ANALYZING SELF-ESTEEM AS A MODERATOR OF THE RELATIONSHIP OF
PERCEIVED UNIVERSITY ENVIRONMENT AND ACADEMIC SELF-EFFICACY IN
AFRICAN AMERICAN COLLEGIATE STUDENTS

DISSERTATION

By

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A problem of growing concern to higher education administrators and educators is that while the number of minority students has increased, there is evidence in the literature that minority students, in particular African Americans, have much lower retention and graduation rates at predominantly White institutions, than their White counterparts (D’Augelli & Hershberger, 1993). According to the National Center for Education Statistics (NCES)(1998), African American students who ascertain a bachelor’s degree make up only 7.8% of all college graduates, while they comprise 13% of any given entering class.

This study will attempt to bridge the gap in research concerning the academic success of African American students in higher education, with particular focus on predominantly White institutions. Examining the relationship between university environment, self-esteem and academic self-efficacy will further the understanding of how such factors, or a combination of these factors, play a key role in an African American student’s perception of their ability to succeed in higher education.
Results of the present sample concur with the author’s hypothesis that university environment and cultural congruity are positive predictors of academic-self efficacy. Specifically at the large Midwestern university of study, African American students who found the university environment to be welcoming, and had a perception of cultural fit within the university had higher levels of academic self-efficacy.

Additionally, self-esteem was found to be a positive predictor of academic self-efficacy for the present sample, though a moderating effect was not present, as the author speculated.

Although lack of retention of students of color at predominantly White institutions cannot be contributed to university environment and cultural congruity alone, they have proven to be important factors in the success of African American students. A more extensive exploration into how these factors, as well as self-esteem, affect retention may prove to be beneficial in increasing the number of African American students who succeed in their journey of higher education.
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CHAPTER 1

INTRODUCTION

It is becoming apparent that the student population of most colleges and universities throughout the United States is becoming more culturally and ethnically diverse. A problem of growing concern to higher education administrators and educators is that while the number of minority students has increased, there is evidence in the literature that minority students, particularly African Americans, have much lower retention and graduation rates at predominantly White institutions than their White counterparts (D’Augelli & Hershberger, 1993). According to the National Center for Education Statistics (NCES) (1998), African American students who obtain a bachelor’s degree make up only 7.8% of all college graduates, while they comprise 13% of any given entering class. Arenson (2003) adds that the majority of the African American college graduates are women.

Many factors have been cited as contributing to the poor academic achievement and retention of minority students. Environmental factors, such as comfort level, the degree to which students feel they fit in with the university culture, and the
extent to which students feel the faculty is supportive of their academic goals have all been identified as playing a critical role in the success or failure of African American students at these predominantly White institutions (McClellan, Cogdal, Lease, & Londono-McConnell, 1996).

DeSousa and Kuh (1996) found that the more students were involved in peer-related activities, the more positive the effect on the students’ adjustment to higher education. However, African American students have reported that the environment at predominantly White institutions is more alienating than those at historically Black universities (Loo & Rolinson, 1986; Suen, 1983). African American students have articulated that making the adjustment to collegiate life requires more effort for them, specifically in regard to creating social and cultural networks within the larger university community (Constantine & Watt, 2002). As a result of these feelings of being outsiders, African American students are less likely to get involved in social organizations on campus.

It is also important to note that Watson and Kuh (1996) found that African Americans perceive less support and encouragement at majority-dominated institutions, which as previously mentioned, plays a critical role in the success of students of color. Such hostile environments that leave African American students feeling isolated and unsupported by faculty can
ultimately have an adverse effect on their academic self-efficacy.

In addition to the aforementioned environmental factors of some predominantly White institutions, an individual factor, self-efficacy, has been shown to also have an impact on academic success. Self-efficacy can be defined as an individual’s perception of their ability to successfully complete a task. Hackett and Betz (1989), as well as many others, hypothesized that efficacy expectations are related to persistence and success in college majors and career choices (Lent, Brown, & Larkin, 1984; O’Brien, Brown, & Lent, 1989). Bandura (1986) found that self-efficacy can influence one’s level of performance, effort, persistence, and reaction to stress. Bandura also observed that there are certain environments that do not allow students, regardless of their self-efficacy, to perform successfully. In particular, environments that are seen as hostile and non-supportive can negatively affect an individual’s level of academic self-efficacy.

Additionally, researchers have studied the relationship of self-esteem and self-efficacy in an attempt to better understand their contributions to academic achievement. Lane, Lane and Kyprianou (2004) report that there is a positive correlation between self-esteem and self-efficacy, such that individuals who have a positive sense of self are more likely to have a positive appraisal of their ability to successfully complete given tasks.
Steele (1992) studied this relationship among African-American students and found that an inverse relationship existed, such that individuals with increased levels of self-esteem exhibited low levels of academic self-efficacy. Interestingly, Steele found that this discrepancy, which he termed the *disidentification hypothesis*, can be seen as early as the eighth grade, specifically among African American males. Steele’s hypothesis pronounces that African American students begin a process where they detach self-esteem from self-efficacy as a protective factor. Hughes and Demo (1989) observed that though social discrimination has no influence on self-esteem, where African American students are concerned, perceived inequality and prejudice do influence efficacy in that these students feel deprived of opportunities that would allow them to feel successful within the academy.

A considerable amount of research has examined the importance of the university environment and the effects of positive academic self-efficacy and self-esteem on academic achievement. Unfortunately, as Hackett and Byars (1996) point out, there is a lack of research that attempts to study the relationship among the university environment, ones’ level of academic self-efficacy at that university, and persistence specifically where African American students are concerned. Consequently, it is necessary to see further research investigating the relationship between university environment and
academic self-efficacy in African American students, specifically at predominantly White institutions. The present study will investigate whether a relationship exists between the perception of a university’s environment and students’ level of academic self-efficacy, and whether self-esteem moderates this relationship.

More specifically, this study will attempt to bridge the gap in this research concerning the academic success of African American students in higher education, with particular focus on predominantly White institutions. Examining the relationship between university environment, academic self-efficacy, and self-esteem will further the understanding of how such factors, or a combination of these factors, play a key role in an African American student’s perception of their ability to succeed in higher education.
CHAPTER 2

LITERATURE REVIEW

Allen (1988) reports that while some African American students are doing well academically at predominantly White institutions, there is a discernible decrease in these students’ performance as they adjust to college-level work, far beyond what is expected. As previously mentioned, there are several factors credited as antecedents for the diminished academic performance of African American students. The following review presents an in-depth, but non-exhaustive, look into the literature on several of these constructs, namely university environment, academic self-efficacy, and self-esteem.

2.1 University Environment

Research has indicated that because the university environment can be seen as a possible context for one’s social support system, it can influence students’ attitudes about persistence in higher education (Cardinal, 1981; Gottlieb, 1981; Mallinckrodt, 1988). Though support from family and friends is vital for academic perseverance, students need support from university faculty, staff, and the administration as well
Mallinckrodt (1988) found a significant correlation between persistence in higher education and the extent to which students felt university personnel were there to listen and help. Additionally, there is evidence that student’s perception of the campus environment is correlated with their academic achievement in higher education (Astin, 1993; Pascarella & Terenzini, 1991).

2.1.1. Isolation/Lack of Support

Ponterotto (1990) reviewed data from the American Council on Education, The United States Department of Education, and the Commission on Minority Participation in Education and American Life as a means of ascertaining information about racial/ethnic students in higher education. The demographic trends, college enrollment, and attrition rates indicated a high dropout rate for African American students. Ponterotto’s research pointed out that racial/ethnic students were more likely to report feelings of isolation due to the unreceptive environment on many predominantly White campuses.

Isolation results from being one of few racial/ethnic students on campus and being faced with constant questions about one’s ethnic identity. Students who find themselves in this situation feel caught in the middle and forced to make a choice between identifying with their own cultural heritage and that of the conventional White culture (Fiske, 1988). Defreece (1987) characterized these feelings of isolation and cultural alienation
as "nonsense." Students are aware that the unwelcoming environment at these institutions of higher learning has everything to do with their cultural differences. Oftentimes this environment leaves African American students with feelings of inadequacy, which can lead to substandard academic performance.

