

ABSTRACT

Sherra M. White. RESILIENCE DIFFERENCES OF BLACK GREEK-LETTERED ORGANIZATION MEMBERS AND AFRICAN-AMERICAN STUDENTS AT PREDOMINANTLY WHITE INSTITUTIONS (Under the direction of Dr. Paul Toriello). Department of Addictions and Rehabilitation Studies, December 2013.

Even though the number of African American students has increased on college campuses, particularly Predominately White Institutions (PWI), over the last century, they are less likely to graduate than their White counterparts are. They face discrimination, hostile environments, adversity, low or no social or mentoring support, and often feel compelled to validate their intellectual capabilities to White peers in the classroom and on the collegiate campus. The purpose of this study will be to compare resiliency, ethnic identity, race-related stress and educational performance between Black Greek-Letter Organization (BGLO) undergraduate members and African American students attending a Predominately White Institution (PWI). Five questionnaires will be utilized to measure the constructs: Connor-Davidson Resilience Scale (CD-RISC), Multigroup Ethnic Identity Measure-Revised (MEIM-R), College Resilience Questionnaire-Revised (CRQ-R), Index of Race-Related Stress-Brief version (IRRS-B) and a Demographic survey.

Based on established theory and previous research, we will test the following hypotheses (1) Higher average student organization hours/per week will predict higher cultural insight/belonging as measured by the Multigroup Ethnic Identity Measure-Revised (MEIM-R), (2) Higher MEIM-R scores will predict higher resiliency as measured by the Connor-Davidson Resiliency Scale (CD-RISC), (3) Higher Race-Related Stress (Index of Race-Related Stress-Brief: IRRS-B) will predict lower educational resilience scores as measured by the College Resilience Questionnaire-Revised (CRQ), (4) Resilience scores as measured by the CD-RISC will be higher among members of BGLO's than non-members, (5) Educational resilience scores

will be higher among members of BGLO's than non-member students as measured by the College Resilience Questionnaire-Revised (CRQ). The results of this study will help answer the important question of determining if positive cultural social structures support African American students' resilience and success in college.

RESILIENCE DIFFERENCES OF BLACK GREEK-LETTERED ORGANIZATION
MEMBERS AND AFRICAN-AMERICAN STUDENTS AT PREDOMINATELY WHITE
INSTITUTIONS

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DEDICATION

I would like to dedicate the dissertation to those who did not live to see this degree completed, but has been my 'unseen' heroes and motivation. I love you all!

To my cousin, Tasha Holman, you were the first woman in my family to show me that education does not stop at the bachelor's level. You told me to not accept anything but a master's degree. "Fuiste mi amiga, prima, maestra y mentor. Sé que estás en el cielo enseñando español! Cuando lees esto, sepa que te quiero y te agradezco por establecer el fundamento."

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Jeremiah 29:11 – “For I know the plans I have for you,” declares the LORD, “plans to prosper you and not to harm you, plans to give you hope and a future.”

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.....*To KJ, TJ, Shawn, Brianca, Maya, Brittany, and Malcolm*

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CHAPTER 1: INTRODUCTION

Introduction to the Study

College is a transitional period when young people undergo new experiences, meet new people, as well as face opportunities that may cause stress in their lives. Rimer (2004) discussed the importance of addressing stress among college students and examining the strategies taken by colleges and universities to address stress in a holistic manner. For the college student, stress can take on many forms in their daily life. The pressures of maintaining a balance between interpersonal relationships, academic demands, one's own expectations and maintaining personal relationships can be an extremely daunting task. Further examples of the difficulties that college students face are academic workload, being away from home, family obligations, work, maintaining personal relationships, time management, financial obligations, and becoming acclimated to a new environment.

While college students, in general, face a myriad of difficulties, African American college students enrolled at Predominately White Institutions (PWIs) may encounter additional stressors. Enrollment rates for African-American students at PWIs have increased since the 1960s. These students face additional stressors such as racism, discrimination, hostile campus and classroom environments, and lack of support by peers, campus officials and teachers (Ezekiel, 1994). Researchers have associated these additional stressors with low graduation rates, which are lower than their white peers, revealing problems with retention and completion by African-American students at PWIs (Allen, 1988; Douglas, 1999). Research is increasingly demonstrating that racism and racism-related stress influences and shapes the unique experiences of college students of color (Reynolds, Sneva, & Beehler, 2010). Students of color (i.e., African Americans, Hispanic and Asians) experience the negative effects of bias and racism, which

creates difficulty in adjusting to their campus environments, particularly at PWIs. For example, Reynolds et al. reported Black and Latino students are less likely to succeed academically because they often report problems with social isolation and academic integration (2010), which may ultimately create roadblocks to graduation. Because the number of African-American college students is expected to continue growing, research is needed on factors contributing to the adjustment and academic achievement of these students.

What follows is a continuation of chapter 1 with sections that discuss the background of the study, the statement of the problem, the purpose of the study and hypotheses, the justification of the study, the significance of the study, and the chapter summary.

Background of the Study

On May 17, 1954, the U.S. Supreme Court handed down the landmark decision outlawing the doctrine of *separate but equal* in public education. This pivotal decision initiated the desegregation of public schools and colleges. Prior to 1954, Historically Black Colleges and Universities (HBCUs) were responsible for enrolling African American collegiate students in the United States. For example, African American students enrolled in the four available HBCUs in the 1960s comprised 90% of the enrollment rate (Allen, 1992). However, by 1973, 75% of African American students attended PWIs (Easley, 1993). Today, 86% of African American students attend PWIs and approximately 14% attend HBCUs with HBCUs annually responsible for 26% of baccalaureate degrees conferred to African American students (NCES, 2007; Redd, 2000). Thus, there is a significant disproportion between the numbers of African Americans who enroll and graduate from HBCUs versus PWIs. Of the 772 four-year colleges and universities in the United States where at least 5 percent of the student body is African American, 69% report graduation rates ranging from 10 to 30 percent for African American students. These graduation

rates for African American students at PWIs are particularly troubling when contrasted with the much higher rates at HBCUs, which reported graduation rates ranging from 14 to 77 percent (Black Student College, 2005). This problem is compounded by the fact that six times as many black students attend PWIs than HBCUs, yet PWIs graduate a significantly lower rate of African American students than HBCUs who only enroll 14% of the African American collegiate population. Moreover, the graduation rates of African American students at PWIs historically have been and continue to be low when compared to those of White American students (Douglas, 1999). Douglas (1999) revealed that there is a 16% gap in overall college graduation rates between African Americans and Whites, with a 55% dropout rate for undergraduate Whites compared to a 71% dropout rate for African American undergraduates.

This difference in success between the two racial groups has resulted in the examination of a number of possible causes, including students' adjustment to college. Studies examining why some students make the transition successfully, while others struggle or leave school after only a short time (Ezezek, 1994; Holmbek & Wandrei, 1993) have highlighted the complexities students face when entering college. Banyard and Cantor (2004) stated that successful efforts to support students through this transition must draw upon a more complete understanding of variables that place students at risk, as well as protective factors that promote positive adaptation. The variables faced by African American students at PWIs range from stress, lack of assimilation into the collegiate environment, lack of peer and adult support, and cultural resources on campus (Allen, 1992).

Statement of the Problem

African American college students face a variety of psychosocial stressors, which place them at risk of academic failure or dropout. These stressors can include depression (Garlow et

al., 2008), eating disorders (Striegel-Moore, Silberstein, Frensch, and Rodin, 2006), gambling (Beason et al., 2005), alcohol abuse (Barry, 2007; Lo & Globetti, 1995), substance abuse (McCabe et al., 2007), low self-esteem (Atlas & Morier, 1994), academic difficulty, and high-risk sexual behaviors (Wilder, Hoyt, Surbeck, Wilder, & Carney 1986). Along with the stressors, African American students at PWIs face even greater challenges as they engage a predominately-White environment and social structure. African American students at PWIs often report high levels of alienation, racism, social isolation and pressure to conform to the White cultural norms (McClure, 2006). Many African American students come from ethnic communities and high schools in which they were the majority. This shift in cultural dynamics can be stressful as some may face racism in both subtle and obvious ways. African American students find difficulty in establishing relationships and friendships in the classroom and on campus due to racism and stereotyping which is highly influenced by the race and background of peers and campus officials (Pewewardy & Frey, 2002). Stress in these areas can significantly affect academic success of students. Recent research has focused on individual and contextual variables such as gender, racial identity, coping strategies, stress, social support, and attachment, when examining factors related to success in college (Schuh, 2004). This success has been termed educational resilience, a concept built upon the general quality of resilience.

Resilience is a multidimensional concept that has been researched in various fields and has led to the development of various definitions. For example, Masten (2008) defined resilience (in psychology) as the positive capacity of people to cope with stress and catastrophe. Here resilience includes the ability to “bounce back” to a balanced lifestyle after a disruption or exposure to stress that increases resistance to future negative events (2009). Tusaie and Dyer defined resilience as a continuum of adaptation or success, which is rooted in the psychological

aspects of coping and the physiological aspects of stress (2004). Resilience has most often been associated with a personality characteristic that moderates the negative effects of stress and promotes adaptation (Clauss-Ehlers, 2006). Resilience has further been defined as the ability to successfully cope with change or misfortune (Wagnild & Young, 1993). Research on resiliency has also focused on characteristics of resilient individuals and their experiences with adversity or trauma (Luthar & Cicchetti, 2000). Additionally, resilience research has focused on understanding the process through which individuals are able to successfully adapt, or “bounce back” from stress or trauma. Resilience is also seen as more than simple recovery from insult (Bonnano, 2004), but rather as a positive growth or adaptation following periods of negative lifestyle behaviors (Richardson, 2002). Finally, resilience has been examined in educational contexts as educational resilience. For example, some researchers concluded that educational resilience is based off the presence of social supports, specialized academic services, and presence of cultural organizations (Harper, Byars & Jelke, 2005). Thus, African American college students at PWIs may find educational resilience complex.

Career counseling researchers have focused attention on how career barriers influence African American college students' career development (Neblett, Shelton, & Sellers, 2004). Career barriers are defined as "events or conditions, either within the person or in his or her environment, that make career progress difficult" (Swanson & Woitke, 1997, p. 434). Fouad and Byars-Winston (2005) generated a meta-analysis, which examined racial and ethnic differences on career aspirations and barriers among various racial groups. The results of their study showed (a) no significant difference in career hopes among racial and ethnic groups and (b) that racial and ethnic minorities were more likely to be exposed to career barriers. In other words, career barriers such as racism or racial-related stress might preclude racial and ethnic minorities from

meeting their occupational goals. Therefore, racism-related stress must also be considered as a potential educational and career barrier for African American students.

To counteract racism and discrimination, the values of PWIs have drastically changed over the years to increase emphasis on multiculturalism. However, many African American students still attest to walking into a “chilly” campus environment. One of the ways that African American students flourish in this climate is through student organizations, which serve as support mechanisms (McClure, 2006). Involvement in African American student organizations such as Black Greek Letter Organizations (BGLO’s), Black student government, and advocacy groups like National Association for the Advancement of Colored People (NAACP) is common. Several researchers have stated that involvement in these student organizations facilitates social integration into the university. Moreover, assimilation into the campus community has been associated with positive benefits to decrease the attrition of African American students from PWIs. For example, Sutton and Kimbrough (2001) found that BGLO’s are among the most popular out-of-class engagement venues for contemporary African American undergraduates at PWIs. Harper, Byars & Jelke (2005) found at PWIs, “BGLO’s tend to be the primary source of involvement for African American undergraduates; they sponsor most of the culturally-appealing social activities that members and nonmembers, alike, come to enjoy and they provide a haven of sorts from the racism, isolation, and underrepresentation that African American students often experience” (p. 409).

The presence and importance of Greek-letter organizations in collegiate life provides numerous benefits such as social, academic support, recreation, social justice, community involvement, and increased leadership development. Another positive to membership in BGLO’s includes various aspects of identity development, especially among African American males. For

example, one study found BGLO male members express higher levels of racial identity development and a more positive sense of self-esteem than non-member counterparts (Taylor & Howard-Hamilton, 1995). In addition, BGLO male members developed “productive” identities that compelled them to view leadership and engagement positively (Harper, 2004). Such students also reported an increased sense of competence and academic performance. Further understanding of how BGLO membership contributes to the success of African American students may help create healthier campus environments (academic and socially), and greater retention and graduation rates of African American students.

Purpose of the Study

The purpose of this study will be to examine and compare resiliency and psychosocial issues among a sample (N=120) of African American BGLO member and African American student BGLO non-member, college students at PWIs. Specifically, the study will investigate the relationship between resiliency, educational resiliency, ethnic identity and race-related stressors as a means to further understand memberships in campus organizations or BGLOs may interact or relate to these concepts.

Hypotheses

African-American students face a myriad of psychosocial, academic and cultural issues on collegiate campuses of PWIs. The basic premise guiding this study is that African-American students whom are members of BGLO’s have increased supports and cultural outlets as compared to the African American students who are not members of BGLO’s. Of particular interest is the relationship between these populations’ resiliency, ethnic identity and overall academic performance. This study will seek to test the following hypotheses.

Hypothesis I: Higher average African American student organization hours/per week will predict higher cultural insight/belonging as measured by the Multigroup Ethnic Identity Measure-Revised (MEIM-R).

Hypothesis II: Higher MEIM-R scores will predict higher resiliency as measured by the Connor-Davidson Resiliency Scale (CD-RISC).

Hypothesis III: Higher Race-Related Stress as measured by the (IRRS-B) will predict lower educational resilience scores as measured by the College Resilience Questionnaire-Revised (CRQ).

Hypothesis IV: Resilience scores as measured by the CD-RISC will be higher among members of BGLO's than non-members.

Hypothesis V: Educational resilience scores will be higher among members of BGLO's than non-member students as measured by the College Resilience Questionnaire-Revised (CRQ).

Justification of the Study

Since there is a limited amount of literature on the experiences BGLO members have at PWIs, the current study may reveal implications for higher education, multicultural counseling, and counseling education-training programs. First, these findings can help institutions better serve the African American students' population by identifying and understanding the factors that can reduce attrition. Understanding the cultural and social factors related to this multi-factorial population is important at the collegiate setting. Academic counselors are in unique positions to prepare, motivate and support African American students and their families for the challenges they face when transitioning to college. Additionally, counselors working in college counseling centers and various academic advising programs are ideally suited to provide the support that African American students need to succeed at PWIs. Providing adequate training

and academic programs to cover this trend will help counselors understand the African American college student experience at PWIs. The study will raise the important question of determining what positive cultural social structures support African American resilience and educational resilience within the PWI environment.

While we know that African American students fail to attain their baccalaureate degree at the same rate as their White counterparts, we do not necessarily know why, nor do we know how membership in social organizations can counteract this phenomenon. The findings of this study will help elicit answers to these questions through an examination of BGLO members and non-Greek student experiences. Understanding the factors that contribute to the degree completion of African American students, BGLO members and non-members may provide four-year institutions with the understanding necessary to improve educational environments that can support and nurture all minority students. Additionally, the findings from this study may ultimately lead to ongoing research on the development of a comprehensive cultural support model that can be implemented in colleges, communities, schools, and with other minority groups.

