied have you been with student health insurance?
12. How satisfied have you been with services associated with the GI Bill?

APPENDIX L

INTRODUCTION TO STUDY

Introduction to Study

Students have varying experiences in college. Some start right after high school while others wait or take time off at some point. Some people care for family members, get married, have children, and/or work either part-time or full-time while others remain single or choose not to work during their college years. Some students have to take out loans, receive grants, or financial aid, while others receive scholarships or have their tuition paid for by family members or pay out of pocket. These are examples of factors that could impact the type of experience you might be having while enrolled in school. This study is designed to better understand your college experience, especially given the changing nature of today's college campus and the modern college student. As researchers, better understanding your college experience can help us to better meet your needs as students.

This study is anonymous and your participation is totally voluntary. You may cease participation at any point with no penalty.

Who can participate?

In order to participate, you must be at least 18 years old and currently enrolled in college.

Compensation

This study involves collecting data at both Old Dominion University and Norfolk State University; therefore, you will be compensated according to your University's policy or at the discretion of your course instructor.

Contact Information

If you would like more information about the survey materials and the results of the study, please contact the student researcher Courtney Podesta, M.S., at Courtney.Podesta@gmail.com You may also contact the faculty advisor to the project for Old Dominion University, Robin Lewis, Ph.D., at rlewis@odu.edu or Desideria Hacker, Ph.D., the faculty advisor for Norfolk State University at dshacker@nsu.edu.

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EDUCATION

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 Norfolk State University, and Old Dominion University
 Psy.D., expected 08/09
- 2003-05 **Old Dominion University**
 M.S., Experimental Psychology
- 1995-99 **James Madison University**
 B.S., Mass Communications

ADVANCED TRAINING

- PREDOCTORAL INTERN
 APA Accredited
 08/08 – 08/09 **Johns Hopkins University Counseling Center**
 Baltimore, Maryland
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 09/07-05/08 **The College of William and Mary Counseling Center**
 Williamsburg, Virginia

PRACTICA

- 03/07-08/07 **Atlantic Psychiatric Services**
 Virginia Beach, Virginia
- 01/07-05/07 **Old Dominion University Counseling Center**
 Norfolk, Virginia
- 08/06-12/06 **Open Campus Alternative High School**
 Virginia Beach, Virginia
- 01/06-08/06 **Hampton Newport News Community Service Board**
 Hampton, Virginia
- 09/05-12/05 **VAMC-Hampton**
 Hampton, Virginia

RESEARCH EXPERIENCE

- DISSERTATION *"A comparison of traditional and nontraditional students attending Historically Black or Predominantly White Institutions."*
 Chair: Desideria Hacker, Ph.D.