While seclusion has been shown to have a negative impact on students of color, research does indicate that environments that encompass diversity have been shown to have positive effects on students of color. African American students who are able to develop relationships with university faculty, or mentors, are more likely to have higher academic development (Hackett & Byars, 1996). Specifically, having a mentor who has successfully accomplished scholastic achievement as well as racially similar peers who are currently persevering in their journey through higher education seem to create an increased sense of efficacy or one's own ability to successfully navigate through the course of higher education (Cervantes, 1988).

A key component to creating an environment that is perceived as friendly, inviting, and helpful must involve faculty who are willing to assist students of color in their academic, social, and personal development (Wright, 1987). The opportunity to meet with instructors, both inside and outside the classroom and faculty referrals to individuals and programs, such as community organizations, tutoring services, and student organizations, are simple ways faculty can facilitate the
integration of African American students to the university. Involvement in peer-related activities has been shown to have a positive effect on African American students’ personal and educational development (DeSousa and Kuh, 1996).

2.1.2. Racism

Aside from the unsupportive nature of some predominantly White campuses, research shows that African American students’ experience of racism can mediate the relationship between their academic potential and their actual performance (Mallinckrodt, 1988). Some studies report as many as 43% of African American students have been harassed by other undergraduate students or university faculty, staff, and administrators (D’Augelli & Hershberger, 1993). Evidence suggests that students of color attending predominantly White colleges experience significantly higher levels of overt racism than do their White counterparts, which has been shown to relate to increased feelings of social isolation, stress, and personal dissatisfaction (Feagin, Vera, and Imani, 1996).

A study conducted by Phillips Morrow, Burris-Kitchen, and Der-Karabetian (2000) held eight focus groups consisting of students of color in an attempt to assess campus climate and the cultural needs of these students. What they consistently found was that African Americans, more so than Latino Americans and European Americans, were dissatisfied with racial harmony (the integration of culturally diverse students) on campus. On
average, African American students reported experiencing more prejudice on campus than did Latino and European Americans. Almost one-third of the African Americans involved in these discussions viewed faculty as either somewhat insensitive or not sensitive at all to issues of multiculturalism and diversity. One of the African American women stated:

“Our faculty and staff need an awareness program about other cultures such as African American and Latino, to know what is sensitive to the students” (Phillips Morrow et al., 2000, p.596).

Not surprisingly, studies show that African Americans who believe their faculty are racist have been shown to have an overall dissatisfaction with their academic experience at their college or university, while students who perceive faculty and teaching associates as fair tended to have an overall satisfaction with their university (Helm, Sedlacek, & Prieto, 1998).

2.1.3. Cultural Congruity/Incongruity

Cultural congruity is defined as the fit between students’ personal values and their environment, in this case campus climate. (Gloria & Robinson Kurpius, 1996). Individuals attending a university whose mainstream culture is different from their own may experience cultural incongruity due to having different values, beliefs, and behavioral expectations (Fiske, 1988). It tends to be the case that beliefs, behaviors, and values that are different from the campus climate norms are often considered
abnormal and may cause students of color to find themselves feeling uncomfortable or incongruent with their environment (Gloria & Robinson Kurpius, 1996). These students face a balancing act, where they are forced to make a decision about staying true to their cultural heritage or changing their values and behaviors as a means of being accepted by the dominant White culture. According to Smith (1985), this struggle of balance has a negative impact on racial/ethnic students.

Ancis, Sedlacek, and Mohr (2000) conducted a study looking at student perceptions of campus cultural climate. Results revealed that African American students felt significant pressure to conform to racial and ethnic stereotypes when in academic settings while minimizing racial characteristics like style of dress and use of slang. In the aforementioned study that Phillips Morrow et al. undertook, an African American male subject responded:

“Blacks are judged as rowdy, so we have to be on our best behavior at all times. Black males have to change who they are to be accepted” (p. 594).

According to Gloria and Robinson Kurpius (1996) if students perceived the environment as being more culturally congruent, they were likely to make more positive academic decisions.
2.1.4. Summary of Cultural Role in Higher Education

An overwhelming amount of literature supports the notion that the university environment plays a critical role in the collegiate experience of African American students. Research has shown that environments seen as racist and discriminatory leave students of color feeling isolated, not only academically, but socially as well. These inhospitable environments cause students to question their values, beliefs, and overall identity.

It is noteworthy that the converse of this relationship has also been documented. MacKay and Kuh (1994) found that environments that were actively supportive and nondiscriminatory were associated with higher satisfaction in college, better adjustment, and persistence through graduation particularly where students of color were concerned. D’Augelli and Hershberger (1993) also found a significant relationship between university environment and well-being where African Americans are concerned, such that the better they felt about the university, the higher they rated their overall well-being. Bandura (1989) also notes that students who experience successful and positive interactions within the university are more likely to participate in supplementary university activities. Such an increase in involvement within the university is likely to shift students’ attitudes toward the university in a more positive direction and
increase students’ self-efficacy and beliefs that they can successfully navigate the journey of higher education.

2.2 Self-Efficacy

Bandura (1977) proposed a theoretical framework that helps to explain and predict behavioral change. Birthed out of Bandura’s Social Learning Theory, he suggested that behavioral change can be achieved by various methods mediated by a cognitive method he referred to as self-efficacy expectations. He defined self-efficacy as “people’s judgments of their capabilities to organize and execute courses of action required to attain designated types of performances” (Bandura, 1986, p.391). Self-efficacy has been shown to predict such diverse outcomes as social skills, pain tolerance, athletic performance, career choices, and most importantly for this study, academic achievements (Schunk, 1991).

Bandura (1977) hypothesized that self-efficacy affects whether someone will attempt or avoid a task, the amount of effort an individual will exert on a given task, and the amount of time an individual will persist in the face of obstacles while completing a given task. People develop efficacy by reviewing performance accomplishments, observational experiences, emotional arousal, and verbal persuasion, also referred to as the antecedents of self-efficacy.

Additionally, an individuals’ experience of the aforementioned antecedents will help to enhance or reduce their
perceived level of self-efficacy in a particular domain. This appraisal of efficacy is based on the process of individual persons weighing and combining the contribution of such personal and situational factors as perceived ability, difficulty of task, amount of external assistance received, number of successes or failures, and their perceived similarity to successful models within a particular domain (Schunk, 1991).

Within this concept of self-efficacy, Bandura (1986) posits that individuals have a self-system, or self-referent thought, which allows them to exert some control over their thoughts, feelings, and actions. Self-referent thought serves as a mediator between knowledge and action. Keeping this in mind, knowledge and prior accomplishments have been shown to be poor predictors of future achievement, because they do not take into consideration the beliefs individuals hold about their abilities and about the payoffs they associate with their academic efforts. This tends to powerfully influence the actions of these individuals (Pajares, 1996).

2.2.1. Academic Self-Efficacy

Academic self-efficacy can be defined as the amount of confidence students have in their ability to successfully perform a variety of college-related tasks, such as taking class notes, researching term papers, participating in class discussions, and making new friends while in college (Solberg, O’Brien, Villareal, Kennel & Davis, 1993). Zimmerman (1995) found that academic self-
efficacy influenced achievement directly through evoking change in the amount of effort expended and indirectly by raising students’ grade goals. Findings suggest that students who believe themselves capable of successfully performing academically related tasks tend to have greater academic performances, such as final grades, in-class assignments, quizzes, exams, essays and reports (Pintrich & DeGroot, 1990). Pajares and Kranzler (1994) found that the direct effect of self-efficacy on performance was as strong as the effect of actual ability, which supports the idea that, at the very least, it is important to consider a students’ perception of their ability to succeed in the realm of academia.