Significance of the Study

Low graduation rates are not only troublesome for minority students, but also indirectly raise sociological concerns. Douglas (1999) reported that there is a 16% gap in overall college graduation rates between African Americans and Whites, with a 55% dropout rate for undergraduate Whites compared to a 71% dropout rate for African American undergraduates. Degree completion often entails both personal and socio-economic benefits; however, failure to achieve this goal can also mean the reduction of an educated citizenry and skilled workforce for the larger society (Porter, 2002).

The current job market demonstrates that possessing a college degree increases an individual's chance of securing stable employment (Bureau of Labor Statistics, 2009). The United States Census Bureau (2002) issued a report entitled "The Big Payoff" which found a direct correlation between individuals' educational attainment and future economic earnings. Moreover, national studies examining individuals earning potential rewarded found that a college graduate would earn twice as much compared to individuals possessing an associate's degree or high school diploma (Day & Newburger, 2002). In addition to increased earning potential, Lin and Vogt (1996) argue that both economic and social mobility are more likely to occur when an individual possesses a baccalaureate degree. All of these findings suggest that attaining a college degree can significantly increase an individuals' chance for greater employment opportunities, higher future earnings and social mobility. The educational systems and policy have changed and so too have the students attending college. Over the past decade, many colleges and universities have become increasingly diverse with more students of color attending PWIs. However, a higher attrition rate of African American students is burdensome for both individuals and society, as financial stability and job success can be impacted by lack of education and knowledge. History has revealed that even though our country has rejected "separate but equal", we need to understand further, what facilitates a "together and equal" educational environment.

Chapter Summary

This study will examine resiliency, ethnic identity and educational performance among African American students who are BGLO members and non-members. Data reported has revealed a disproportionate number of African American students not graduating from college while enrolled at a PWI. African American students at PWIs also report significant barriers and discrimination. This is not just an individual or collegiate problem but also one that affects

society. The attainment of baccalaureate degrees increases opportunity for financial stability and career options.

CHAPTER 2: LITERATURE REVIEW

Introduction to Literature Review

In the 50 years since the U.S. Supreme Court's landmark ruling in *Brown v. Board of Education*, African Americans have made substantial gains in educational attainment. No longer are African Americans only attending HBCUs, instead a majority of African American college students enroll in PWIs. However, a continued lack of academic and social supports and cultural insight has led to disproportionately higher attrition rates of African American students at PWIs than White students. What follows is a review of the research conducted on ethnic identity of African Americans and models of identity formation. The next sections of this chapter reviews Person-Environment Interaction Theory and its applicability to the population examined in this study. The last sections of this chapter reviews of resilience, educational resilience, African American students at PWIs, and BGLO history and research.

Ethnic Identity of African-Americans

For ethnic minorities in the United States, their minority status heightens the awareness of their ethnicity and contributes to the important developmental task of ethnic identity formation (Phinney & Alipuria, 1990). Jean Phinney (1990) stated that there are "widely discrepant definitions and measures of ethnic identity, which makes generalizations and comparisons across studies difficult and ambiguous" (p.500). She maintains that "ethnic identity is a dynamic, multidimensional construct that refers to one's identity, or sense of self as a member of an ethnic group" (2003, p. 63). A person will claim an identity within the context of a subgroup that claims a common ancestry and shares at least a similar culture, race, religion, language, kinship, or

place of origin. “Ethnic identity is not a fixed categorization, but rather is a fluid and dynamic understanding of self and ethnic background which is constructed and modified as individuals become aware of their ethnicity, within the large (sociocultural) setting” (2003, p. 63). Thus, ethnic identity includes both a subjective and objective elements. Examples of these elements include genetically acquired attributes (e.g., skin color, gender, hair type, eye color, height, and physical features), cultural and historical inheritance (e.g. the names, languages, places of birth and origin of one’s parents and ancestors), inheritance (e.g. last name, or tribal markings), and/or attributes “believed to be associated with descent,” such as a credible myth of association in which descent has been woven, regardless of whether or not such an association exists in fact.

Studies on changes in ethnic identity have focused primarily on the high school years of minority adolescents and have yielded inconsistent findings. Studies observed either an increase, decrease or no changes in ethnic identity development during the adolescent years (Ortiz & Santos, 2009). The typical approach to racial/ethnic identity research has tended to focus on the significance of race or ethnicity in individual lives. Phinney (1992), and Luhtanen and Crocker’s (1992) ethnic-identity model has specific concepts that deal with the importance individuals place on their racial/ethnic group membership. Luhtanen and her colleagues addressed the significance of race to an individual’s self-concept and the affective and evaluative feelings that the individual holds for his or her racial/ethnic group (Luhtanen & Crocker, 1992). Phinney also measured similar constructs in her Multi-Group Ethnic Identity measure (Phinney, 1992). The components of ethnic identity are framed by the use of models that specifically evaluate the stages people undergo by age from childhood, adolescents and into adulthood.

The research on racial/ethnic/cultural identity development has made a significant contribution to research on identity development in general. How racial identity influences, and

is impacted, provides critical knowledge for those who work on college campuses. While it is important that practitioners understand the process of racial identity development it is also paramount that African Americans be examined as a heterogeneous group in terms of backgrounds and beliefs (e.g., Pascarella & Terenzini, 1991) because not all students are alike (Helms, 1994). Moreover, a number of researchers have focused on African American students' differing beliefs and philosophies regarding race and how these beliefs and perceptions relate to their academic adjustment in the PWI college environment (e.g., Baldwin, Duncan & Bell, 1987; Sellers, Chavous & Cooke, 1998). Such research asserts, for example, that African American students who perceive discrimination from faculty and White peers avoid interaction with them outside the classroom are more likely to feel alienated and adjust poorly to PWI campuses (Stage & Hossler, 1989). Consequently, African American students on PWI campuses may be particularly vulnerable, in that they may be less likely to ask for help from their professors or other professionals, participate in curricular-related activity, and generally less socially involved in the college environment (Allen, 1988; Fleming, 1984). Greater awareness of African American racial identity development can contribute to further understanding students' perspectives and experiences, which may lead not only to earlier identification of issues but more appropriate treatment by practitioners, thus having particular significance for African American students. Therefore, a review of racial identity development theories is presented here to not only further efforts towards its investigation, but also highlight the complexity of conducting research in this area (Torres, Howard-Hamilton & Cooper, 2003).

Models of Identity Formation

Ethnic identity development is conceptualized as a process of exploration the individual undergoes leading to identity commitment and a secure sense of self (Phinney, 1990).

Understanding the course and development of ethnic identity is important since ethnic identity has been associated with positive outcomes for African-American youth and adolescents, like increased self-esteem, academic success, and positive psychosocial adjustment (Luhtanen & Crocker, 1992). Ethnic identity thus serves as a potential marker of psychological well-being in terms of individual competence for racial/ethnic minorities. Various racial/ethnic identity models developed over the last 25 years primarily addressed racial issues thought to influence the psychotherapy process and the assumption that assimilation by Black individuals was necessary for healthy psychological adjustment (Constantine et. al, 1998). Additional theories formed in an attempt to delineate healthy African American identity development, asserted that African American people's over identification with White culture is psychologically unhealthy (Helms, 1990). African American racial identity theories that have focused on the emotional, cognitive, and behavioral processes associated with being African American in American society are entitled models of nigrescence or black racial identity. In essence, such theories reflect the notion that healthy racial identity development is achieved when African Americans progress through a series of linear stages commencing with degrading thoughts and feelings about themselves and other African Americans (accompanied by idealized beliefs about Whites), and ending with internalized positive feelings about themselves, other African Americans, and other racial and ethnic groups.

William Cross, one of the scholars at the forefront of the racial identity movement, developed a nigrescence model to illustrate the complexity of African American identity. The psychology of nigrescence, or the psychology of becoming Black, outlines five stages that African Americans undergo in developing their identities (Cross, 1995). In Cross's original 1971 model, the first stage, pre-encounter is characterized by an African American individual having

anti-Black attitudes that mimic White racist attitudes toward African Americans. In the encounter stage, the transitional second stage, an event occurs that “catches the individual off guard” and makes race more salient to his or her identity. For example, this shift is believed to be brought about because of some type of external event that challenges the Eurocentric perspective previously expressed by the individual such as racism, discrimination, or trauma caused by racial motives. The result of this stage is that the individual is steered toward the third stage, immersion-emersion. Immersion-emersion is characterized by intense African American involvement (e.g., the individual joins African American groups, learns about African American history, shops at African American stores) coupled with anti-White sentiment. Emersion is the transitional aspect of the third stage that facilitates movement to the fourth stage, called internalization. Internalization occurs when the individual forms a healthy African American identity that is not coupled with anti-White sentiment and distrust. An individual’s identity in this stage would still give high salience to “blackness” but would not be consumed with hatred toward Whites. Rather, hatred turns into controlled anger toward oppressive and racist institutions. In the final stage, internalization-commitment, African Americans not only commits themselves to issues concerning African Americans but also engage in activities that help bring justice to other oppressed groups.

Because of criticisms put forth by scholars in the racial identity field, Cross (1995) revised his 1971 racial identity model to address some of the deficiencies in his initial conceptualization. Cross added two additional dimensions to the pre-encounter stage, namely, miseducation and assimilation. The miseducation stage is the experience of being educated in the American school system, in which the focus is primarily on Western cultural history and the significance of African American history is not considered. African American children are often

miseducated about the role of Africa in relation to the origin of Western civilization within the American school system hence resulting in a Eurocentric cultural perspective (Constantine, Richards, Benjamin, & Wilson, 1997). In the pre-encounter assimilation stage, African American individuals are more likely to see themselves as “American” as opposed to African American. Race is not a salient feature of identity for African Americans in this assimilation stage. Cross (1995) also revised the internalization stage by adding two additional components, namely, the internalization nationalist (later renamed Afrocentric) and bicultural identities. The nationalist identity is composed of attitudes that espouse African American empowerment, economic independence, and increased awareness of African American history; while those of bicultural identities may be or divulge themselves into more than one race or culture (Vandiver, Fhagen-Smith, Cokley, Cross, & Worrell, 2001). For example, those who are “mixed” with White and African American, Native American and White, or Italian and Polish will identify themselves in both races and cultures. For individuals with the nationalist or Afrocentric identity, their worldview focuses on African culture while those with bi-cultural identity will focus on more than one culture.

Each stage of the Black Identity Model elicits certain behavioral and personality characteristics, which can either positively or negatively influence resilience and educational resilience levels, or overcome racism. Ethnic identity has also been reported to have an influence on the career development process. Much of the research connecting identity to career development has explored the effect of racial and ethnic identity on vocational maturity and career goals. Research has shown that identity and racism may compel or detract racial and ethnic minorities to/from specific occupational goals (Fouad & Byars-Winston, 2005). Jackson and Neville (1998) were the first researchers to investigate empirically how identity predicts

African American college students' vocational identity and expectation to achieve goals. The results of their study indicated that African American college students who conformed to White cultural standards and values reported lower levels of vocational identity. Conversely, African American college students who accepted healthy aspects of both the American society and their own racial identity reported higher levels of vocational identity and career hopes. More recently, Duffy and Klingaman (2009) conducted a cross-sectional study and examined the extent to which ethnic identity was a determinant of career development progress among 2,432 first-year college students. The results suggested that when African Americans strongly identify with their ethnic identity, they tended to report higher levels of career decidedness.

As African Americans experience the stages of ethnic identity, how they interact with their environment, people and places, will determine the development of their ethnic identity. Thus, it is critical that all those who work on college campuses understand how racial identity develops. Moreover, we need to develop a greater awareness of the extent to which, as well as ways in which, Black racial identity development may affect students' mental health issues, such as depression, substance abuse, eating disorders, and more. An enhanced awareness can lead to heightened understanding, earlier diagnosis, and better treatment. To understand better this interaction of minorities with their environments, a Person-Environment Fit theoretical perspective is reviewed next.

Person-Environment Interaction Theory

The Person-Environment Interaction theories have been used in the behavioral sciences for decades. Research regarding these theories has been reviewed in narrative summaries (Edwards, 1991; Katzell, 1964; Kristof, 1996; Meglino & Ravlin, 1998; Pervin, 1968; Spokane, 1985; Spokane, Meir, & Catalano, 2000) and meta-analyses (Arthur, Bell, Villado, &

Doverspike, 2006; Assouline & Meir, 1987; Chapman, Uggerslev, Carroll, Piasentin, & Jones, 2005; Hoffman & Woehr, 2006; Kristof-Brown, Zimmerman, & Johnson, 2005; Tranberg, Slane, & Ekeberg, 1993; Tsabari, Tziner, & Meir, 2005; Verquer, Beehr, & Wagner, 2003). More recently, Person-Environment Interaction theories are being utilized in higher education settings to examine the interchange between different genders, cultures, and small versus large campuses.

The successful exchange or lack thereof between a person and their environment is known as “fit”. Fit is the degree to which a person or their personality is compatible with their environment. To some degree, this occurs because a person adjusts to their surroundings, for example to their working condition, and/or they are successful in constructing or adapting an environment to their needs, as for example with a family (Schneider, Smith & Goldstein, 2000).

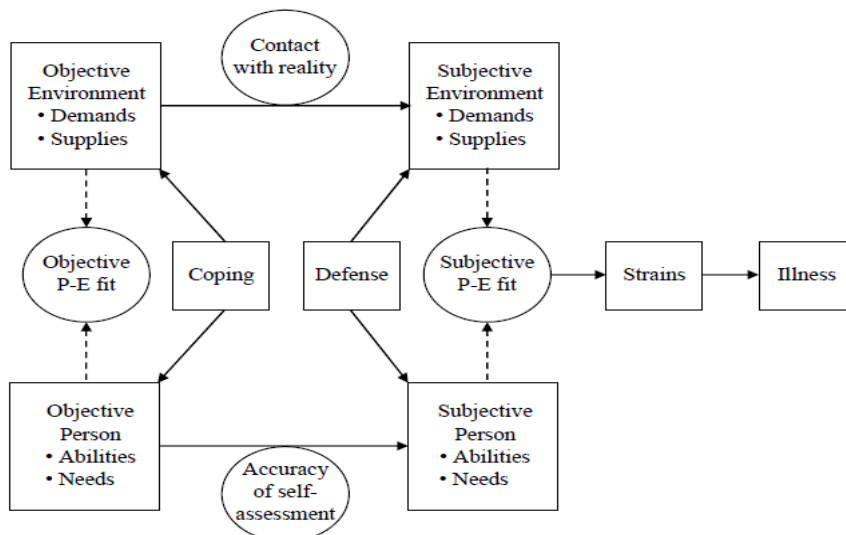
Person-Environment Fit

As an aspect of Person-Environment Interaction theory, Person - Environment (P-E) Fit (i.e., the congruence, match, or similarity between the person and the environment) is a widely used theoretical framework to understand thinking and behavior in organizations (Kristof-Brown, Zimmerman, & Johnson, 2005). The concepts of P-E Fit include (1) the person changes due to their environment and (2) the person’s perception of the environment changes due to their interaction within it. Research (Kristof, Zimmerman & Johnson, 2005; Ahmad, K.Z., 2010) has revealed several types of Fit, among them, Fit between the demands of the environment and abilities of the person, Fit between individual needs and environmental supplies, and Fit between organizational values and values of the individual. For example, studies involving P-E Fit examined the outcomes to career successfulness or job satisfaction. Specifically, Person-Organization Fit was a significant predictor of both extrinsic measures of success (salary, job

level attained, and number of promotions received), and intrinsic measures of success (job and life satisfaction) (Bretz Jr, R. & Judge, T., 1992; O'Reilly, C., Chatman, J., & Caldwell, J., 1991).