Bandura (1986) notes that for optimal functioning, it is important to have a reasonably accurate appraisal of one’s efficacy. Interestingly, research findings suggest that most students overestimate their academic capabilities (Hackett & Betz, 1989; Pajares & Miller, 1994). While inaccurate levels of academic self-efficacy have been found to be maladaptive, improving an individual’s efficacy to a level slightly above what they can actually accomplish may serve to increase the amount of effort that individual exercises in the attainment of a goal or execution of a specific behavior.

2.2.2. Academic Self-Efficacy in African American Students

When it comes to issues of general self-esteem, which can be defined as an individual’s perceived sense of worth (Schunk,
1991), and appraisals of attractiveness and popularity, African American students consistently score higher than their White counterparts. Unfortunately, when it comes to issues of self-efficacy in academically related area, these same students rate themselves lower than Whites (Hare, 1985). Hackett, Betz, Casas, and Rocha-Singh (1992) found that although race did not predict college performance, it did influence self-efficacy, with students of color exhibiting lower expectations of success in the realm of academia. Even when measured ability matched that of White counterparts, African American students still tended to have lower levels of academic self-efficacy.

Okech and Harrington (2002) looked specifically at the relationship between Black consciousness and academic self-efficacy. They defined Black consciousness as an individual’s beliefs or attitudes about his or herself, own race, and the White majority in relation to their Black experience. The authors found that African American students who were rated as having adaptive attitudes towards Blackness and White culture, or the highest level of Black consciousness, were found to have higher levels of academic self-efficacy than those reporting lower levels of Black consciousness. This relationship supports Butler’s (1975) proposition that positive role modeling for African American students helps them abandon the internalization of White stereotypes, some of which imply that the high academic performance of students of color is considered “acting White.”
Mayo and Christenfeld (1999) posit that through exposure to peers and professional role models, students of color might come to understand that they, as well as their cultural group, are not inferior to others.

2.2.3. Summary of Self-Efficacy Research and Literature

It is without question that research supports the notion that perceived levels of academic self-efficacy can influence performance (Vrugt, Langereis, & Hoogstraten, 1997). Individuals with high levels of academic self-efficacy tend to pursue more challenging goals, seek innovative solutions, persever in the face of difficult tasks, and perform to the best of their capabilities. Such efforts are likely to lead individuals to the expansion of actual ability and subsequent goal achievement (Tuckman & Sexton, 1992). Okech and Harrington (2002) also raise awareness to the significant relationship between Black consciousness and academic self-efficacy. Such exploration suggests that in order to enhance the academic self-efficacy of African American students, cultural variables must be considered, purposely focusing on the academic achievement and potential of these students and away from negative stereotypes.

2.3 Self-Esteem

Research on ‘the self’ has a long history in the realm of psychology (Andrews, 1998). A central conversation has been the extent to which boosting students’ self esteem was the necessary ingredient to increasing academic achievement (Mruk, 1999). Self-
Esteem can be defined as an individual’s self-worth, or the extent to which individuals value themselves. When defining self-esteem, it is important to understand that the construct isn’t unitary (Harter, 1990; Tracey, 2002). It is possible for individuals to have high opinions of their abilities in some realms (e.g., music) and a low opinion of their abilities in other realms (e.g. academia) (Elbaum & Vaughn, 2001).

2.3.1. Origins of Self-Esteem

In a society built on mass media and commercialism, it should bring no surprise that social context is extremely important in shaping a child’s sense of self (Humphrey, 2004). Elmer (2001) has suggested that the most prominent ‘significant others’ that influence global esteem are a child’s parents. The amount of unconditional positive regard they receive, or lack thereof, is instrumental in shaping how a child sees him or herself. Humphrey (2004) posits that teachers and peers are also important in shaping esteem, specifically when it comes to the context of academia. Teachers are often seen by children as authority figures whose opinions are valued, and as such their feedback helps sculpt a child’s understanding of his or her worth. This is especially salient for African American males as they perceive that teachers have lower academic expectations where they are concerned ( Arenson, 2003). Peers are influential in two ways. First, they are seen as a comparison group (Harter, 1999), so a student might undergo self-evaluation based on how he
or she measures up to his or her classmates. Secondly, peers exhibit what Harter refers to as “cultural values,” or standards of cultural expectations, which feed into a child’s sense of how well he or she is fitting into society.

2.3.2. Self-Esteem Among African American Students

Studies completed over the past few decades have consistently found that African American students generally have equal or higher levels of self-esteem than White students (Laar, 2000). While self-reported levels of self-esteem remain high, the American Council on Education (1996) reported attrition rates as high as 62% among African American college students. These statistics beg the question be asked, how one can have increased levels of self-esteem in the face of what appears to be a diminished capacity to succeed in higher education. Weiner (1986) posits that African American students, in particular, are more likely to attribute negative academic outcomes to external causes, which serves as a protective factor where self-esteem is concerned. As such, these students, even in the midst of attaining low standardized test scores and grade point averages, still maintain high levels of worth and positive feelings about themselves and their overall abilities.

Steele (1992) labeled this process of detaching academic performance from self-esteem the “disidentification hypothesis” and found that this protection against personal failure was more prevalent for African American males than females.
Disidentification is proposed to happen in two stages: situational stereotype threat and disengagement (Steele & Aronson, 1995). The first step comes in the form of initial fears about confirming to negative academic ability stereotypes experienced by these students of color. These overwhelming fears lead to the practice of disengaging academically related successes and failures from personal ability and worth.

2.3.3. Summary of Self-Esteem

While researches agree that African American students report similar or higher levels of self-esteem than their White counterparts, the National Center for Educational Statistics (1995) reports a wider gap between African American and White students when it comes to academic achievement. Laar (2000) reports that when African American students start college, many believe they can overcome societal barriers, but they become increasingly pessimistic as they progress through higher education. If in fact they did not start to disengage the coupling of esteem and efficacy in academia before college, it is a process that students of color are more likely to go through than White collegiate students. Unfortunately, as students of color go through this process of disengaging, Graham, Taylor, and Hudley (1998) propose that these students, especially African American males, may be seen by university faculty as disinterested, non-compliant, and apathetic. This has the potential to create a vicious cycle whereby a student enters
academia with a high level of esteem and encounters an unsupportive environment. Through negative feedback, or lack of feedback, the student begins to doubt his or her ability to master the academy and begins to disengage esteem from efficacy as a self-protective factor. This disengagement may be seen by faculty and staff as lethargy, which has the potential to create additional negative feedback for this student.

2.4 Hypotheses of Study

The purpose of this study is to look at potential factors that have been cited as playing an integral part in the success of African American students in higher education. In examining the relationship between university environment, cultural congruity, and academic self-efficacy, it was hypothesized that individuals who report higher levels of comfort with the university environment and those who perceive a greater cultural fit between their personal values and beliefs and that of the university will report higher levels of academic self-efficacy. The opposite of this relationship is also hypothesized to be true; thus, individuals who report low levels of cultural congruity or satisfaction with the university environment will report lower levels of ability to successfully complete college-related tasks. The author also hypothesized that self-esteem will act as a moderator to the relationship between university environment and academic self-efficacy, such that high levels of self-esteem will buffer the effects of university environment.
Taking Steele’s (1992) “Disintegration Hypothesis” into consideration, which states that from an early age African American men separate self-esteem and academic ability, it is proposed that gender will affect self esteem’s moderation of the relationship between university environment and academic self efficacy. Specifically, African American women with high levels of self-esteem will be more likely to have increased academic self-efficacy regardless of their perception of university environment. For African American men it is proposed that high levels of self-esteem will have less of an impact on the relationship between their perception of university climate and academic self-efficacy.
Hypothesis 1: University environment and cultural congruity predict academic self-efficacy.
Hypothesis 2: Self-esteem moderates the relationship between university environment and academic self-efficacy.
Hypothesis 3: Gender effects self esteem as a moderator. The effect of self-esteem as a moderator will be more pronounced for African American females than males.

Table 2.1
Nomological Network of Variables
CHAPTER 3

METHODS

3.1 Participants

Participants were 220 African American undergraduate students (79 males; 141 females) enrolled in an introductory psychology course at a large Midwestern university. The research component of this general psychology course permitted students to choose between participating in experimental research and critically evaluating current psychology related literature. Multiple research projects were available to provide students with choices regarding studies in which they could participate. All participants received credit toward their research component and were assured of the anonymity of their responses. Each participant completed a questionnaire packet containing the assessment battery and a demographic questionnaire. While these materials were counterbalanced in the study, they appear in Appendices A-F, in the same order that they are presented throughout this chapter. A summary of all the demographic information assembled from the participants in this study is
presented in Tables 3.1, 3.2, 3.3, and 3.4, with the modal participant being an 18-year-old freshman female, from an urban environment, who was not an active participant in any campus organization.

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Percentage of Total Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>112</td>
<td>50.9</td>
</tr>
<tr>
<td>19</td>
<td>42</td>
<td>19.1</td>
</tr>
<tr>
<td>20</td>
<td>26</td>
<td>11.8</td>
</tr>
<tr>
<td>21</td>
<td>14</td>
<td>6.4</td>
</tr>
<tr>
<td>22</td>
<td>5</td>
<td>2.3</td>
</tr>
<tr>
<td>23</td>
<td>2</td>
<td>.9</td>
</tr>
<tr>
<td>24</td>
<td>5</td>
<td>2.3</td>
</tr>
<tr>
<td>25 and older</td>
<td>14</td>
<td>6.4</td>
</tr>
</tbody>
</table>

*N = 220

Table 3.1: Age Representation of Participants in Sample.

<table>
<thead>
<tr>
<th>Class Standing</th>
<th>Frequency</th>
<th>Percentage of Total Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>136</td>
<td>61.8</td>
</tr>
<tr>
<td>Sophomore</td>
<td>40</td>
<td>18.2</td>
</tr>
<tr>
<td>Junior</td>
<td>27</td>
<td>12.3</td>
</tr>
<tr>
<td>Senior</td>
<td>17</td>
<td>7.7</td>
</tr>
</tbody>
</table>

*N = 220

Table 3.2: Class Standing of Participants in Sample.
<table>
<thead>
<tr>
<th>Home Environment</th>
<th>Frequency</th>
<th>Percentage of Total Sample(^a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>175</td>
<td>79.5</td>
</tr>
<tr>
<td>Rural</td>
<td>42</td>
<td>19.1</td>
</tr>
</tbody>
</table>

\(^a\)N = 217

Table 3.3: Home Environment of Participants in Sample.

<table>
<thead>
<tr>
<th>Campus Involvement</th>
<th>Frequency</th>
<th>Percentage of Total Sample(^a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>99</td>
<td>45.0%</td>
</tr>
<tr>
<td>Yes-1(^b)</td>
<td>46</td>
<td>20.9%</td>
</tr>
<tr>
<td>Yes-2(^c)</td>
<td>41</td>
<td>18.6%</td>
</tr>
<tr>
<td>Yes-3(^d)</td>
<td>31</td>
<td>14.1%</td>
</tr>
</tbody>
</table>

\(^a\)N = 217

\(^b\)Yes-1 indicates that students are active participants in one campus organizations.

\(^c\)Yes-2 indicates that students are active participants in two campus organizations.

\(^d\)Yes-3 indicates that students are active participants in three or more campus organizations.

Table 3.4: Campus Involvement of Participants in Sample.

3.2 Instruments

3.2.1. University Environment. Students’ perception of the university environment was assessed using the University Environment Scale (UES) (Gloria & Robinson Kurpius, 1996). The UES examines students’ perception of the university setting along a continuum ranging from unfriendly and insensitive to welcoming and engaging.

The UES consist of 14 items where participants are asked to indicate their perception of their university by responding on a
seven-point Likert-type scale ranging from (1) Not at all to (7) Very true to each of 14 assertions about the university. Sample items from the UES are, “The university encourages/sponsors ethnic groups on campus”, and “Financial aid staff has been willing to help me with financial concerns”. Scores are obtained by summing across the 14 items, where higher scores indicate a more positive perception of the university’s environment. The UES was piloted by Gloria and Robinson Kurpius (1996) with undergraduate students of color from two major universities. The interitem consistency for both universities ranged from .81 – .85, with a reported Cronbach’s alpha of .84.

3.2.2. Cultural Congruity. The Cultural Congruity Scale (CCS) (Gloria & Robinson Kurpius, 1996), was also used to measure cultural fit between the participants and their university. The CCS consists of 13 items that were formulated as an extension of the Perceived Threat Scale (PTS) (Either & Deaux, 1990) which measured perception of threat among racial/ethnic minority students attending Ivy League colleges and universities. In addition to the items adapted from the PTS, further items were generated based off of Gloria and Robinson Kurpius’ experience as racial/ethnic students, as well as professors who have served in the role of mentors to racial/ethnic students. The CCS measures the extent to which students’ sense a cultural fit within the collegiate environment, more specifically, the degree to which
students feel that their personal values, behaviors, and beliefs align with that of the university.

Participants are asked to indicate their perception of cultural fit by responding on a seven-point Likert type scale ranging from (1) Not at all to (7) A great deal to each of 13 statements. Sample items from the CCS are, “I often feel like a chameleon, having to change myself depending on the ethnicity of the person I am with at school”, and “I feel like my language and/or appearance make it hard for me to fit in with other students”. Scores are obtained by summing across the 13 items, where higher scores signify a greater perception of cultural fit. Gloria and Robinson Kurpius (1996) reported an alpha coefficient of .81 with a sample of students of color.

3.2.3. Academic Self-Efficacy. The degree to which students’ feel they are able to succeed in academic related tasks at the university level was measured using the College Self-Efficacy Instrument (CSEI) (Solberg et al., 1993). The CSEI was constructed to address college related issues common to all students, and consists of three subscales: Course Efficacy, Roommate Efficacy, and Social Efficacy.

Course Efficacy examines a students’ perception of their ability as it relates to classroom work, such as researching a term paper and understanding the textbook. The second subscale, roommate efficacy looks at a students’ perception of their efficacy as it relates to roommate issues, such as the ability to
socialize and get along with roommates. Finally, social efficacy
determines the level of efficacy a student perceives they have in
regard to social activities inside and outside the classroom,
such as asking a professor a question or participating in a
student organization.

The CSEI consists of 19 items with 7 items relating to
course-efficacy, 4 items relating to roommate-efficacy, and 8
items relating to social-efficacy. The CSEI is a self report
measure where students respond to the following statement: “How
confident are you that you could successfully complete the
following tasks:...”. Participants were asked to rate their
efficacy using a seven-point Likert type scale ranging from (1)
Not confident at all to (7) Complete Confidence, and similar to
both aforementioned instruments, a total sum score is computed
across all three subscales with higher scores indicating an
increased sense of ability to succeed at college related tasks.
Additionally, scores are also summed for each of the subscales,
with higher scores indicating an increased sense of efficacy as
it relates to courses, roommates, and social skills. Solberg and
colleagues (1993) reported an alpha coefficient of .93 for the
total CSEI, and .88 for each of the subscales respectively.

3.2.4. The Rosenberg Self-Esteem Scale. Self-Esteem was measured
using Rosenberg’s Self-esteem Scale (RSES) (Rosenberg, 1965).
Participants completed the scale by indicating their agreement
with each of the 10 items. Questions were answered on a four-
point Likert type scale ranging from (1) Strongly Disagree to (4) Strongly Agree. After reverse scoring the 5 negatively worded items, a total Self-Esteem score was obtained by summing the 10 responses. The range of scores can be from 10 – 40, with higher scores indicating a higher self-esteem. Rosenberg reported a Cronbach’s alpha of .90, indicating an internally reliable scale.