P-E Fit involves the process of conceptualizing and measuring Fit. First, Fit involves the fit between the demands of the environment and the abilities of the person. Using the career successfulness example, demands may include quantitative and qualitative job requirements, role expectations, and group and organizational norms, whereas abilities include aptitudes, skills, training, time, and energy the person may muster to meet demands. Next, P-E Fit involves the match between the needs of the person and the supplies in the environment that pertain to the person's needs. P-E Fit theory characterizes needs in general terms, encompassing innate biological and psychological requirements, values acquired through learning and socialization, and motives to achieve desired ends. Supplies refer to extrinsic and intrinsic resources and rewards that may fulfill the person's needs, such as food, shelter, money, social involvement, and the opportunity to achieve (Edwards, Caplan, & Harrison, 1998).

A model of stress as person-environment fit. Concepts within circles are discrepancies between the two adjoining concepts. Solid lines indicate causal effects. Broken lines indicate contributions to person-environment comparisons. Adapted from Harrison (1978).



The first principle of P-E Fit is between the person and environment. The second principle focuses on the distinction between objective and subjective representations of the person and environment. The objective person refers to attributes of the person, as they actually exist, whereas the subjective person signifies the person's perception of his or her own attributes (i.e., the person's self-identity or self-concept). The objective environment includes physical and social situations and events, as they are independent of the person's perceptions, whereas the subjective environment refers to situations and events as encountered and perceived by the person. The two distinctions described above combine to yield four types of correspondence between person and environment constructs: (1) objective P-E Fit, which refers to the Fit between the objective person and the objective environment; (2) subjective P-E Fit, or the Fit between the subjective person and the subjective environment; (3) contact with reality, meaning the degree to which the subjective environment corresponds to the objective environment; and (4) accuracy of self-assessment (or accessibility of the self;), representing the match between the objective person and the subjective person (Strange, 1991). What follows is an example of a study framed by P-E Fit in its determination of personality development within a specific environment.

Robert and Robins (2004) conducted an a 4-year study of 304 college students to determine continuity and change in P-E Fit and its relation to personality development within the collegiate environment. Researchers wanted to determine if an individual is likely to flourish in an environment that fits with their values. Conversely, they examined if difficulties and challenges arise when individuals are in an environment that conflicts with their goals and needs. The match between attributes of the person and attributes of the environment reflects the concept

of P-E Fit (Walsh, Craik, & Price, 2000). Robert and Robin's (2004) research, focused on the Fit between a person's needs and the environment's resources: (a) the match between the subjective values and desires of the person and the consensus judgment of the resources provided by the environment (Alpha Fit) and (b) the match between subjective values and desires of the person and subjective resources of the environment (Beta Fit). Participants in the studies (Robert & Robins, 2004) ranked items describing their actual university environment (subjective resources provided by environment) and rank-ordered the same 10 items for their ideal university (subjective needs). The aggregate of the subjective environment rankings across all participants at each year of the study was used to derive the consensus judgment of the university, which may be considered a more accurate evaluation of the resources provided by the university environment than any one person's opinion. Results of the study indicated individual differences in P-E Fit were moderately consistent over time with year-to-year correlations ranging from .35 to .52. Specifically, results indicated that Fit change came about through students changing their own values, not their environment; and changes in students' perceptions of the actual and ideal environment as it was seen as the university as less competitive and rule oriented than originally thought and as more innovative and people oriented (Robert and Robins, 2004). Results also indicated that students who had higher levels of P-E Fit showed higher levels of personality consistency over 4 years of college.

According to Lofquist and Dawis (1991), changes in P-E Fit can arise either from reacting to the environment and changing one's values or through acting onto the environment, resulting in a change in one's perception of the environment. For example, if the college environment is achievement and academic oriented, and students come to idealize and work towards this achievement, it will lead to higher P-E Fit. Alternatively, students could also change

their majors in an effort to change the environment to being less achievement oriented, which could also lead to increases in PE Fit. Therefore, change of the person to fit the environment is completed by changing values or beliefs or goals. Therefore, in time, individuals will respond to the role expectations and cultural pressure of their environment, and change in the direction of the environment's or dominant cultures values.

According to socialization theories, P-E Fit was predicted to increase as time spent in within the environment increased (Bandura, 2001). Using growth modeling, P-E Fit increased with time as the person's subjective needs began to match their current opinion of their environment. Results revealed that students who increased P-E Fit did so through changing their ideal needs of the environment, for example, the student becoming more competitive, achievement-oriented, and deemphasizing the desire to be in a supportive and cooperative environment (Robert & Robins, 2004). Results also indicated that students who viewed that there was changes within the actual environment, saw the environment as less competitive; therefore changing their viewpoint or perception of their environment. This indicates that changes in P-E Fit came about through students changing their own values, not their environment, and from changes in students' perceptions of the actual and ideal environment. Thus, students who increased in P-E Fit did so in part from idealizing a more competitive and achievement-oriented university and by coming to see the actual university as less competitive than originally thought. This pattern implies that students achieved higher P-E Fit by changing both their own values and the environmental nature of their school environment over time (Robert & Robins, 2004). Changes in a student's values, particularly those whom are minorities are often referred to as assimilating to the dominate culture and are often viewed as "losing" a sense of self. Being able to fit comfortably into an environment while focusing on cultural strengths and beliefs may

influence the attrition rates of African American college students, as they are able to utilize and view various aspects of their culture within their environment (Weaver, 2010). College adjustment is a multifaceted psychosocial process that imposes stressors on students and requires an array of coping skills. All students are expected to experience various adjustment demands in academics, social, familial and emotional/mental and attachment to the institution. However, cultural minority students face unique difficulties that majority students do not face. Therefore, cultural aspects such as race and culture may play a significant role in P-E Fit.

Ethnocultural P-E Fit

Studies of P-E Fit revealed that individuals will seek out, find comfort, and flourish in environments that support their specific preferences. More specifically, Ethnocultural P-E Fit centers on the idea that organizations have cultures that are more or less attractive to certain types of individuals (Wilkins & Ouchi, 1983). Individuals tend to classify themselves into social categories, such as gender, race, ethnicity, and organizational affiliation, and to use those categories to define themselves. Drawing on underlying values, individuals may manage their lives in ways that help them choose roles and organizations they perceive as having values similar to their own (Schneider, 1987). In addition, organizations attempt to select recruits who are likely to share their values. New members are then further socialized and assimilated, and those who do not fit, leave. Research has shown that similar backgrounds, attitudes, and experience can increase liking between individuals and organizations hence being more or less attractive to different types of people (O'Reilly, Chatman, and Caldwell, 1991). Values provide the starting point, with the joint processes of selection and socialization acting as complementary means to insure Person-Organization Fit (O'Reilly, Chatman, and Caldwell, 1991). Thus, congruency between an individual's values and those of an organization may be at the center of

Ethnocultural P-E Fit. The importance of an individual's values in organizational culture are linked to the psychological process of identity formation in which individuals appear to seek a social identity that provides meaning and connectedness, which in turn can affect their academic successfulness (Ashforth & Mael, 1989). The inclusion of racial and cultural identity models in the understanding and practice of student development may well be the starting point for institutions to better address the needs that African American students face in a college environment. Even though adjustment and P-E fit are interrelated concepts, there are differences in terms of how students are expected to experience these two variables (Hutz et. al, 2003).

Ethnocultural P-E fit is a dynamic relationship between students and their environment, whereas adjustment relates to whether students believe life changes need to be made in order to get the most out of their college experience. As such, if students believe that they have the ability to meet the demands of college life and their needs are adequately met by the university, and feel a sense of ethnocultural belonging to the campus and immediate community, it is likely that they will not perceive a need to make major changes in self in order to be adjusted. The relationship between P-E fit and adjustment could have important implications for minority students attending PWIs. Chavous (2000) found that African American college students who more strongly identified with their racial background experienced lower levels of Ethnocultural P-E fit than did African American college students who were not as strongly identified. Minority student populations report differences in Ethnocultural P-E Fit than majority students. For example, minority student populations believe that they are less able to meet their needs, have their needs met by the university environment, and perceive that they are more ethnoculturally different from the university community and fewer positive attitudes toward the university than majority students did (Husk et. al, 2003). Therefore, understanding the dynamics associated with facing

adversity and advocating for institutions of higher learning to understand their role in P-E Fit is imperative. P-E Fit may provide a framework by which we can examine multifaceted determinants of resilience among specific populations. P-E Fit allows the study of resilience through analysis of individual, perceived social, and perceived physical environmental determinants.

Race-related Stress within Higher Education

Minority students not only face adversity within the campus environment but also at times can face the same within the classroom. According to Quaye and Harper (2007), the responsibility is typically placed on minority students to make classroom environments culturally engaging and the material culturally relevant. In one recent review, authors characterized classrooms as venues where White professors teach in ways that engender feelings of cultural deprivation and corresponding acts of disengagement and participatory withdrawal from African American students (Rovai, Gallien, & Wighting, 2005). Similarly, Sedelacek, Helm, and Prieto (1998) found that a significant number of African American students perceived their instructors to be racist and were disappointed with the treatment they had received in predominately-White classrooms. Participants in Fries-Britt and Turner's study of African American students at a PWI identified and elaborated on a number of problems they encountered:

- (a) Experience negative comments and stereotypes from professors and non-African American peers about the African American community;
- (b) Felt forced to validate and prove their intellectual competence to White peers and faculty in the classroom;
- (c) Face inappropriate stereotypes about their personal appearance (2001).

These problems eroded African American students' confidence in their academic abilities, thus resulting in diminished levels of engagement (Harper, 2007). Calling on African American students to provide the "African American" or "minority" perspective on course topics is another common mistake made by instructors at PWIs (Howard-Hamilton, 2000). Author and activist Bell Hooks called attention to this dilemma:

"Often, if there is a lone person of color in the classroom, she or he is objectified by others and forced to assume the role of 'native informant'...this places an unfair responsibility onto that student" (1994, p.43)

Consequently, descriptors like alienated, disengaged, disenfranchised, underserved, incompatible, and dissatisfied have been used to characterize the in-class and out-of-class experiences of African American undergraduates at PWIs. McCormack (1995) compared data from 1988 and 1992 on the number of incidents and type of discrimination on college campuses, and detected a shift in the nature of racism from subtle, covert forms (e.g., ostracism) in the 1988 data to more overt forms of blatant attacks (e.g., verbal harassment and differential treatment) in the 1992 data. In a follow up study, the same author (McCormack, 1998) found that incidents of discrimination in universities had again increased, and were overtly expressed. The most common forms of discrimination were verbal harassment in the form of racial slurs, exclusion from activities, and physical violence (Suarez-Balcazar, Orellana-Damacela, Portillo, Rowan, & Andrews-Guillen, 2003). These experiences help explain, at least in part, why African American undergraduates, in comparison to other respondents to the National Survey of Student Engagement, reported the lowest level of satisfaction with their college experiences (NSSE, 2005). It is especially imperative to examine the connection between race-related stress and

resilience, given that race-related stressors may preclude an individual's ability to positively cope, overcome various circumstances and impede their success (Sue & Sue, 2008).

Resilience

Masten, Best, and Garmezy defined resilience as the ability to thrive despite adversity and as a “process, capacity or outcome of successful adaptation despite challenges or threatening circumstances,” and “good outcomes despite high-risk status, sustained competence under threat and recovery from trauma” (1990, p. 426). Resilient individuals are better able to cope and adjust to difficult life situations, and are likely to prevent future, more problematic behavior (Clauss-Ehlers, 2008). As resiliency researchers begin to incorporate or recognize other factors that may influence its ability, one popular factor is culture. There has been an increase in literature that examines how cultural factors relate to and influence the development of coping and resilience in diverse racial and ethnic backgrounds. In one study, Belgrave, Chase-Vaughn, Gray Addison and Cherry (2000) explored adversities experienced by adolescent African American girls. The study's emphasis focused on positive cultural contributions that promoted resilience. The theoretical framework for the study was an Afro-centric worldview pertaining the values of “spirituality; harmony; collective responsibility; oral tradition; sensitivity to emotional cues; authenticity; balance; concurrent time orientation to past, present, and future; and interpersonal/communal orientation” (Belgrave et al., 2000, p. 136). Another factor related to resilience that has been studied is hardiness. Hardiness is defined as a “constellation of personality characteristics that function as a resistance resource in the encounter with stressful life events” (Kobasa's, 1979, p. 169). The three basic elements comprising hardiness include the ability to perceive change as a challenge, to maintain a sense of purpose and deep commitment to the people and activities in which they are involved, and to perceive a sense of personal control

in handling life's events and activities. As discussed in the Black Identity Model, minorities progress through five stages hence developing internal and external pride and purpose in their race or culture. In turn, they exhibit a commitment in advocating for change, self-empowerment, increased awareness of racial issues, and autonomy in handling life's stressors and events.

Clauss-Ehlers et al. (2006) found that higher levels of ethnic and gender identity development were predictors of resilience, in response to stress, indicating the potential importance of cultural resilience in coping for some populations. The study examined the relationship between stress and resilience among a diverse group of collegiate women. Women who were engaged in learning about their ethnic group's history and tradition via cultural campus organizations reported greater resilience than women less engaged in exploring their ethnic identity. Clauss-Ehlers et al. (2006) concluded that these findings are consistent with how ties to local or national homelands, neighborhoods, and communities act as buffers against exhaustion and despair for diverse people dealing with a variety of stressors. The theoretical models and findings from Belgrave et al. (2000) and Clauss-Ehlers et al. (2006) implicate cultural factors as potential positive influences on the nature of coping and resilience in students from diverse cultural backgrounds. While the literature cited above leads to a conclusion that resilience must include culture in a study of diverse populations, a review of measures of resilience indicates that, the major measures currently in use do not attend to cultural resilience. For example, increased sense of ethnic identity contributes to greater resilience among first- and second-generation African American college students (Saddlemire, 1996). Resilience bridges ethnic identity to P-E Fit as one's ability to overcome adversity relates to one's belief or view of ethnic identity. As P-E Fit measures a person's general sense of belonging within a particular environment, it addresses the relationship between the person and the environment (Swartz-

Kulstad & Martin, 2000). According to Tinto's (1993) model of student departure, perceived level of P-E fit, from an academic and social perspective, influences retention. According to the model, congruence between a person and her or his environment results in greater satisfaction, lower levels of stress, and higher levels of achievement (Puccio, Talbot, & Joniak, 1993).