3.3 Procedure

Participants were recruited through the Research Experience Program (REP), a component of the general introduction to psychology course, at a large Midwestern university. Participants were able to sign up for experiments via the REP website which depicted the location, time, amount of course credit participants would receive, and the general nature of the study.

Prior to the administration of the assessment battery, the experimenter read a script detailing the general purpose of the study, the amount of credit each participant would receive, the voluntary nature of the experiment, with participants having the ability to withdraw from involvement without penalty, as well as instructions on how to return the completed packets to the experimenter (see Appendix F). Each participant received an assessment battery, consisting of the College Self-Efficacy Instrument, the University Environment Scale, the Cultural Congruity Scale, the Rosenberg Self-Esteem Scale, and a demographic questionnaire appearing at the end of the packet.
Response sheets contained no identifying information to ensure the anonymity of participants and their responses. Participants were provided with a debriefing sheet, which is the script that the experimenter read prior to administration, subsequent to their completion of the assessment battery (see Appendix F). The contact information of the investigator was also provided in the event participants were interested in the results of the final data analyses.

3.4 Research Design/Data Analysis

Initially, multiple regression analysis was employed to determine if university environment and cultural congruity were significant predictors of academic self-efficacy. Additionally, hierarchical moderated regression (HMR) was employed to determine whether the proposed moderating variable, self-esteem, strengthened the relationship between the proposed predictors, university environment and cultural congruity, and the criterion variable, academic self-efficacy, specifically for African American women. University environment and cultural congruity were tested separately. Accordingly, university environment, the predictor variable, and self-esteem, the proposed moderator variable, were entered in Step 1 of the analysis. In Step 2, the interaction term reflecting the product of the predictor and moderator variables was entered, university environment X self-esteem. A statistically significant increment in $R^2$ at Step 2, with an effect size of .02, supports a moderator effect. The same
analysis was utilized in testing self-esteem as a moderator of the relationship between cultural congruity and academic self-efficacy.
CHAPTER 4

RESULTS

4.1 Demographics and Descriptive Statistics

The assessment battery utilized for the present study was administered to 220 African American students (79 males; 141 females) at a large predominantly White Midwestern university. The students were enrolled in an introduction to psychology course where each student received research credit for their participation in this study. The modal participant of this study was 18 years of age (n= 112; 51%), single (n= 209; 95%), a freshman (n= 136; 62%), and non-active in campus related activities and organizations (n= 99; 45%). The modal participant also reported being raised in an urban environment, inner-city, (n= 175; 80%), and having had both parents attended college (n= 90; 41%).

The overall means and standard deviations of participants’ scores for each of the four administered instruments are provided in Table 4.1. In regard to university environment, the mean score for the present study was 74.72 (the range of the UES scale is 7 - 98), with a standard deviation of 11.70, suggesting that
overall the participants find the university environment to be a welcoming atmosphere. By conducting a t Test for a Single Sample mean, the author was able to compare the mean score of the University Environment Scale ($M = 66.63, SD = 12.21$) Gloria and Robinson Kurpius (1996) observed in their initial psychometric analysis to that of the current sample. The mean of the current sample was found to be significantly different, at the .05 level, suggesting that the participants of the present study find their university environment to be a more inviting and friendly environment than those in the initial study performed by Gloria and Robinson Kurpius ($t = 10.20, df = 217$).

The same analysis was performed for cultural congruity, where participants of the current study report a similar cultural fit, as measured by the Cultural Congruity Scale ($M = 72.98, SD = 11.47$), between their values and beliefs and those regarded by the university than were initially observed by Gloria and Robinson Kurpius (1996) ($M = 71.5, SD = 14.03$). The difference between the mean of the current study and the mean originally observed, however, was not significant at the .05 level ($t = 1.91, df = 219$).

Mean comparisons were also performed for academic self-efficacy, evaluating the current samples level of academic self-efficacy ($M = 101.24, SD = 16.81$) and that found in previous research ($M = 104.32, SD = 15.38$) utilizing the College
Self-Efficacy Instrument. A statistically significant difference was observed at the .05 level \( (t = -2.71, df = 217) \), suggesting that the current sample has a lower sense of their ability to succeed in the academy, than other students of color also attending a large predominantly White Midwestern university.

A statistically significant gender difference was observed, through the examination of independent t-tests, for self-esteem, with African American males having a more positive sense of self worth than African American females \( (t = 1.96, df = 218, at \ p < .05) \). There were no significant gender differences when examining university environment, cultural congruity or academic self-efficacy.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Female ((N = 141))</th>
<th>Male ((N = 79))</th>
<th>Overall ((N = 220))</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>UES</td>
<td>73.94</td>
<td>11.94</td>
<td>76.08</td>
</tr>
<tr>
<td>CCS</td>
<td>73.03</td>
<td>11.85</td>
<td>72.89</td>
</tr>
<tr>
<td>CSEI</td>
<td>100.11</td>
<td>17.27</td>
<td>103.26</td>
</tr>
<tr>
<td>RSES</td>
<td>34.02</td>
<td>6.34</td>
<td>35.82</td>
</tr>
</tbody>
</table>

Note. UES = University Environment Scale; CCS = Cultural Congruity Scale; CSEI = College Self-Efficacy Instrument; RSES = Rosenberg Self-Esteem Scale. Higher scores indicate greater perception of a welcoming university environment, higher perception of cultural fit within the university, greater belief that one is able to successfully complete college related tasks, and higher levels of self-esteem.

Table 4.1 Mean Scores and Standard Deviation of Perception of University Environment, Cultural Congruity, Academic Self-Efficacy and Self-Esteem, by Gender.
4.2 Instrument Reliabilities

Internal consistency reliability was measured for the four instruments administered to assess perception of university environment, cultural congruity, academic self-efficacy, and self-esteem. These results appear in table 4.2. Reliability was measured using Cronbach’s alpha, and each instrument was shown to be as psychometrically robust as indicated in previous research. As shown in the table, alpha coefficients for the three subscales of the College Self-Efficacy Instrument, as well as the alpha coefficient for the full 19-item instrument, have been reported. Reliabilities greater than .70 are considered minimum for research purposes, indicating 70% consistency in the scores produced by a particular instrument (Walsh & Betz, 2001).
<table>
<thead>
<tr>
<th>Measure</th>
<th>Number of Items</th>
<th>Alpha</th>
<th>Prior Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>University Environment Scale</td>
<td>14</td>
<td>.81</td>
<td>.84&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Cultural Congruity Scale</td>
<td>13</td>
<td>.80</td>
<td>.89&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>College Self-Efficacy Instrument</td>
<td>19</td>
<td>.89</td>
<td>.93&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Course-Efficacy</td>
<td>7</td>
<td>.83</td>
<td>.88&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Roommate-Efficacy</td>
<td>4</td>
<td>.83</td>
<td>.88&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Social-Efficacy</td>
<td>8</td>
<td>.88</td>
<td>.88&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Self-Esteem Scale</td>
<td>10</td>
<td>.90</td>
<td>.90&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

Note: N ranged from 218 to 220 due to incomplete item response by some subjects.

<sup>a</sup> Alpha levels reported by Gloria and Robinson Kurpius’ (1996) during the validation of the University Environment and Cultural Congruity Scales.

<sup>b</sup> Alpha levels reported by Solberg, O’Brien, Villareal, Kennel and Davis (1993) during the validation of the College Self-Efficacy Instrument.

<sup>c</sup> Alpha level reported by Rosenberg (1965) for the Rosenberg Self-Esteem Scale.

Table 4.2: Values of Coefficient Alpha Reliability for Administered Instruments.

4.3 Order Effect

The assessment battery was counterbalanced in the present study, such that approximately half of the participants (n = 111) received the white version of the battery and the other half (n = 109) received the green version of the assessment battery. The white version contained the measures in the following order: CSEI, UES, CCS, RSES, and the demographic question. While the green version contained the measures in the following order: RSES, CCS, UES, CSEI, and the demographic questionnaire.
Independent samples t-tests were employed to ensure that the order in which the assessment battery was presented did not influence participant responses. Analysis showed that the order of the scales did not influence participant responses (see Table 4.3), so the white and green versions of the assessment battery were not analyzed separately.

<table>
<thead>
<tr>
<th>Scale</th>
<th>White Version Mean</th>
<th>Green Version Mean</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>UES</td>
<td>74.06</td>
<td>75.42</td>
<td>-1.17ns</td>
</tr>
<tr>
<td>CCS</td>
<td>72.73</td>
<td>73.20</td>
<td>-.439ns</td>
</tr>
<tr>
<td>CSEI</td>
<td>102.89</td>
<td>99.69</td>
<td>-1.82ns</td>
</tr>
<tr>
<td>RSES</td>
<td>35.05</td>
<td>34.32</td>
<td>-1.22ns</td>
</tr>
</tbody>
</table>

Note: UES = University Environment Scale, CCS = Cultural Congruity Scale, CSEI = College Self-Efficacy Instrument, and RSES = Rosenberg Self-Esteem Scale.

ns = Not Significant

Table 4.3: Independent samples t-Test for Order Effects of Assessment Battery

4.4 Instrument Intercorrelations

Correlation coefficients representing the relationship across each of the four variables are presented in Table 4.4. Due to the statistically significant gender differences observed for self-esteem, these correlation coefficients are presented within
gender. Analysis of coefficients are based on Cohen (1992), who defines a small correlation as $r_s = .10$, a moderate correlation as $r_s = .30$, and a large correlation as $r_s = .50$. The results of the current study show that the variables utilized are consistent, but correlate only moderately with each other, supporting the notion that each of the four variables is a discrete but correlated dimension.

For female participants of the current sample, a significant positive correlation, moderate-to-large in size, was found between the University Environment Scale and the Cultural Congruity Scale ($r = .48, p<.01$). Additionally for female participants, the University Environment Scale and the Cultural Congruity Scale revealed a positive significant correlation, moderate to moderate-to-large in size, with the College Self-Efficacy Instrument ($r = .40, p<.01$) and ($r = .42, p<.01$) respectively. These results lend support to the framework of the presented hypothesis, that university environment and cultural congruity are in fact related to academic self-efficacy as defined in the present study. A significant correlation, small-to-moderate in size, was observed for university environment and self-esteem ($r = .24, p<.01$), for female participants.

For male participants of the current sample, a significant positive correlation, moderate-to-large in size, was observed between the University Environment Scale and the Cultural Congruity Scale ($r = .41, p<.05$). Additionally, the University
Environment Scale and the Cultural Congruity Scale revealed a significant correlation with the College Self-Efficacy Scale ($r = .23$, $p<.05$) and ($r = .46$, $P<.01$) respectively. Interestingly, for male participants there was not a significant correlation between university environment and self-esteem, suggesting that for this sample the perception of the university as welcoming is not related to the current sample of African American men’s concept of self worth.

<table>
<thead>
<tr>
<th>Measures</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. UES</td>
<td></td>
<td>.48**</td>
<td>.40**</td>
<td>.24**</td>
</tr>
<tr>
<td>2. CCS</td>
<td>.41**</td>
<td></td>
<td>.42**</td>
<td>.34**</td>
</tr>
<tr>
<td>3. CSEI</td>
<td>.23*</td>
<td>.46**</td>
<td></td>
<td>.44**</td>
</tr>
<tr>
<td>4. RSES</td>
<td>.06</td>
<td>.37**</td>
<td>.50**</td>
<td></td>
</tr>
</tbody>
</table>

Note: Values above the diagonal are for females (N = 141); values below the diagonal are for males (N = 79).  
*p<.05  
**p<.01  

Table 4.4: Overall Correlations Among Measures of University Environment, Cultural Congruity, Academic Self-Efficacy, and Self-Esteem, Within Gender.

4.5 Regression

Multiple regression analysis was used to examine university environment and cultural congruity as predictors of students’ perception of their ability to succeed at college related tasks,
which was operationalized in this study by total scores on the College Self-Efficacy Instrument. Table 4.5 summarizes this analysis. Consistent with the author’s hypothesis, the results of the present study suggest that university environment and cultural congruity are both positive predictors of academic self-efficacy. More specifically, individuals who perceive similarities between their values and beliefs and that of the university, as well as sensing the university environment to be a welcoming place, will have a higher perception of their ability to excel at college related responsibilities, $\beta = .34, R^2 = .213, F(2,214) = 29.001, p<.01$. The findings from the present analysis suggest that university environment and cultural congruity accounted for 21.3% of the variance in academic self-efficacy. Additional regression analyses were performed to determine if gender, age of the participant, and whether or not the participant was involved in campus activities and organizations had any bearing on the relationship between university environment, cultural congruity, and academic self-efficacy. All of the aforementioned variables were shown to have no significant effect on the relationship between university environment, cultural congruity, and academic self-efficacy.

Additional regression models were examined to determine whether university environment and cultural congruity were positive predictors of each individual subscale of academic self-efficacy. The first equation examined the effects of the
aforementioned variables on course-efficacy, where results showed that only cultural congruity was a positive predictor, $\beta = .17$, $R^2 = .101$, $F(2,216) = 12.07$, $p<.01$. P-values were adjusted to control for experimenter-wise error, (.05/4 = .01). Next, both university environment and cultural congruity were found to be positive predictors of roommate-efficacy, $\beta = .07$ and .11 respectively, $R^2 = .13$, $F(2,217) = 16.64$, $p<.01$. Finally, both university environment and cultural congruity were found to be significant predictors of social-efficacy, $\beta = .17$ and .21 respectively, $R^2 = .156$, $F(2,217) = 19.93$, $p<.01$.

<table>
<thead>
<tr>
<th>Predictors</th>
<th>B</th>
<th>SE B</th>
<th>$\beta$</th>
<th>$t^*$</th>
<th>$R$</th>
</tr>
</thead>
<tbody>
<tr>
<td>University Environment</td>
<td>.28</td>
<td>.10</td>
<td>.19</td>
<td>2.84*</td>
<td>.46</td>
</tr>
<tr>
<td>Cultural Congruity</td>
<td>.50</td>
<td>.10</td>
<td>.34</td>
<td>4.98*</td>
<td></td>
</tr>
</tbody>
</table>

N = 220

*a df = 216

*p<.01

Table 4.5: Results of Regression Analysis Predicting Academic Self-Efficacy from University Environment and Cultural Congruity.

Two hierarchical moderated regression analyses were performed to determine whether the proposed moderating variable, self-esteem, interacted with university environment or cultural congruity to predict academic self-efficacy in African American students at a predominantly White university (Frazier, Tix, &
Barron, 2004). Utilizing procedures outlined by Aiken and West (1991), the predictor variable, university environment, and the moderator variable, self-esteem, were entered at Step 1. Next, at Step 2, the interaction term, university environment X self-esteem was entered. The same procedure was followed to determine if self-esteem moderated the relationship between cultural congruity and academic self-efficacy by replacing university environment with cultural congruity in the analysis. Results are displayed in Table 4.6.

Two additional regression analyses were performed to determine if gender strengthened or weakened the effect of self-esteem as a moderator of the aforementioned relationships. In analyzing the effects of gender, the predictor variable, university environment, and the moderator variable, self-esteem, along with gender were entered at Step 1. Next, at Step 2, the interaction terms, university environment X self-esteem, gender X university environment, and gender X self-esteem were entered. Finally, at Step 3, the interaction term university environment X self-esteem X gender was entered. The same analysis was done to determine the effect of gender on self-esteem as a potential moderator of the relationship between cultural congruity and academic self-efficacy. Results are displayed in Table 4.7.

McClelland and Judd (1993) recommend the use of liberal alphas because of the difficulty of detecting statistically significant interactions. For the present study an alpha of .10
was exercised. To control for experiment-wise error, the 
Bonferonni correction was utilized yielding a corrected alpha of 
.025 (.10/4).