Educational Resilience

Students at risk of academic failure often face a complexity of problems caused by poverty, health, and other social conditions that have made it difficult for them to succeed in school. It has been a priority of administrators and teachers in all levels of education, to close the achievement gap between those students who are academically successful and those who are at risk of failure (Waxman, Gray & Padron, 2003). One area of research that has important implications for the educational improvement of students at risk of academic failure is focused on “resilient” students, or those students who succeed in school despite the presence of adverse conditions. Educational resilience “refers to students who despite economic, cultural, and social barriers still succeed at high levels” (Cabrera & Padilla, 2004, p. 152). The construct of “educational resilience” is not viewed as a fixed attribute but as something that can be promoted by focusing on “alterable” factors that can influence an individual’s success in school. This approach does not focus on attributes such as academic ability.

McMillan and Reed (1994) describe four factors that appear to be related to educational resiliency:

- Personal attributes such as motivation and goal orientation,
- Positive use of time (e.g., on-task behavior, homework completion, participation in extracurricular experiences),
- Family life (e.g., family support and expectations), and

- School and classroom learning environment (i.e., facilities, exposure to technology, leadership, and overall climate).

These factors associated with educational resilience relate to the types of people and environments we interact in, and the potential outcome on ethnic identity and educational resilience. Weaver (2010) conducted a study, which intertwined resilience, ethnic identity and academic success of African American students and found that ethnic identity was significantly and positively correlated with resilience; and resilience was predictive of academic success (i. e., GPA). Students having higher educational resilience indicators also had higher grades. Therefore, determining the necessary characteristics needed for African American students to succeed despite cultural, economic and cultural barriers is essential in increasing their academic success.

African American Students at PWIs

When compared to their majority peers, African American students have higher attrition rates, lower academic achievement levels, less likelihood of enrollment in advanced degree programs, poorer overall psychosocial adjustment, and lower post-graduation occupational attainments and earning (Allen, 1992). They can feel marginalized more often than they feel valued which can negatively affect their academic and social experiences (Pewewardy & Frey, 2002). They may perceive the environments of PWIs campuses as unwelcoming, hostile or threatening (Douglas, 1998). Examples of this marginality can be found in hate crimes on college and university campuses. The Southern Poverty Law Center found that all college campuses are the third most common venue for hate crimes (Corey, 2000).

BGLO's: The Divine Nine

On December 4, 1906, on the campus of Cornell University in Ithaca, New York, seven enterprising young African American men pursuing their dreams of higher education at that institution sought to improve themselves within their current environment through the formation of a social studies and literary society. The Fraternity initially served as a study and support group for minority students who faced racial prejudice, both educationally and socially, at Cornell. This organization would later evolve into the first national college fraternity for African American men: Alpha Phi Alpha Fraternity, Incorporated. The founders and early leaders of the Fraternity succeeded in laying a firm foundation for Alpha Phi Alpha's principles of scholarship, fellowship, good character, and the uplifting of humanity (Alpha Phi Alpha, 2010).

Founded on the campus of Howard University in Washington, DC on January 15, 1908, Alpha Kappa Alpha Sorority, Incorporated is the oldest Greek-letter sorority. With fewer than 30 women present on Howard University's campus at that time, the sixteen founding members sought relief by bonding together socially (Parker, 1990). The small group of women who organized the Sorority was conscious of a privileged position as college-trained women of color, just one generation removed from slavery. They were resolute that their college experiences should be as meaningful and productive as possible. Alpha Kappa Alpha was founded to apply that determination. As the Sorority grew, it kept in balance two important principles, leadership and service (Alpha Kappa Alpha, 2010).

Kappa Alpha Psi Fraternity, Incorporated the second Greek fraternity was founded on January 5, 1911 by ten African American male students. Alike its predecessor, Alpha Phi Alpha, they were also founded on a predominately white university, Indiana University. Formidable obstacles were erected to prevent the few who were enrolled from assimilating into co-curricular campus life. This ostracism characterized on the campus at that time led to a vision of change.

The Fraternity's foundation also like “Alphas” may also have been contributed to some of its members serving as waiters in White fraternity houses. The founders sought a formula that would immediately raise the aspirations of African American collegians and stimulate them to accomplishments higher than they might have imagined. Fashioning achievement as its purpose, Kappa Alpha Psi began uniting college men of culture, patriotism and honor in a bond of fraternity (Kappa Alpha Psi, 2010).

The next four organizations were all founded at Howard University, also known as the “Mecca” for many of the Historically African American Greek organizations. Omega Psi Phi was founded on a Friday evening, November 17, 1911. Three Howard University liberal arts undergraduate students, with the assistance of their faculty adviser, gave birth to the Omega Psi Phi Fraternity. From the initials of the Greek phrase meaning "friendship is essential to the soul," the name Omega Psi Phi was derived. The phrase was selected as the motto. Manhood, scholarship, perseverance and uplift were adopted as cardinal principles. A decision was made regarding the design for the pin and emblem, and thus ended the first meeting of the Omega Psi Phi Fraternity. The Faculty Council at Howard initially would only accept the fraternity as a single local chapter and not a national organization. The fraternity refused acceptance as a strictly local organization and fought to be recognized as a legitimate and worthy fraternity as its predecessors. The fraternity has continued to expand internationally since its inception (Omega Psi Phi, 2010).

Many Initial members of Alpha Kappa Alpha sorority to be established felt a strong desire for leadership and wanted the organization to focus more on collegiate, community, national, and global service and politics. That pull led to the creation of Delta Sigma Theta Sorority, Incorporated. Delta Sigma Theta Sorority was founded on January 13, 1913 by twenty-

two collegiate women. These students wanted to use their collective strength to promote the aforementioned, along with, academic excellence and to provide assistance to persons in need. The first public act performed by the Delta Founders involved their participation in the Women's Suffrage March in Washington D.C., March 1913 (Delta Sigma Theta, 2010).

The following organizations, Phi Beta Sigma Fraternity, Incorporated and Zeta Phi Beta Sorority, Incorporated are unique in that their two groups share a constitutional relationship with each other – a “brother-sister” alliance among the BGLO’s. Phi Beta Sigma was founded on January 9, 1914 by three young African American males. The fraternity wanted to organize a Greek letter fraternity that would truly exemplify the ideals of brotherhood, scholarship, and service. The Founders deeply wished to create an organization that viewed itself as "a part of" the general community rather than "apart from" the general community. They believed that each potential member should be judged by his own merits, rather than his family background or affluence...without regard to race, nationality, skin tone or texture of hair. They desired for their fraternity to exist as part of an even greater brotherhood which would be devoted to the "inclusive we" rather than the "exclusive we". From its inception, the Founders also conceived Phi Beta Sigma as a mechanism to deliver services to the general community. Rather than gaining skills to be utilized exclusively for themselves and their immediate families, they held a deep conviction that they should apply their newly acquired skills to the communities from which they had come. This deep conviction was mirrored in the Fraternity's motto, "Culture for Service and Service for Humanity". Today, Phi Beta Sigma has blossomed into an international organization of leaders, and is no longer a single entity (Phi Beta Sigma, 2010).

With the help of their “brother” organization, Zeta Phi Beta sorority, Incorporated was founded January 16, 1920. The sorority was founded on the simple belief that sorority elitism

and socializing should not overshadow the real mission for progressive organizations - to address societal mores, ills, prejudices, poverty, and health concerns of the day. Zeta began as an idea conceived by five African American females also known as the Five Pearls. They dared to depart from the traditional coalitions for African American women and sought to establish a new organization predicated on the precepts of Scholarship, Service, Sisterly Love and Finer Womanhood. The ideal of the Founders was for the Sorority to reach college women in all parts of the country who were sorority minded and desired to follow the founding principles of the organization. Founder Viola Tyler was oft quoted to say "[In the ideal collegiate situation] there is a Zeta in a girl regardless of race, creed, or color, who has high standards and principles, a good scholarly average and an active interest in all things that she undertakes to accomplish" (Zeta Phi Beta, 2010).

Only one of the nation's African American sororities, Sigma Gamma Rho Sorority, Incorporated, had its beginnings at a predominately white institution. It was organized November 12, 1922 in Indianapolis, Indiana at Butler University by seven young educators. At that time, Butler was a normal or teacher-training school. The group became an incorporated national collegiate sorority on December 30, 1929. The founders of the sorority were older students, actually teachers, who wanted to create an organization that would provide service and fellowship opportunities as well as promote professional achievement through higher education. The sorority's aim is to enhance the quality of life within the community. Public service, leadership development and education of youth are the hallmark of the organization's programs and activities. The sorority continues to address concerns that impact society educationally, civically, and economically. The sorority's commitment to service can be seen in its slogan, "Greater Service, Greater Progress" (site Sigma Gamma Rho Sorority, 2010).

1963 was a turbulent year. History-making events, such as the Birmingham police used water hoses on peaceful civil rights demonstrators, the Medgar Evers assassination and the historic "March on Washington where thousands heard Martin Luther King, Jr. deliver his historic "I Have a Dream" speech in Washington, DC. These occurrences would radically and permanently affect the country as a whole, and African-Americans in particular. Three weeks later in Baltimore, Maryland, another group of men would make a different kind of history. On September 19, 1963, at Morgan State College (now Morgan State University), 12 students founded what is now the nation's fifth largest, predominately African-American social service fraternity: The Iota Phi Theta Fraternity, Incorporated. Based upon the higher ages of the founders, heightened responsibilities, and increased level of maturity, this group had a slightly different perspective than the norm for college students. It was this perspective from which they established the Fraternity's purpose, "The development and perpetuation of Scholarship, Leadership, Citizenship, Fidelity, and Brotherhood among Men." Additionally, they conceived the Fraternity's motto, "Building a Tradition, Not Resting Upon One!" (Iota Phi Theta, 2010).

Research on BGLO's

Research regarding African American student involvement in Greek organizations is lacking. Within the last few years, BGLO have been researched as a separate entity from the Predominately-White Greek system. Most of the research has focused on the experiences of White students and the findings are mixed concerning educational growth, openness to diversity, or college GPA. Fox et al. (1987) found that characteristics most often associated with White fraternity membership were not necessarily applicable to African American fraternity membership. Existing literature suggests that African American Greeks are different in

background characteristics, membership experiences, values, attitudes, roles the organization plays in their life and priorities from their White Greek counterparts.

Although there is a considerable amount of research concerning the experiences of African American students at PWIs, studies regarding the classroom behaviors of African American sorority and fraternity members are non-existent. Likewise, literature on BGLO's focuses disproportionately on socially-produced outcomes and the non-academic experiences of members, such as hazing, pledging, and medical or legal issues which have occurred from the aforementioned (Harper, 2007). BGLO's tend to serve as a source of social support for African American undergraduates; they sponsor most of the culturally-appealing social activities that members and nonmembers alike enjoy; and they provide a haven from the racism, isolation, and underrepresentation that African American students often experience (Harper, Byars, & Jelke, 2005).

Collective responsibility of BGLO members speaks directly to leadership and accountability. BGLO members report high levels of accountability to their chapters, recognizing that their classroom and community performance affects the overall success of the entire group. Because of their Greek affiliation, African American students at both HBCUs and PWIs have been exposed to various leadership roles, opportunities for civic responsibility within and beyond the collegiate environment, and a network of men and women who promote and encourage academic achievement and community service (Harper, 2008; Harper & Harris, 2006; Kimbrough, 1995, 1997; Patton & Bonner, 2001). Research has shown that membership in a BGLO provides benefits to affiliated students. For example, Schuh, Triponey, Heim, and Nishimura (1992) found that membership in a BGLO provided bonding networks both locally and nationally, allowed members to act as role models, and stressed the importance of

community service involvement. A study by Harris (1998) determined that involvement in Black sororities allowed women to become leaders and enhanced their academic experience. Similarly, Phillips (2005) stated, “The sisterhood network of African American sororities has provided avenues for self-improvement, racial uplift, and leadership development” (p. 347). Phillips maintains that African American sororities retain cultural traditions of the African American community and serve as an oppositional space of resistance against oppressive societal systems, such as those imposed by race, class, and gender. The research on the benefits of Greek affiliation among Black men indicated that those who participated in Greek organizations developed a greater sense of their racial identity and self-esteem when compared to nonmembers (Taylor & Howard-Hamilton, 1995). In addition to these benefits, McClure (2006) noted that Greek affiliation within a Black fraternity was central in helping African American men succeed in college. Their membership in a BGLO facilitated closer bonding with other Black men, a stronger connection to the campus environment, and greater knowledge regarding Black history. McClure’s findings are consistent with the work of Harper and Harris (2006) who suggested that in comparison to their same race, non-Greek affiliated peers, African American men in historically Black fraternities hold more campus leadership positions and are more involved in campus activities. While other minority student organizations exist on campus and provide leadership development, affiliation in BGLO’s tends to be the most popular vehicle for African American students to become leaders, particularly at PWIs (Kimbrough, 1995; Sutton & Terrell, 1997).

Conclusion from Reviews

In the collegiate environment, students with a strong identification with their ethnic group achieve better within the school environment (Yasui & Dishion, 2007). Students with strong

ethnic identity utilize their own cultural group as a support structure, calling on family members and their cultural beliefs/traditions when facing adverse circumstances in the environment.

Cultural groups in which African American students engage in are BGLOs as they provide the support and same beliefs/traditions needed to face the various stereotypes and discrimination seen within the classroom and campus environments of PWI's. BGLO's characteristics can increase African American students' cultural pride and ethnic identity, resilience to adversity, and potentially improve their academic performance. Educational resilience can be thought of as a continuous interaction between an individual and characteristics of his or her educational environment. This interaction as seen through P-E Interaction Theory looks at the students Fit within the interaction (subjective) and environment (objective). Therefore it can be argued that students with a stronger ethnic identity and Fit, will likely correlate with higher resilience, and educational resilience.

There is a significant amount of literature that studies African American college students and their presence on the campuses of PWI's. While all college students may experience challenges when they arrive on campus, some studies suggest that the needs of African American students are unique and often differ greatly from those of their White counterparts. While the literature identifies characteristics associated with membership in Greek lettered organizations, it has only been recently that research has begun to differentiate Greek lettered organizations based on race. African American Greek lettered organizations offer rich history, philanthropy, networking opportunities, and social interactions. However, the literature does suggest positive outcomes such as positive social supports, academic standings and matriculating and decreased risky behaviors for members at PWIs as they engage in culturally relevant activities and others who have similar race or cultural beliefs. However, research does not offer if any of the

aforementioned benefits offer positive contributions to member's academic success and resiliency on collegiate campuses.

African American students attending white universities are often caught in a whirlwind of confusing racial emotions and identities. While the literature on African American college students helps provide a better understanding of factors that may influence degree completion at a PWI, the participants in this current study share a unique, dual identity. These individuals are not only African American students who attended a traditionally White institution, but they are also Greek members.

Chapter Summary

This study built an integrated framework that incorporates elements from the Environment Interaction Theory. This theoretical approach not only assisted in the development of the framework that guided this study, but will also help in the creation the methodology and analysis of data. The Interaction theory looks at the behavior of individuals and the interactions they make in their environments and the barriers those minority students must overcome in order to be successful in college. This theory was useful as it is also situated within a local context and emphasizes the need to attain knowledge specific to the particular institution being examined. By integrating various aspects this study explored social, academic, cultural and institutional variables and their impact on degree completion for African American students.

This chapter synthesizes existing literature on both African American students and African American college students attending traditionally White institutions. Because the literature focusing specifically on African American students and Greek members; and ethnic identity and resilience pertaining to educational success is limited, it was important to review both bodies of work to frame the context for examining this student population. Additionally,

this chapter highlights the need for future research on African American students and Greek members. As this population continues to grow, it is important to know who these students are, what characteristics they possess and what factors contribute to their overall success. Chapter 3 describes the methodological approach used for this study. It also describes the data collection and analysis procedures employed. It concludes with an introduction of the participants in this study.

CHAPTER 3: METHODOLOGY

Introduction and Purpose Statement

The purpose of this study was to explore and examine the relationship differences in resiliency, race-related stress, educational resilience, ethnic identity and racism-discrimination issues among African American students and African American Greek members at PWIs. In addition, this study was to investigate whether, and to what extent, the constructs of resiliency, educational resiliency, and ethnic identity issues affected academic performance. Specifically, the study investigated the potential relationship between resiliency, educational resiliency, ethnic identity and race-related stressors as a means to further understand memberships in campus organizations or BGLOs may interact or relate to these concepts. This chapter includes a description of and rationale for the proposed research design, followed by a description of the data source, including the population of interest and sampling strategies, and the instrumentation and measures used to examine data and test hypothesis.

Hypotheses

Specifically this study sought to confirm the following hypotheses:

Hypothesis I: Higher average African American student organization hours/per week will predict higher cultural insight/belonging as measured by the Multigroup Ethnic Identity Measure-Revised (MEIM-R).

Hypothesis II: Higher MEIM-R scores will predict higher resiliency as measured by the Connor-Davidson Resiliency Scale (CD-RISC).

Hypothesis III: Higher Race-Related Stress as measured by the (IRRS-B) will predict lower educational resilience scores as measured by the College Resilience Questionnaire-Revised (CRQ).

Hypothesis IV: Resilience scores as measured by the CD-RISC will be higher among members of BGLO's than non-members.

Hypothesis V: Educational resilience scores will be higher among members of BGLO's than non-members as measured by the College Resilience Questionnaire-Revised (CRQ).

Research Design

This study utilized a descriptive-quantitative research method with a non-experimental, cross-sectional survey, between-subject research design to determine the relationship between resilience, race-related stress, educational resilience and ethnic identity. The research design was non-experimental because it will not be feasible to use a control group or to randomly assign participants to a test or control group. Additional characteristics that make this research non-experimental include lack of manipulation of any independent variables, studying what naturally occurs or has already occurred, and how variables are related (Creswell, 2005). This survey method was chosen because of the advantages of this method, such as the ability to ask many questions about several issues, relative inexpensiveness, usefulness in exploring trends, and gathering information from participants at different sites, at one point in time. Specifically, this

study used a cross-sectional survey research design in that the study examined African American students and BGLO members at PWIs.

Because the research involved participants in a non-laboratory environment, randomization of subject assignment to treatment and control groups was not feasible. All data was from the same group of participants, which consisted of African-American college students from three southeastern universities. A non-experimental research design can be used when the research does not have the objective of establishing a cause-and-effect relationship between the variables under investigation (Cohen, Manion, & Morrison, 2000). The research design was cross-sectional because it collected data to identify the overall resilience of African American college students in two southeastern universities at a single time. The alternative longitudinal design is not suitable for this research because the research questions are not aimed to examine changes over time but current status. The study's intention was to obtain data on the interrelationships among selected variables such as resilience, educational resilience, race-related stress, ethnic identity and demographics.

An online survey method (computerized self-administered questionnaire) was used to disseminate the survey. The web-based, research surveying software, Qualtrics, was utilized in disseminating the survey to participants. Data was collected between June and September 2013. This method was to provide an opportunity to reach as many of the research population as possible. Web-based surveys have the benefits of reduced time to completion, directed branching, and reduced overall survey costs if no significant programming is required (Schonlau, Fricker, & Elliott, 2002). With regard to directed branching, this survey automatically directed the respondents to the next appropriate question based upon their previous answer; therefore will result in less confusion for the respondents (Fowler Jr., 2002).

Web-based surveys also have disadvantages such as unclear answering instructions that can lead to some people becoming frustrated and exiting the survey without finishing (Ray and Tabor, 2003); being impersonal due to no human contact usually which can limit the ability to probe in-depth (Scholl et al., 2002); and low response rates. Several researchers have examined the low response rates of many online surveys (see, for example, Fricker and Schonlau 2002; Sheehan and McMillan, 1999). Fricker and Schonlau (2002) state a popular conclusion that there is limited evidence in the literature that online surveys generally obtain higher response rates than do other survey types. They report that the majority of reported results show online surveys to at best attain response rates equal to other modes and sometimes to do worse; and they suggest that the reasons for this merit more study.

Population

Two universities located in the southeastern area of the United States was used to recruit study participants. Population of study was African American undergraduate college students whom attend one of the two universities. Both university's' total enrollment ranges from 25,000 to 28,000 students, including both on-campus and distance education students. Ethnic minorities including American Indian, Asian, African American Non-Hispanic, and Hispanic make up an average of 12% to 20% of the undergraduate students. Each university has over 200-registered organizations offered on their campuses, with 7-10% of undergraduates joining sororities or fraternities.

Sample & Sampling Procedure

Power Analysis

Power of a statistical test refers to the probability of rejecting a false null hypothesis, or finding a difference or relationship that does exist. In other words, statistical power ($1-\beta$) refers to the likelihood the test will not lead to Type II error or a false negative (β) conclusion. Power

analyses are generally conducted prior to data collection in order to determine appropriate sample size for meaningful outcomes. Quotas for each segment of the population should be proportional to the size of each segment.

In general, greater power increases the chances of being correct, but because power is associated with sample size, statistical significance, and effect size, greater power generally requires more participants and resources. Power of 0.80 is considered an adequate and acceptable standard used in the behavioral and health sciences (Graviter & Wallnau, 2005). When desired power is established and sample size is unknown, the necessary sample size may be determined by specifying the appropriate level of significance and the estimated effect size. The level of significance (α) is established in order to minimize the chance of a Type I error, or the probability of declaring a difference or relationship exists when it really does not exist. In the behavioral sciences, Cronbach's $\alpha = 0.10$ is considered an acceptable level of significance for exploratory studies and in determining relationships between concepts (i.e., variables). Effect size (f^2) refers to the strength of the relationship and is related to the coefficient of determination (R^2) in the case of a linear regression model. According to Cohen, Cohen, West, & Aiken (2003, p.179) a population $R^2 = 0.02$ or $f^2 = 0.02$ is considered a small effect size, a population $R^2 = 0.13$ or $f^2 = 0.15$ is considered a medium effect size, and a population $R^2 = 0.26$ or $f^2 = 0.35$ is considered a large effect size. In addition to this information, effect size may be estimated by examining R^2 values reported in relevant literature. A related *effect size* is r^2 , the coefficient of determination (also referred to as "r-squared"), calculated as the square of the Pearson correlation r . In the case of paired data, this is a measure of the proportion of variance shared by the two variables, and varies from 0 to 1. For example, with an r of 0.21 the coefficient of determination is 0.0441, meaning that 4.4% of the variance of either variable is shared with the other variable.

The r^2 is always positive, so does not convey the direction of the correlation between the two variables (Cohen, Cohen, West, & Aiken, 2003). Cohen's f^2 is one of several effect size measures to use in the context of an F-test for ANOVA or multiple regression. Unfortunately, it estimates for the sample rather than the population and is biased (overestimates effect size for the ANOVA). An unbiased estimator for ANOVA would be Omega squared, which estimates for the population. Note that it estimates for the sample rather than the population and is biased (overestimates effect size for the ANOVA). The f^2 effect size measure for hierarchical multiple

regression is defined as: $f^2 = \frac{R_{AB}^2 - R_A^2}{1 - R_{AB}^2}$. Where R_A^2 is the variance accounted for by a set of one or more independent variables A , and R_{AB}^2 is the combined variance accounted for by A and another set of one or more independent variables B (Cohen, Cohen, West, & Aiken, 2003).

Where $R^2 A$ is the variance accounted for by a set of one or more independent variables A , and $R^2 AB$ is the combined variance accounted for by A and another set of one or more independent variables B . By convention, f^2 , an effect sizes of 0.02, 0.15, and 0.35 are termed *small*, *medium*, and *large*, respectively (Cohen, 1988). As this analysis used a hierarchical multiple regression, f^2 was better used in this approach.

For the current study, an online statistical calculator was used to determine an appropriate sample size (Statistics Calculators Index, 2012). This calculator used Cohen's (2003) method for determination of sample size (n), where $n = [(L/f^2) + u + 1]$. Lambda (L) is an index related to population effect size (f^2), and u is the number of independent variables. Lambda as derived from Cohen's L table for determination of sample size where the following established values were used: power = 0.80; error df $v_2 = 120$; $\alpha = 0.10$; and $u = 2$ independent variables (Cohen, 1983, p.477). Onwuegbuzie et al., (2004) recommends a minimum of 21 participants per

subgroup for one-tailed hypotheses for most common quantitative research designs. Therefore, a minimum total of 42-60 participants of each subgroup need to be recruited.

The first step in non-probability quota sampling is to divide the population into exclusive subgroups, (i.e., Greek versus Non-Greek). Examining the differences in educational resilience of African American students at PWIs, therefore membership or non-membership in a BGLO was used as the stratification. The second step in non-probability quota sampling is to calculate a quota for each population. The number of participants that should be included in each stratum varied depending on the make-up of each quota within the population. Because we are examining the resilience differences in African American students with strata specific to Greek membership, the number of students from each group that we would include in the sample was based on the proportion of African American students amongst the 25,000 to 28,000 university students. The range of African American enrollment into BGLOs at two PWIs ranged from .4-8% (average 5%). Therefore, if our desired sample size were 100 students, this would mean our sample should include 50 BGLO students and 50 African American students. The third step shows that once the number of units is selected, recruitment to fill each population continued until all quotas are filled.

Moderating Interactions

Cohen also recommended conventions for describing small, medium, and large effect sizes for squared partial correlations of .02, .13, and .26, respectively. Using Cohen's power tables, an investigator would need to obtain sample sizes of 392, 55, and 26, respectively, to have "adequate" power (i.e., power of .80) at .05 for detecting small, medium, and large effect sizes, respectively, if the variables included in the interaction were measured without error (Soper, 2012). Samples of more than 200 participants may be necessary for having adequate power for

detecting interactions with medium effect sizes using measures with reliabilities of .70, whereas more than 1,000 participants may be necessary for detecting interactions with small effect sizes. Cronbach's alpha (Cronbach, 1951; Hassad, 2009) which quantifies the degree of internal consistency (reliability) of a set of items. For this study, the effect size was determined moderate, 0.15, which was deemed conservative and appropriate for this study as past literature where similar variables were reported as those to be used in this study revealed R^2 values ranging from 0.10 to 0.40, with most predictors having associated R^2 values of 0.15 to 0.27 (Mikolashek, 2004).

Instrumentation

Participants was asked to complete a survey packet which included: The *Connor-Davidson Resilience Scale* (CD-RISC; Connor & Davidson, 2003) used to assess resilience symptomology; The *College Resilience Questionnaire* (CRQ; Carlson, 2001) used to assess collegiate educational resilience; *Multigroup Ethnic Identity Measure-Revised-Revised* (Roberts et.al, 1999) used to assess racial identity development, and *Index of Race-Related Stress - Brief Version (IRRS-B)* (Utsey, 1999) used to assess multidimensional and cumulative race-related stress experienced by African-Americans and demographic information.

Reliability

Reliability indicates to what extent an instrument consistently yields the same result. Internal consistency reliability was computed for the instruments that were used to measure ethnic identity, overall resilience, educational resilience, and race-related stressors. What constitutes a good level of internal consistency differs on what source you refer to, although all recommended values are 0.7 or higher (Cronbach, 1951; Kline, 2005).

Conner-Davidson Resilience Scale

The Connor-Davidson Resilience Scale (CD-RISC; Connor & Davidson, 2003) is a 25-item measure influenced by Kobasa's (1979) work with hardiness. Hardiness is defined as a “constellation of personality characteristics that function as a resistance resource in the encounter with stressful life events” (p. 169). The three basic elements comprising hardiness include the ability to perceive change as a challenge, to maintain a sense of purpose and deep commitment to the people and activities in which they are involved, and to perceive a sense of personal control in handling life's events and activities. As discussed in the section entitled, “Models of Identity Formation”, minorities progress through five stages hence developing internal and external pride and purpose in their race or culture. In turn, they exhibit a commitment in advocating for change, self-empowerment, increased awareness of racial issues, and autonomy in handling life's stressors and events. It is one of the most widely used resiliency scales. Kobasa's work led to researchers Connor and Davidson's (2003) description of Resilience as a multidimensional characteristic that varies with context, time, age, gender, and cultural origin, as well as within an individual subjected to different life circumstances.

The CD-RISC has 25 self-rated items that relate to hardiness, action orientation, self-efficacy, confidence, adaptability, patience, and endurance in the face of adversity, and characteristics of historical figures that embody the concept of resilience. Moreover, the CD-RISC distinguishes between those with greater and lesser resilience (Connor & Davison, 2003). The CD-RISC has been used primarily with individuals who experience anxiety, depression, and posttraumatic stress reactions. The tool has also been used with collegiate and minority populations that are similar to the planned participants for the current study. Connor and Davidson (2003) describe the scale as “a brief self-rated assessment to help quantify resilience and as a clinical measure to assess treatment response” (p. 77). Sample items are “I like

challenges,” “I can deal with whatever comes,” “Even when things look hopeless, I don't give up,” and “I tend to bounce back after illness or hardship.” Participants respond using a five point likert scale (0 = Not true at all, 1 = Rarely true, 2 = Sometimes true, 3 = Often true, and 4 = True nearly all the time). Scores can range from 0 to 100 with higher scores indicating greater resilience. Connor and Davidson (2003) report Cronbach's alpha for the CD-RISC at .89. Test–retest reliability indicates an intraclass correlation coefficient of .87. Convergent validity was established with the Kobasa Hardiness Scale at .83 (Clauss-Ehlers, 2008). Participants in the study included 305 college age women, and indicated that cultural factors were related to aspects of resilience such as childhood stressors, global coping, adaptive coping, maladaptive coping, and sociocultural support. The CD-RISC presented a strong reliability in past studies (27 Items, $\alpha = .959$, $N = 220-222$).

CD-RISC and Populations.