In addition to statistical significance, effect size was 
also observed as a means of determining the effect our proposed 
variable had on the criterion. Moderator effects are evidenced by 
a statistically significant incremental change in $R^2$. Following 
the recommendation of Cohen (1992), an observation of an 
incremental change in $R^2$ of .02 or more, at Step 2 of our 
analysis, would denote a moderator effect.

Inconsistent with the author’s hypothesis, the proposed 
moderator variable, self-esteem, did not effect the relationship 
between the predictor variables, university environment and 
cultural congruity, and the criterion variable, academic self-
efficacy. Additionally, results showed that gender did not 
strengthen or weaken the effect of self-esteem on the proposed 
relationships, contrary to the author’s hypothesis. Results from 
each regression analysis are presented in Tables 4.6 and 4.7.
### Table 4.6
Hierarchical Moderated Regression Analyses Predicting Academic Self-Efficacy From University Environment (UES), Cultural Congruity (CCS), Self-Esteem (RSES), and Interactions (N = 219).

<table>
<thead>
<tr>
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<th>B</th>
<th>SE B</th>
<th>β</th>
<th>( R^2 )</th>
<th>( R^2 )</th>
<th>( \Delta R^2 )</th>
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Adj. = adjusted

\(^a\) df = 217
### Table 4.7
Hierarchical Moderated Regression Analyses Predicting Academic Self-Efficacy From University Environment (UES), Cultural Congruity (CCS), Self-Esteem (RSES), Gender, and Interactions (N = 219).

Adj. = adjusted
G = gender
° df = 217

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<tr>
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CHAPTER 5

DISCUSSION

The U.S. Department of Education, National Center for Education Statistics (2005), reported that 8.7% of bachelor’s degrees conferred during the 2002-2003 academic year were awarded to African American students, a rate only 1% higher than what was reported a decade ago for these students of color. While the matriculation of African American students has drastically increased over the past decade, the number of Black students attaining higher-education degrees has remained relatively unchanged. Many variables such as low socio-economic status, being a first-generation college student, being reared in the inner-city, and having a low level of academic self-efficacy have been credited for the high attrition rates of these students of color. While all these variables might play a role in students successfully adjusting to and succeeding in college, the author concentrated in the present study on issues of campus climate, cultural fit, and self-esteem as a means of understanding how these variables affect individuals’ levels of academic self-efficacy (one’s belief in their ability to succeed in college-related tasks). In better understanding the variables that play
into a students’ belief in their ability to succeed in the academy, the author hopes that education administrators can create programming that target these variables as a means of decreasing the high levels of attrition found among African American students.

5.1 Review of the Objectives

The present study examined two variables, university environment and cultural congruity, and their ability to predict the academic self-efficacy of African American students at a predominantly White institution. Results from the present sample support the author’s hypothesis that university environment and cultural congruity are positive predictors of academic-self efficacy. Specifically, at the large Midwestern university of study, African American students who found the university environment to be welcoming, and had a perception of cultural fit within the university reported higher levels of academic self-efficacy. Taken together, these two variables accounted for approximately 21% of the variance in participants’ measured academic self-efficacy.

The aforementioned results are consistent with previous literature supporting the notion that university environment plays a vital role in the academic and social adjustment of African American students (Constantine & Watt, 2002). Beyond adjustment, campus climate has a great impact on the academic success or failure of these students in higher education (Helm et
African American students have affirmed that the more they feel a part of the university, the higher they rate their overall satisfaction with the university.

In order to better understand the predictive value of university environment and campus climate on the specific subscales of academic self-efficacy, a closer look at course efficacy, roommate efficacy, and social efficacy was examined. In exploring the subscales of academic self-efficacy, the present sample indicates that cultural congruity was a positive predictor of all three subscales. This implies that students who find similarities between their cultural values and the values of the university have a greater likelihood of having higher levels of efficacy when it comes to completing course-related work such as writing term papers, taking quality class notes, and keeping up with everyday course assignments. Furthermore, participants of the study who perceived a greater cultural fit were found to have higher levels of social-efficacy and roommate efficacy, suggesting that individuals who believed their personal values were in line with the values of the university were efficacious in interacting with university faculty and staff, both inside and outside the classroom, joining student organizations, and getting along with roommates. While university environment was found to be a positive predictor for social and roommate efficacy, it was not shown to have predictive value for course efficacy. These results suggest that students are more likely to engage in social
interactions, with roommates or in campus organizations, provided they perceive the environment to be welcoming.

While university environment and cultural congruity do explain approximately 21% of the variance in academic self-efficacy for the present sample, inquiry into the remaining variance is of utmost importance. Research suggests that self-concept, or an individual’s collective self-perceptions of their ability in academic subareas (e.g., science or English), has an effect on an individual’s level of academic self-efficacy (Shunk, 1991). Additionally, attributions, defined as perceived causes of outcomes, have also been identified as a predictor of academic self-efficacy (Schunk, 1991). Specifically, how individual students make attributions about current academic successes has an influence on their expectancy of future successes, so that a student who attributes success on a quiz to luck, as opposed to ability and effort, will be less likely to expect success on future quizzes.

While previous research shows that self-esteem, or one’s perception of their self-worth, might play a role in the formation of efficacy, Jonson-Reid, Davis, Saunders, Williams, and Williams (2005) reported that there are few articles that look at the combined effects of esteem and efficacy in African American students. In the present study, the author hypothesized that self-esteem would moderate the relationship between both university environment and academic self-efficacy, and cultural
congruity and academic self-efficacy. While results indicate that self-esteem did not moderate the aforementioned relationships, results did suggest that self-esteem was an independent positive predictor of academic self-efficacy, accounting for an additional 14%, beyond the 21% accounted for by university environment and cultural congruity, of the variance in academic self-efficacy. Thus, African American students who had higher levels of self-esteem detail higher levels of their personal belief in their ability to successfully complete college-related tasks and activities.

The positive correlation between esteem and efficacy for the current sample is contrary to findings from previous research that has established that, though African American students tend to have high levels of self-esteem, their academic self-efficacy tends to be much lower (Hare, 1985). Osborne (1995) specifically noticed that the disparity between levels of self-esteem and efficacy were more present for African American males than African American females. Steele (1992) referred to this disparity as “disidentification,” whereby African American men separate their “personal selves” and their “school orientation” because they realize that coupling feelings about self and school performance could be detrimental. With this in mind, the last hypothesis of the current study was that gender would effect the moderation of self-esteem, such that we would see a stronger moderator effect for African American women than for African
American men. While no moderation was observed in the present sample, the author did notice some interesting findings based on gender.

Results showed that for the current sample there was a moderate correlation between self-esteem and academic self-efficacy for both African American males and females, $r = .50$ and $.44$ respectively. Additionally, African American males had statistically significantly higher levels of self-esteem and reported higher levels of academic self-efficacy than the African American females. Though African American males perceived lower levels of cultural fit than did African American females, these male participants reported higher levels of academic self-efficacy than did their female counterparts. Though there is no concrete explanation for this, results of the present sample could be influenced by the high number of participants' parents who have attended and/or graduated from institutions of higher education, $n = 167$ and $116$ respectively. Future research might explore if the disidentification hypothesis, as presented by Steele and other researchers, is no longer a necessary protective factor for African American males in higher education. Additionally, researchers might investigate the effects of having parents who have successfully navigated through the process of higher education and the protective factors with which they equip their children to deal with the obstacles that normally lead to attrition at the collegiate level.
5.2 Limitations of Study

Several limitations must be noted in considering the results of this study. Though every attempt was made to recruit a diverse sample of African American participants, the current sample consists of predominantly 18-year-old, first-year females. In examining university environment and cultural congruity, the scores observed in the present sample were higher than the normative sample. Given the first-year status of the majority of the current sample the disparity between these participants and the normative sample might come as a result of a threshold effect. Replication of this study with a more diverse sampling of African American students, specifically upperclassman, might allow for a more accurate depiction of university environment taking into consideration the amount of time participants have spent on campus.