CD-RISC has been used in numerous prior studies with African-American adolescents, college students and young adults, and university students of all ethnicities. College students from various countries such as USA, Australia ($M = 64.3$, $SD = 12.3$; $M = 69.1$, $SD = 13.4$), Iran ($M = 68.3$, $SD = 17.5$), Japan ($M = 55.8$, $SD = 14.8$; $M = 64.3$, $SD = 16.7$), Netherlands ($M = 66.4$, $SD = 10.8$), and Canada ($M = 28.0$, $SD = 5.7$) with sample sizes ranging from 57 to 856 respondents.

Brown (2008) evaluated the CD-RISC in 153 Black/African Americans. The scale correlated significantly with racial socialization messages as measured by the Teenage Experience of Racial Socialization Scale (TERS), Cultural Pride Reinforcement Scale (CPR) and the Multidimensional Scale of Perceived Social Support (MSPSS). A hierarchical regression analysis showed that, of all the variables studied, CPR and MSPSS-Special Person were the

significant predictors of resilience, supporting Brown's main hypothesis that social support and racial socialization would predict resiliency in young African American adults, mean score of 78.1 (12.1); and another population of African-American diabetics scored a mean of 83.8 (8.5). Clauss-Ehlers and Wibrowski (2007) conducted a study regarding educational resilience and social support and its effect among first- and second-generation college students, which concluded a mean (*SD*) score of 73.1 (14.1).

Benetti and Kambouropoulos (2006) studied a group of 240 young adults and college students, examining whether trait anxiety and resilience influenced self-esteem, as measured by the Rosenberg Self Esteem Scale, and if these effects were mediated by negative and positive affects respectively, as measured by the PANAS. Their results found this to be the case and the authors concluded that the impact of resilience on self-esteem is due to its effect on regulating affective experience. Steinhardt et al (2008) assigned 30 college students to a four-week resiliency-training course, and compared them to matched controls. Between pre and post treatment, CD-RISC scores increased from a mean of 67.7 (10.0) to 75.3 (8.4) in the treated group, while the controls showed no change (70.6 (12.3) to 70.6 (11.7)). In closing, additional college studies utilizing the CD-RISC included an Iranian study of undergraduates revealed a mean score of 68.3 (17.5) (Khoshouei, 2009); Australian adults and undergraduates (Benetti and Kambouropoulos, 2008), the mean score was 68.3 (12.3); Dutch undergraduates students (mean age 19.6 years) showed a mean score of 66.4 (10.8) (Giesbrecht et al, 2009); Incoming college students in Texas had a mean score of 67.7 (10.0) before a four week resiliency program (Steinhardt and Dolbier, 2008); and Ito et al. (2009) have reported a mean (*SD*) CD-RISC score of 55.8 (14.8) in Japanese university students (mean age 20.1).

College Resilience Questionnaire

The College Resilience Questionnaire (CRQ) (Carlson, 2001) consists of 27 items and measures college student resilience. Carlson's view on resilience was based on her examination of social and cognitive characteristics of resiliency and defined as a "complex interaction of risk factors and protective factors that lead to positive developmental outcomes" (p. 11). Her conceptualization of college student resilience is based on the work of Tinto (1993), which identifies social and academic integration as central to persistence in college. According to Carlson, "students who become socially and academically integrated are better able to cope with the risks and therefore persist" (p. 61).

Carlson created two subscales—academic engagement and social engagement. Academic engagement is being involved with academic activities and relationships with faculty members and peers, whereas social engagement is feeling, integrated in daily social activities and relationships on campus (Carlson, 2001). Resilience was not directly measured in this study, but the antecedents of resilience—academic and social engagement—was measured. The cronbach's alpha for the CRQ revealed an internal consistency at .94 for the academic engagement factor and .86 for the social engagement factor. Test-retest reliability was .63 ($p < .01$). Psychometrics involving the CRQ were validated in an initial pilot study and additionally in a second study, which stemmed from a dissertation. At this time, no additional studies have been found using the tool. The CRQ-R presented a strong reliability in past studies (25 Items, $\alpha = .925$, $N = 220-222$).

CRQ and Populations.

Initially the creation and validation of this questionnaire was conducted and normed with a collegiate population. The primary purpose in the development of this tool was to conduct studies within the college or university settings regarding defining and measuring educational

resilience. As also identified at the beginning of this section, this tool was designed to measure resilience issues among the collegiate populations; with noted studies noting moderate-to-high scores for African American collegiate students.

Index of Race-Related Stress-Brief Version (IRRS-B)

The Index of Race-Related Stress - Brief Version (IRRS-B) (Utsey, 1999) is a 22-item, multidimensional measure of the cumulative race-related stress experienced by African-Americans. As discussed in the section entitled “Race-related Stress within Higher Education”, minority students not only face adversity within the campus environment but also at times within the classroom. The responsibility for minority students to make classroom environments culturally engaging and the material culturally relevant (Quaye and Harper, 2007), white professors teaching in ways that engender feelings of cultural deprivation hence leads to acts of disengagement and participatory withdrawal (Rovai, Gallien, & Wighting, 2005) all are primary examples of race-related stressors experienced African-American students at PWIs. Similarly, Sedelacek, Helm, and Prieto (1998) found that a significant number of African American students perceived their instructors to be racist and were disappointed with the treatment they had received in predominately-White classrooms. Other studies of African American students at a PWIs (Fries-Britt and Turner, 2001; Harper, 2007) have also identified additional race-related stressors encountered.

The IRRS-B asks participants to appraise the effects of racist encounters that he or she has endured, and to rate race-related events in their daily lives. Participants indicate their responses on a 5-point likert-scale ranging from 0 (this never happened to me) to 4 (event happened and I was extremely upset). The IRRS-B yields a Global Racism score in addition to three subscales: Cultural (10 items measuring stress related to the disparagement of one's

culture), Institutional (six items measuring stress related to the coding negatively worded items, summing across items, and deriving a mean score. Three subscales are used to examine individual racism, cultural racism, and institutional racism. Summing the scores from the three subscales creates a global racism score. Individual racism measures racism experiences on the interpersonal level. A sample item is: "You were treated with less respect and courtesy than Whites while in a store, restaurant, or other business establishment." Cultural racism assesses racism that is the result of the denigration of one's cultural group. An example is: "You seldom hear or read anything positive about people of your ethnic group on the radio, TV, newspapers or in history books." Institutional racism measures racism experiences based on an institution's policies and practices. Sample items include: "You were refused an apartment or other housing; you suspect it was because of your ethnicity," or "You have been subjected to racist jokes by Whites in positions of authority, and you did not protest for fear they might have held it against you." Scoring the IRRS-B is performed by summing the total of the weighted subscale scores. Higher scores on the IRRS-B are indicative of experiences of greater levels of racism-related stress.

The Index of Race Related Stress-Brief has also been revised into a generic form to assess the experiences of a multiracial population by Utsey and associates (2002) that was used for this study. Those revisions did not seem to weaken the strength of the instrument as the α coefficients in that study were robust: global racism = .91, individual racism = .84, cultural racism = .87, and institutional racism = .72. For the current sample, a Cronbach's α of .91 was calculated for the global scale, .82 for individual racism, .82 for institutional racism, and .84 for cultural racism. Utsey (1999) reported the Cronbach's alpha as .78 for Cultural Racism, .69 for

Institutional Racism, and .78 for Individual Racism. The IRRS-B presented a strong reliability in past studies (22 Items, $\alpha = .904$, $N = 220-222$).

IRRS-B and Populations.

Studies with the IRRS-B, has occurred with minorities and college students. Initial development validation of the IRRS-B was on 310 African American college students and seven remaining studies on minorities reliability reporting. College students and community residents (pilot study, $N = 377$); college students, community residents, and drug-treatment clients (Study 1; $n = 302$); college students and community residents (Study 2; $N = 341$). The IRRS-B revealed INDR = .85, CR = .87 and INS = .81 compared to previously reported Cronbach alpha's of: cultural racism = .78; institutional racism = .69; and individual racism = .78. All instruments were found to be psychometrically sound. Test-retest reliability coefficients for the IRRS subscales ranged from .61 to .79 for a college sample.

Multigroup Ethnic Identity Measure-Revised – Revised (MEIM-R)

The MEIM is a widely used individual survey for the measurement of ethnic identity. The survey measures affirmation and belonging, ethnic identity achievement, other-group orientation, familial ethnic identification, and ethnic behaviors (Phinney, 1992). The MEIM-R was developed to measure the process of ethnic identity development in adolescents and young adults. It has been used with participants from age 12 and up, including adults. It may not be appropriate with younger children because of their level of cognitive understanding. It has subsequently been used in dozens of studies and has consistently shown good reliability, typically with alphas above .80 across a wide range of ethnic groups and ages. It has evolved over time, in particular in a 1999 study (Roberts et.al, 1999). Using factor analysis with a large diverse sample of adolescents, Roberts et al. (1999) found that the measure can best be thought

of as comprising two factors, ethnic identity exploration (a process-oriented developmental and cognitive component) and commitment (an affective and attitudinal component). Two items from the original 1992 scale have been dropped, and a few minor modifications have been made, to yield the current 12-item version of the scale (below). It differs from the original in having fewer items along with not including the separate Other-group orientation scale (Roberts et.al, 1999). The two factors defining the current 12-item scale are ethnic identity search (or exploration), items 1, 2, 4, 8, and 10; and ethnic identity commitment, items 3, 5, 6, 7, 9, 11, and 12 (Roberts et al., 1999). Items 13, 14, and 15 are not part of the scale but can be used together with the initial open-ended item for identifying participants' ethnic heritage (Roberts et.al, 1999).

The suggested scoring is to use the mean of the item scores; that is, the mean of the 12 items for an over-all score. The two subscales can also be used independently in research however was not be used in this study. The commitment subscale corresponds most closely with the common usage of the term “ethnic identity”; the meaning of the seven items of the commitment subscale can be used alone to assess a sense of belonging to one’s group. The mean of the five items of the exploration scale can also be used alone to assess this aspect of ethnic identity. Note that the scale as originally published used a 4-point response scale, with a potential range of scores is from 1 to 4. However, the authors recommend using a 5-point scale that gives a neutral midpoint; thus, scores can range from 1 to 5. For comparison across studies, the same response range has been used. No norms are currently available, as the scores have shown to vary depending on demographic and contextual factors.

Roberts et al. (1999) established the construct validity of the MEIM-R. Principal axis factor analysis indicated that the “affirmation, belonging, and commitment” factor and “ethnic identity search” factor explained 41.6% and 9.6% of the total variance, respectively. Results

from a confirmatory factor analysis also provided support for the MEIM-R's two-factor model of ethnic identity (Pegg & Plybon, 2005). The MEIM-R is significantly correlated with self-esteem and ethnic salience. Translations of the measure into Spanish, French, and Dutch now exist and are available, but we currently have no information on their reliability.

The MEIM was normed in a 2-part study, which included 134 Asian American, 131 African American, 89 Hispanic, 12 White, and 41 mixed background high school students (aged 14-29 years) and 58 Hispanic, 35 Asian, 23 White, 11 Black, 1 American Indian, and 8 mixed background college students (aged 18-34 years). Validity of the MEIM suggested that items loaded highly onto a single factor (80; Phinney, 1992). Results of an exploratory factor analysis (Phinney, 1992) suggested that the 14 items of the MEIM constituted a single factor of ethnic identity, distinct from the Other-Group Orientation Scale. A number of studies have indicated a similar single-factor structure (Ponterotto, Gretchen, Utsey, Stracuzzi, & Saya, 2003; Reese, Vera, & Paikoff, 1998; Worrell, 2000). The validity of the measure was also supported by significant correlations with measures of psychological well-being, such as coping, mastery, self-esteem, optimism and happiness, loneliness, and depression. Reliability as reported by Phinney (1992) based on calculated a high school sample ($N = 417$) and a college sample ($N = 136$) was reported at .81 for multiethnic high school students and .90 for multiethnic college students (Phinney, 1992). Low scores on the MEIM signify low ethnic identity, and high scores on the MEIM-R suggest high ethnic identification. The MEIM-R presented a strong reliability in past studies (6 Items, $\alpha = .812$, $N = 220-222$).

MEIM-R and Populations.

In addition to Phinney's (1992) study, three studies (Lee, Falbo, Doh, & Park, 2001; Ponterotto, Gretchen, Utsey, Stracuzzi, & Saya, 2003; Worrell, 2000) have examined the factor

structure of MEIM scores with adolescents or young adults with reliability estimates of .89 and .76. Spencer et al., 2000; Yancey et al., 2001), and one study used an ethnically diverse sample of Asian American college students (Lee & Yoo, 2004). The study by Lee and Yoo combined data sets from three studies to yield a sample of 323 participants from universities in Texas and California. Phinney and Alipuria (1990) reported significantly higher EI search scores for African American, Asian American, and Mexican American college students than for their White counterparts. Ethnic group comparisons based on MEIM scores resulted in similar findings. Asian, Black, Hispanic, and Mixed high school students obtained significantly higher EI scores than their White counterparts (Phinney, 1992), and Black students obtained higher EI scores than Whites and Hispanics in the college sample. The sample in this study represents the seventh independent sample in which the MEIM (original) scores were examined. Phinney's (1992) study included both a college and a high school sample, Ponterotto et al. (2003) used a college sample, Lee et al. (2001) studied two college student samples. As seen in the aforementioned, these findings produced reliabilities of .81 among high school students, .84 - .90 among college students, and across ethnic groups a range of .81 to .89. Correlation averages across the three largest ethnic groups (African American, European American and Mexican American has average correlations of .40 which perhaps is the strongest evidence for validity.

Demographic Questionnaire

A Demographic Questionnaire was the final instrument used. In order to gain supplemental information necessary to support the research questions, collection of demographic variables was obtained. A demographic survey comprised of 15 items was developed to collect the following information: academic variables (i.e., academic level, probability of graduating from university, college grade point average, and student intent to

attend graduate school), personal variables (i.e., gender, ethnicity, age, and religion), campus variables (i.e., participation in campus organizations, BGLO membership, held offices within organizations or BGLOs, interest in BGLOs, and campus support by faculty and staff), and other (i.e., experienced personal difficulties such as discrimination or stereotyping).

Procedures

The data collection procedure involved obtaining data from participants by administering an online survey with the additional demographic questions included. Specific outline of the procedure can be seen below:

1. Permission to recruit volunteers who would be willing to complete questionnaire packets was sought from appropriate faculty or staff affiliated with student organizations on campus most likely to be comprised of or associated with African American students enrolled in the university.
2. Contacts with representatives of the Black Student Union (BSU), Office of Student Diversity and Multicultural Affairs, NAACP (National Association for the Advancement of Colored People), and BGLO Fraternities (AΦA, KAΨ, ΩΨΦ, ΦBΣ, and IΦΘ), and BGLO Sororities (AKA, ΔΣΘ, ZΦB, and ΣΓP) were made via e-mail, telephone or personal contact.
3. A brief description of the study and an invitation to participate was sent to individual students and organizations.
4. In sum, the researcher invited undergraduate students who identified as African American or members of BGLOs in a summer semester of two PWIs located in the Southeastern section of the U.S. to participate in this study. The only criteria for participation included a willingness to complete the battery of instruments, affirmation of student enrollment, self-identification as African American, or acknowledgement of being a member of a BGLO.
5. The researcher followed up initial indications of interest by collaborating with faculty/staff or organization members to resend an online survey link and to remind participants regarding the length of availability of the online survey.

6. Data were collected throughout the summer semester of 2013.
7. Numerical codes were assigned via the online survey program as no identifiable participant information was requested.
8. Students were also assured that they could discontinue participation at any time. As this was primarily an exploratory study examining the relationships among variables.
9. The cover sheet of the online survey packet consisted of an informed consent form assuring confidentiality, and a brief statement of the purpose of the research project.
10. Participants were also made aware that they might experience minimal psychological discomfort while considering their responses to items on the questionnaires, particularly the College Resilience Questionnaire-Revised (CRQ) and Index of Race-Related Stress-Brief version (IRRS-B). To attend to this possibility the researcher provided a referral list of campus and local counseling resources.
11. Participants were asked to complete a survey packet that included Connor-Davidson Resilience Scale (CD-RISC), Multigroup Ethnic Identity Measure-Revised (MEIM-R), College Resilience Questionnaire-Revised (CRQ), Index of Race-Related Stress-Brief version (IRRS-B) and a Demographic survey.
12. An initial e-mail was sent to all potential participants informing them of the nature and purpose of the study and will provide the study participants with an opportunity to voluntarily participate in the study by completing the study survey, which will be available through a hyperlink within the e-mail (See Appendix D). Study participants who used the hyperlink was directed to the survey. It also indicated that participation in the study would require completion of the online survey with the addition of the demographic questions, and a link to the survey included in the email. The solicitation included assurances of confidentiality to encourage participation in the study.
13. A second follow-up email was sent to participants in the study thanking them for their participation and encouraging those who have not participated to do so (see Appendix E). This procedure was used to potentially increase the number of participants willing to participate in the study due to use of repetition.
14. The researcher designated a three-month timeline for the data collection following the Universities review and approval of the study.

15. The researcher provided the participants with a link to electronically access the survey instrument through the hosting organization, *Qualtrics*, and brief instructions about how to fill out the survey. The data, collected by the survey hosting organization, *Qualtrics*, was stored securely online and transferred into an Excel data file for use in SPSS.
16. Participant anonymity was ensured as the survey did not collect any personal identification data and no information beyond the survey data was passed to the researcher, or any third party, as provisioned in *Qualtrics* Privacy Statement.
17. Prior to organizing and analyzing the data, a preliminary screening was conducted. The data was screened for existence of outliers (students who do not meet entrance criteria by race) and missing data to ensure the data is ready for analysis.
18. Each completed survey was logged into an SPSS spreadsheet in the following manner: sequential number, Enrollment in BGLO (0-No, 1-Yes), Demographic Information survey, Connor-Davidson Resilience items (score on each item), Index of Race-Related Stress - Brief Version (score on each item), CRQ items (score on each item), Multi-group Ethnic Identity Measure items (score on each item), and Total Multi-group Ethnic Identity Measure score. The research data was only entered by the investigator and maintained on an encrypted jump drive.

Statistical Analyses

To examine the data, SPSS V 20 was used to obtain descriptive statistics for demographic variables. One-way between subjects ANOVA examined mean or condition differences on overall resilience (dependent variable) as compared to educational resilience, ethnic identity and race-related stressors (independent variables) for hypotheses 1, 4, and 5. Comparisons of correlations and Pearson's correlation was used to investigate hypotheses 2 and 3. Correlation analysis was conducted to determine whether educational resilience, ethnic identity and race-related stressors are significantly correlated with overall resilience. For all tests, an Cronbach alpha of .10 was used.

Normality assumes the observations are normally distributed on the dependent variable in each group and the homogeneity of variance ($H_0: \sigma = \sigma$) assumes the population variances for the

groups are equal. To check for normal distribution, histograms were constructed, and normal probability plot tests examined of variables. To check for normality, linearity and homoscedasticity of independent variables, a residuals scatterplot and t-test were also considered. The assumption of normality is met if the variables have a small deviation from the bell curve in a histogram or when the values closely line up along the diagonal line from lower left to upper right in a normal probability plot. Normality, linearity and homoscedasticity assumptions are also met if the scatterplot is rectangular and centered on the zero value of the residuals. This “rectangularity” within the residuals output indicates that the residuals are normally distributed among the predicted dependent variable scores (Tabachnick & Fidell, 2006). To check for collinearity, tolerance statistics will need to be examined. The Tolerance level needed to be larger than .01, the Variance Inflation Factor (VIF) less than 10, and the Condition Index less than 30. Results of these tests for assumptions are present in Chapter four.

Hypotheses and Variables

The variables for this study were constructed by defining each one and computing it into a usable variable. Student organization hours per week were organized into three categories, low (0-3 hours), medium (4-7 hours), and high (8-10 hours). Ethnic identity is defined as a dynamic, multidimensional construct that refers to one’s identity or sense of self as a member of an ethnic group” (Phinney, 2003, p. 63). This variable was constructed by computing the mean of the MEIM-R’s six items. Resilience in this study is defined as the ability to thrive despite adversity and as a “process, capacity or outcome of successful adaptation despite challenges or threatening circumstances,” and “good outcomes despite high-risk status, sustained competence under threat and recovery from trauma” (Masten, Best, and Garmezy ,1990, p. 426). This variable was constructed by computing the mean of the CD-RISC’s twenty-five items. Race-related stressors

in this study is defined as stereotypes, racism and discrimination that may preclude an individual's ability to positively cope, overcome various circumstances and impede their success (Sue & Sue, 2008). Race-related stressors, such as the aforementioned, are perceived differently from person to person as it is determined by each person's *fit* within their environment. This variable was constructed by computing the mean of the IRRS-B's twenty-two items.

Educational resilience in this study is defined as individual and contextual variables such as gender, racial identity, coping strategies, stress, social support, and attachment, when examining factors related to success in college (Schuh, 2004). This variable was constructed by computing the mean of the CRQ-R's twenty-seven items. Black Greek-lettered Organizations (BGLOs) also known as the "Divine 9" are made up of nine historically black fraternities (ΑΦΑ, ΚΑΨ, ΩΨΦ, ΦΒΣ, and ΙΦΘ), and BGLO Sororities (ΔΣΘ, ΑΚΑ, ΖΦΒ, and ΣΓΡ) which date of origin dating from 1906 to 1963.

Hypothesis 1: Higher average African American student organization hours/per week will predict higher cultural insight/belonging as measured by the Multigroup Ethnic Identity Measure-Revised (MEIM-R). The level of significance (α) established for this study is $\alpha = 0.10$ in order to minimize the chance of a Type I error and/or establish the probability of affirming a difference or relationship exists when it really does not exist. Moderate effect size of 0.15 was deemed conservative and appropriate for this study as past literature where similar variables were reported as those to be used in this study revealed R^2 values ranging from 0.10 to 0.40, with most predictors having associated R^2 values of 0.15 to 0.27 (Mikolashek, 2004). If a statistically significant difference is detected, a post-hoc test will be performed using a Tukey Honest Significant Difference test to determine as to which pair the difference was statistically

significant, assuming a relatively balanced design is achieved. An alpha level of .10 will be used to determine statistical significance in this study (Warner, 2008).

Hypothesis 2: Higher MEIM-R scores will predict higher resiliency as measured by the Connor-Davidson Resiliency Scale (CD-RISC). The level of significance (α) established for this study is $\alpha = 0.10$ in order to minimize the chance of a Type I error and/or establish the probability of affirming a difference or relationship exists when it really does not exist. Moderate effect size of 0.15 was deemed conservative and appropriate for this study as past literature where similar variables were reported as those to be used in this study revealed R^2 values ranging from 0.10 to 0.40, with most predictors having associated R^2 values of 0.15 to 0.27 (Mikolashek, 2004).

Hypothesis 3: Higher Race-Related Stress as measured by the (IRRS-B) will predict lower educational resilience scores as measured by the College Resilience Questionnaire-Revised (CRQ). The level of significance (α) established for this study is $\alpha = 0.10$ in order to minimize the chance of a Type I error and/or establish the probability of affirming a difference or relationship exists when it really does not exist. Moderate effect size of 0.15 was deemed conservative and appropriate for this study as past literature where similar variables were reported as those to be used in this study revealed R^2 values ranging from 0.10 to 0.40, with most predictors having associated R^2 values of 0.15 to 0.27 (Mikolashek, 2004).

Hypothesis 4: Resilience scores as measured by the CD-RISC will be higher among members of BGLO's than non-members. The level of significance (α) established for this study is $\alpha = 0.10$ in order to minimize the chance of a Type I error and/or establish the probability of affirming a difference or relationship exists when it really does not exist. Moderate effect size of 0.15 was deemed conservative and appropriate for this study as past literature where similar

variables were reported as those to be used in this study revealed R^2 values ranging from 0.10 to 0.40, with most predictors having associated R^2 values of 0.15 to 0.27 (Mikolashek, 2004).

Hypothesis 5: Educational resilience scores will be higher among members of BGLO's than non-member students as measured by the College Resilience Questionnaire-Revised (CRQ). The level of significance (α) established for this study is $\alpha = 0.10$ in order to minimize the chance of a Type I error and/or establish the probability of affirming a difference or relationship exists when it really does not exist. Moderate effect size of 0.15 was deemed conservative and appropriate for this study as past literature where similar variables were reported as those to be used in this study revealed R^2 values ranging from 0.10 to 0.40, with most predictors having associated R^2 values of 0.15 to 0.27 (Mikolashek, 2004).

Ethical Considerations

The principal investigator was responsible for the anonymity and confidentiality of the data. Furthermore, the rights and well-being of the consumers, counselors and everyone involved in the research was protected. Any information, which may identify students in the sample, was removed and may later be identified with a number of some sorts or perhaps all information was anonymous. It was the responsibility of the principal investigator to store all information electronically on a secure password-protected personal computer or laptop.

Approval from the East Carolina University Institutional Review Board (IRB) was acquired prior to beginning recruitment (see Appendix F for IRB letter). Packets included an informed consent form for participants and assent form for participants was signed online prior to participants completing survey.

Ethical consideration included the protection of participants' safety, privacy, and informed consent. Research with this population required consideration of clinical interests, as

well as research goals. Consideration of participants clinical needs resulted in the design of elements intended to decrease inconvenience for participants and referral sources to cause no harm. Thus, data collection procedures took place online at times that is convenient for the participants.

Chapter Summary

In summary, the design and methodology supported the purpose of this study to explore and examine the relationship between the independent variables (ethnic identity and educational resiliency) and the dependent variable (overall resiliency). Data analysis included examination of the relationships between resilience, ethnic identity and educational resilience among African American students and African American Greek members at PWIs. Specifically, the study investigated the relationship between resiliency, educational resiliency, ethnic identity and race-related stressors as a means to further understand memberships in campus organizations or BGLOs may interact or relate to these concepts.

This study used a quantitative research method with a non-experimental, cross-sectional correlation research design to test the moderating effect of the demographic variables of gender, ethnicity, academic level, and organizational membership status on resilience as measured by the CD-RISC, educational resilience as measured by the CRQ-R and ethnic identity as measure by the MEIM-R. The study's population was a purposeful sample consisting of all African American college students and BGLOs. The data collection instrument was the survey questionnaire, including participant demographic questions developed by the researcher. The researcher used the hosting organization *Qualtrics* as the electronic method of data collection procedure with the college students participating in the study. To preserve confidentiality, the survey did not collect any personal identification data and no information beyond the survey data

was passed to the researcher, or any third party, as provisioned in *Qualtrics* Privacy Statement. The completed questionnaires are stored in a secure electronic database housed within the Qualtrics system. In addition, study participants was provided an informed consent form.

CHAPTER 4: RESULTS

Introduction to the Chapter

This chapter reports the findings of the study. The hypotheses are reintroduced and the outcomes of the statistical analyses are provided. Analysis of the data includes descriptive statistics, correlation analyses and ANOVA.

Response Rate & Preliminary Analysis

The population for this study consisted of African American students from two PWIs within North Carolina. For all students, each PWI consists of 26,500 undergraduate totaling 53,000 students. Over a 2-year period, the percentage of ethnic minority student numbers as reported by each university's website ranged from 12% to 20% of the undergraduate students. During this time, these universities also reported that 7 to 10% of undergraduate students were members of BGLOs (News & Observer, 2013). To focus on the aforementioned population, I invited approximately 16% (mean) or 8,440 of minority undergraduate students across both universities through emails sent to minority organizations, BGLOs, and to various departments who sent them to their students. From these efforts, 222 surveys were returned. However, only 215 respondents completed all of the items required, leading to an effective response rate of 3%.

Preliminary data analyses were conducted in order to adjust the data for errors, missing scores, and outliers. Once the demographic data were reviewed, a complete description of the sample was compiled. After these initial analyses, the scale data were reviewed and reliability analyses were conducted on these scales. The first step of the preliminary analysis was to

compute frequency statistics of all variables in order to check for errors in data entry and to verify missing data. Distributions were reviewed for outliers. The sample size was $N = 222$; however, it was observed that five respondents did not meet the entrance criteria of being a member of a BGLO or African-American student, and all participants had to complete all the scales: MEIM-R, CD-RISC, CRQ and IRRS-B therefore yielding a sample size of 215.

Sample Demographics

This section lists the 15 demographic items collected with the questionnaire. These items included three types of variables—academic, personal and campus. The academic variables consisted of four variables (i.e., academic level, probability of graduating from university, college grade point average, and student intent to attend graduate school). The personal variables consisted of three variables (i.e., gender, ethnicity, and age). Finally, the campus variables consisted of eight variables (i.e., participation in campus organizations, BGLO membership, held offices within organizations or BGLOs, interest in BGLOs, and campus support by faculty and staff and those whom experienced personal difficulties such as discrimination or stereotyping).

The total number of those who participated in the study during the summer and fall semester 2013 at the two southeastern predominantly White universities (PWIs) were 222 respondents that met entrance criteria of: 1) A BGLO member or an African American students who was African American; or 2) All participants had to complete all the scales: MEIM-R, CD-RISC, CRQ and IRRS-B. From these efforts, 222 surveys were returned; however, only 215 respondents completed all of the items required for an effective response rate of 3%. Please note that non-African-American BGLO members were eligible to participate in the study.

Academic Variables

All undergraduate levels were represented in the sample, 11.6 % (25) were freshmen, 5.1% (11) were seniors, .5% (1) were transfers, while the largest percentage were sophomores at 24.2% (52), and juniors at 58.6% (126), representing the next highest percentage. Of the 215 respondents, 197 (91.6%) reported a grade point average. Based on a 4.0 scale GPA, the range reported by respondents was 2.10 to 4.0 with a mean GPA 3.2 ($SD = .46$). Eighteen respondents did not report their grade point average. Approximately 94% of the respondents, when asked the “probability of me graduating from this University,” indicated their probability between 99% - 100%. By contrast, only 2.8% believe that they had a less than 75% “probability of graduating from this University.” A large percentage of respondents, 84.8% (184) ($SD = .36$), reported intention to attend Graduate School.