Secondly, it is important to take into account that the data collected came from one, large, Midwestern university, with the majority of the sample reporting being reared in the Midwest. Due to cultural differences that might result from being raised in different geographic locations, generalizability of this data may be limited to university settings with demographic ratios that mirror that of the present study.

Lastly, all participants of this study were enrolled in an introductory psychology course, which may indicate that the results observed from this particular sample may not be
indicative of individuals enrolled in non-social science related courses. Future studies may wish to include students from a variety of programs.

5.3 Implications for Future Administrators and Future Research

Although historically Black colleges and universities enroll less than twenty-five percent of all African American undergraduate students, they produce approximately forty percent of undergraduate degrees earned (D’Augelli & Hershberger, 1993). Research indicates that part of the reason African American students are not as likely to succeed at predominantly White institutions as their counterparts of European and non-African American descent has to do with the university environment. Students of color consistently report that they feel high levels of racism from university faculty, staff, and administration that leave them feeling isolated and unwelcome. Aside from an unwelcoming environment, African American students have to learn how to negotiate their values and beliefs in university settings, though often times these values are incongruent with those held by the university.

It is important for higher education administrators and educators to understand the role that they play in the achievement of students of color. Positive predictors of successful outcomes have been found to include an integrated faculty/staff/student relationship, inside and outside of the classroom, where students feel comfortable seeking academic
assistance and faculty are active participants in student organizations (Davis, 1991). Such overt interactions with students illustrates to students of color that faculty members have positive attitudes and a high level of commitment to seeing them achieve success. Interestingly, these are two variables that have been found to be critical factors in the retention of African American students (Townsend, 1994).

From a cultural perspective, it is important for administrators to be proactive in enhancing diversity on campus. Part of this initiative comes in the form of preventing discrimination and harassment of students of color as well as integrating African American issues into the curriculum (D’Augelli & Hershberger, 1993). Future research should take into account what is already known about university environment and cultural congruity, and examine what specific components of each have the highest predictive value of academic success and in the overall persistence of African American students in higher education. In looking at the disparity between retention rates of historically Black colleges and universities as compared to predominantly White colleges and universities, it will be essential to examine what students need from predominantly White institutions that they may not currently receive and how these institutions would go about changing the environment to meet those needs.
Clearly the results of the present study and those from previous research suggest that issues of campus climate, academic-efficacy, cultural congruity, and, ultimately, rates of retention warrant further attention. Though enrollment rates of African American students in institutions of higher education continue to increase, the graduation rates of these students, specifically at predominantly White institutions continues to diminish. The present study found that at one large Midwestern university, campus environment, cultural congruity, and self-esteem were positive predictors of academic self-efficacy. Although the lack of retention of students of color at predominantly White institutions cannot be contributed to university environment and cultural congruity alone, they have proven to be important factors in the success of African American students. A more extensive exploration into how these factors effect retention may prove beneficial in increasing the number of African American students who persist through the process of higher education.
APPENDIX A

UNIVERSITY ENVIRONMENT SCALE
For each of the following items, indicate the extent to which you have experienced the feeling or situation at school. Use the following ratings:

1  2  3  4  5  6  7
Not True Very
At All   True

1. Class sizes are so large that I feel like a number.
2. The library staff is willing to help me find materials/books.
3. University staff have been warm and friendly.
4. I do not feel valued as a student on campus.
5. Faculty have not been available to discuss my academic concerns.
6. Financial aid staff have been willing to help me with financial concerns.
7. The university encourages/sponsors ethnic groups on campus.
8. There are tutoring services available for me on campus.
9. The university seems to value minority students.
10. Faculty have been available for help outside of class.
11. The university seems like a cold, uncaring place to me.
12. Faculty have been available to help me make course choices.
13. I feel as if no one cares about me personally on this campus.
APPENDIX B

CULTURAL CONGRUITY SCALE
For each of the following items, indicate the extent to which you have experienced the feeling or situation at school. Use the following ratings:

1 2 3 4 5 6 7
Not At All
A Great Deal

1. I feel that I have to change myself to fit in at school.

2. I try not to show the parts of me that are “ethnically” based.

3. I often feel like a chameleon, having to change myself depending on the ethnicity of the person I am with at school.

4. I feel that my ethnicity is incompatible with other students.

5. I can talk to my friends at school about my family and culture.

6. I feel I am leaving my family values behind by going to college.

7. My ethnic values are in conflict with what is expected at school.

8. I can talk to my family about my friends from school.

9. I feel that my language and/or appearance make it hard for me to fit in with other students.

10. My family and school values often conflict.

11. Given my ethnic background, I feel accepted at school.

12. Given my ethnic background, I feel as if I belong on this campus.

13. I can talk to my family about my struggles and concerns at school.
APPENDIX C

COLLEGE SELF-EFFICACY INSTRUMENT
How confident are you that you could successfully complete the following tasks:

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1. ______ Research a term paper
2. ______ Write course papers
3. ______ Do well on your exams
4. ______ Take good class notes
5. ______ Keep up to date with your schoolwork
6. ______ Manage time effectively
7. ______ Understand your textbook
8. ______ Get along with roommate(s)
9. ______ Socialize with your roommate(s)
10. ______ Divide spaces in your apartment/room
11. ______ Divide chores with your roommate(s)
12. ______ Participate in class discussions
13. ______ Ask a question in class
14. ______ Get a date when you want one
15. ______ Talk to your professors
16. ______ Talk to university staff
17. ______ Ask a professor a question
18. ______ Make new friends at college
19. ______ Join a student organization
APPENDIX D

ROSENBERG’S SELF-ESTEEM SCALE
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 people.
5. I feel 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 that I am no good at all.
APPENDIX E

DEMOGRAPHIC QUESTIONNAIRE
Students Survey

Thank you for filling out this survey that examines your thoughts about your educational experiences. Do not spend a lot of time on each question - respond with your first reaction. Please circle the most appropriate answer to each question and be careful not to inadvertently leave a question blank.

**Do not write your name on this survey!**

Gender: 
□ Male  
□ Female

Class Standing: 
□ Freshman  
□ Sophomore  
□ Junior  
□ Senior

What is your race / ethnicity? ____________________________

Did either or both of your parents attend college? _____________

What is your family income?
□ Less than $10,000  
□ $10,000-$19,000  
□ $20,000-$29,000  
□ $30,000-$39,000  
□ $40,000-$49,000  
□ $50,000-$59,000  
□ $60,000-$69,000  
□ $70,000 & Above

List any campus organization you are affiliated with.
______________________________

I value the degree I am currently working toward. (select one)
□ Strongly Disagree  
□ Disagree  
□ Slightly Disagree  
□ Strongly Agree  
□ Agree  
□ Slightly Agree
Dear Participant:

Thank you for taking the time to sign up and participate in The Study of University Environment. Dr. Don Dell, the principal investigator, and Eric Currence, the co-investigator, both associated with the Psychology Department at OSU, are conducting this study concerning the perception of university environment among college students. The results of this study may inform counselors and others in higher education how to better understand and attend to the needs of diverse student bodies.

You must be 18 years of age, or older, to participate in this study. In a moment you will be asked to complete the attached surveys and demographic questionnaire. The survey packet will take approximately 60 minutes to complete. Participation in this study is voluntary, and you can withdraw from your involvement at any time without penalty.

Individuals will not be paid to participate in this study. As Psychology 100 students, you will be given 1.0 point of course credit for participation. You will receive this credit even in the event of withdrawal from the study prior to its completion.

The information that is provided will be kept anonymous. Only the researchers mentioned above will have access to the information that participants offer. Please do not include any identifying information on any of the survey material or the demographic questionnaire. When you are finished please place the completed packet in the envelope provided before handing it in.

Thank you for your participation in this study.

Respectfully,

Don Dell, Ph. D.  Eric Currence, M.A.
Associate Professor  Doctoral Student
Department of Psychology  Department of Psychology
The Ohio State University  The Ohio State University
LIST OF REFERENCES