Personal Variables

The total sample consisted of 215 respondents, 120 (55.8%) were African-American students who were not in a BGLO, while 95 (44.2%) were BGLO members. The gender distribution of the sample was 60 males (27.9%) and 155 females (72.1%). Those participating in the study ranged from 17 to 39 years with a mean age of 21.5 years ($SD = 2.32$). African-American student respondents reported two different ethnicity groups such as African American 80 (84.21%) and Bi-racial 15 (15.79%). BGLO member respondents reported six different ethnicity groups such as Asian or Asian American 1 (.83%), African American 112 (93.33%), Hispanic 1 (.83%), Caucasian 2 (1.68%), Native American 1 (.83%), and Bi-racial 3 (2.5%).

Campus Variables

Of the 215 participants, 47 (21.9%) stated they did not participate in any campus student organizations and 168 (78.1%) indicated that they did participate in campus student organizations. Those that reported participating in campus student organizations, 80 (36.9%)

held office(s) within their respected organization. We divided respondents by the number of hours per week they participated in campus student organizations. Specifically, we divided respondents into three groups, Low (0-3 hours per week), Medium (4-7 hour per week) and High (8-10 hours). There were 119 (55.3%) individuals in the low participation group, 48 (22.3%) were in medium participation group 2, and 48 (22.3%) were in the high participation group three. Of the 215 respondents, 95 (44.2%) stated they were members in a BGLO while of the remaining 120 respondents, 102 (48.4%) disclosed an interest or had applied for membership with a BGLO.

Several items examined racial discrimination in various contexts. Participants responded with a 'yes' or 'no' to each question. Approximately one-third ($n = 75$, 34.9%) of the participants reported an experience facing racial discrimination while a student at their university, and 142 (65.6%) did not report facing racial discrimination while an undergraduate student. Participants were also able to report if a racial discrimination event changed or affected their academics (grade, attendance, changing major, GPA). Twenty-eight (12.9%) reported that racial discrimination had affected their academics, and 189 (87.1%) reported it did not have an effect. Areas in which students reported feeling the most supported while at their University included: 139 (64.7%) in the classroom, 137 (63.7%) by professors, 177 (82.3%) by peers, 116 (54.0 %) by college staff/workers, and 180 (83.7%) by family. Areas students felt the least supported at their University included: 77 (35.8%) in the community, 103 (47.9%) on the campus community, 51 (23.7%) by college officials, and 66 (30.7%) in the dormitory. It is possible that many participants may have experienced racial discrimination in several settings; therefore, it would be inappropriate to total the percentage across these questions.

Descriptive Statistics

Prior to analyzing the hypotheses, data screening was undertaken to ensure the variables of interest met appropriate statistical assumptions. Variables were created for each tool to allow data to be presented in a specific order. The dependent variables were evaluated for normality and reliability. Reliabilities for each tool reported in this sample consisted of MEIM-R – six items ($a = .81$); CD-RISC – fifteen items ($a = .92$); CRQ – twenty-five items ($a = .95$); and IRRS-B – twenty-two items ($a = .90$).

Data Analysis Results for Hypothesis 1 Testing

Hypothesis I: Higher average African American student organization hours/per week will compare higher cultural insight/belonging as measured by the Multigroup Ethnic Identity Measure-Revised (MEIM-R). Student organization hours per week were organized into three categories, low (0-3 hours), medium (4-7 hours), and high (8-10 hours). Ethnic identity in this study is defined as a dynamic, multidimensional construct that refers to one's identity or sense of self as a member of an ethnic group" (Phinney, 2003, p. 63). This variable was constructed by computing the mean of the MEIM-R's six items. The constructed variable, MEIM_R, was used in the ANOVA analysis to compare with the three groups of organization hours.

Analysis of variance (ANOVA) was used to compare cultural insight/belonging ethnic identity as measured by the Multigroup Ethnic Identity Measure-Revised (MEIM_R) by three different levels of student organization hours/per week. The three participation groups were Low (0-3 hours per week), Medium (4-7 hours per week) and High (8-10 hours per week). The MEIM_R scores for these groups were Low: ($M = 12.80, SD = 4.14$), Medium ($M = 12.10, SD = 4.66$), and High: ($M = 11.30, SD = 3.65$). Homogeneity of variances, as assessed by Levene's Test of Homogeneity of Variance, indicated equal variances ($p = .586$).

While the overall ANOVA was not significant at $p < .10$, $F(2, 214) = 2.24$, $p = .109$), a Tukey post-hoc test was conducted to observe possible trends in the data. There was statistical significance, albeit in the opposite direction hypothesized, ($p = .106$) between MEIM-R scores of students that were involved in Low and the High participation groups with an increase, 1.51, 95% *CI* [-0.02 to 3.03]. Confidence interval for the difference groups Low, 95% *CI* [12.01 to 13.55], Medium, 95% *CI* [10.75 to 13.46], and High, 95% *CI* [10.23 to 12.35]. There was not statistical significance between MEIM_R scores of students that were involved in Low ($p = .109$) and Medium participation groups ($p = .350$). Likewise, there was not a significant difference ($p = .038$) between the medium and high participation groups, .81, 95% *CI* [-1.01 to 2.63].

In summary, there was not a statistically significant difference between means ($p < .10$) and, therefore, we did not reject the null hypothesis. Contrary to my hypothesis, results showed that the more hours a participant spends in their organization, the lower their MEIM_R scores. Conversely, and yet still unexpected, results demonstrated that low and moderate levels of participation hours resulted in higher MEIM_R.

Data Analysis Results for Hypothesis 2 Testing

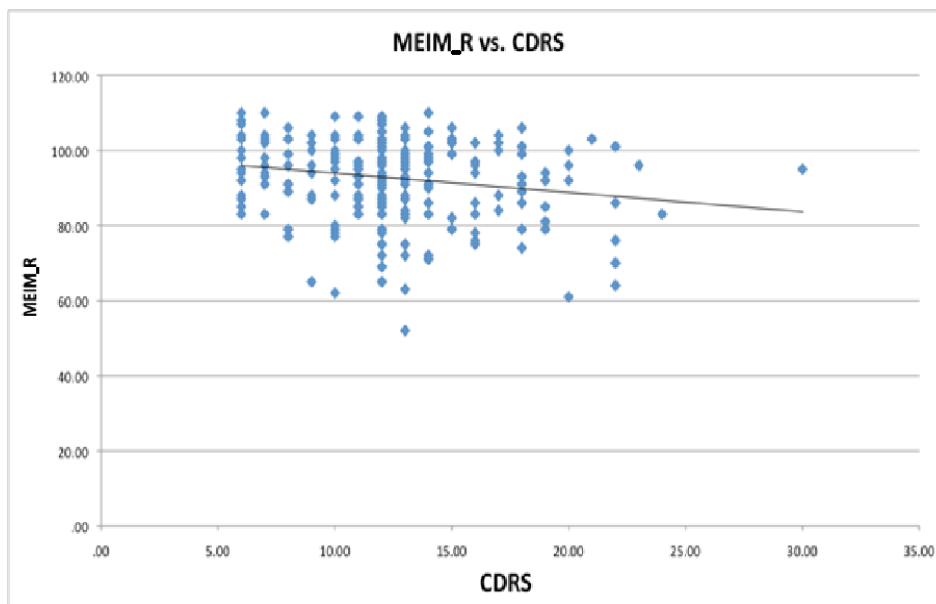
Hypothesis II: Higher ethnic identity (MEIM-R) scores will predict higher resiliency as measured by the Connor-Davidson Resiliency Scale (CD-RISC). Ethnic identity in this study was previously defined and constructed in Hypothesis I. Resilience in this study is defined as the ability to thrive despite adversity and as a “process, capacity or outcome of successful adaptation despite challenges or threatening circumstances,” and “good outcomes despite high-risk status, sustained competence under threat and recovery from trauma” (Masten, Best, and Garmezy, 1990, p. 426). This variable was constructed by computing the mean of the CD-RISC’s twenty-

five items. The constructed variables MEIM_R and CDRS was used in the Correlation analysis to examine relationship between ethnic identity and overall resilience.

To begin correlation analysis, testing of assumptions occurred first with establishing if a linear relationship exists between ethnic identity and overall resilience. To determine if a linear relationship exists, a visually inspection of the scatterplot of the two variables, and Pearson correlation was conducted to evaluate non-linearity. A Pearson correlation was run to assess the relationship between (higher) MEIM-R scores and overall resilience CDRS scores. Preliminary analysis showed the relationship to be monotonic, as assessed by visual inspection of a scatterplot (see Graph 1). There was a significant negative correlation between higher ethnic identity (MEIM-R scores and overall resilience CDRS scores, $r_s(215) = -.20, p = .003$. Specifically, this was not the expected outcome of the analysis; I hypothesized that higher MEIM_R scores would predict higher CDRS scores.

Graph 1:

Scatterplot: MEIM_R versus CDRS



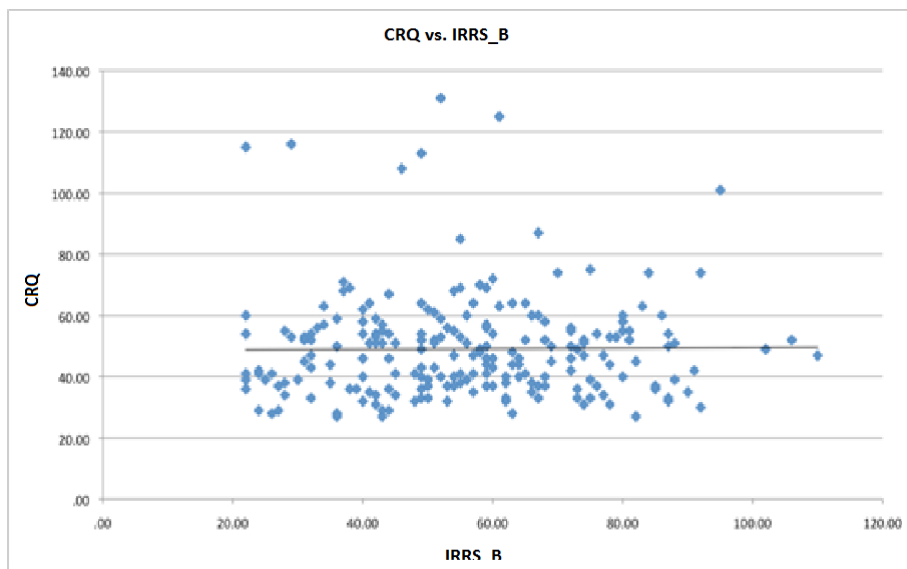
Data Analysis Results for Hypothesis 3 Testing

Hypothesis III: Higher Race-Related Stress as measured by the IRRS-B will predict lower educational resilience scores as measured by the College Resilience Questionnaire-Revised (CRQ-R). Race-related stressors in this study is defined as stereotypes and discrimination that may preclude an individual's ability to positively cope, overcome various circumstances and impede their success (Sue & Sue, 2008). This variable was constructed by computing the mean of the IRRS-B's twenty-two items. Educational resilience in this study is defined as individual and contextual variables such as gender, racial identity, coping strategies, stress, social support, and attachment, when examining factors related to success in college (Schuh, 2004). This variable was constructed by computing the mean of the CRQ-R's twenty-seven items. The construct variables CRQ and IRRS_B were used in the Correlation analysis to examine relationship between ethnic identity and overall resilience.

To begin Correlation analysis, testing of assumptions occurred first with establishing if a linear relationship exists between race-related stress and educational resilience. To determine if a linear relationship exists, a visually inspection of the scatterplot of the two variables, and Pearson-product correlation was conducted to evaluate non-linearity. A Pearson-product correlation was run to assess the relationship between race-related stress (IRRS_B) and educational resilience (CRQ) scores. Preliminary analysis showed the relationship to be monotonic, as assessed by visual inspection of a scatterplot (see Graph 2). There was not significant correlation between race-related stressors (IRRS_B) scores and educational resilience (CRQ) scores, $r_s(215) = -.014, p = .836$.

Graph 2:

Scatterplot: CRQ versus IRRS_B



Data Analysis Results for Hypothesis 4 Testing

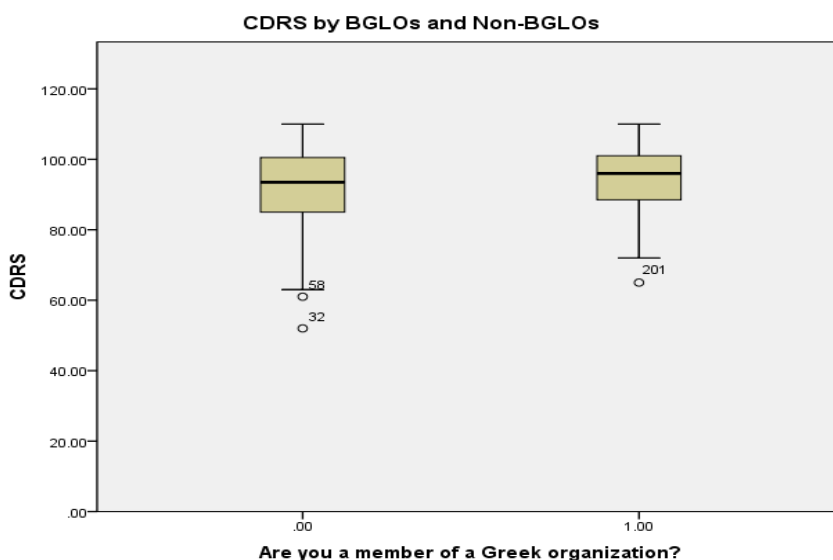
Hypothesis IV: Resilience scores as measured by the CD-RISC will be higher among members of BGLO's than non-members. This variable was previously defined and constructed to yield a mean score (i.e., CDRS). Black Greek-lettered Organizations (BGLOs) also known as the "Divine 9" are made up of nine historically black fraternities (ΑΦΑ, ΚΑΨ, ΩΨΦ, ΦΒΣ, and ΙΦΘ), and BGLO Sororities (ΔΣΘ, ΑΚΑ, ΖΦΒ, and ΣΓΡ) which date of origin dating from 1906 to 1963.

Analysis of variance (ANOVA) was used to compare members of Black Greek-Lettered Organizations (BGLOs) with non-BGLO members on overall resilience as measured by the Connor Davidson Resilience Scale (CDRS). The mean CD-RISC total score for BGLO members was 94.43 ($SD = 9.03$; Range = 65 - 110) and for non-members was 91.96 ($SD = 11.66$; Range = 52 - 110). The assumption of homogeneity of variances was violated, as assessed by Levene's Test of Homogeneity of Variance ($p = .022$). With the assumption of homogeneity of variances established as violated, a modified version of the ANOVA, the Welch ANOVA was used.

This analysis revealed that a statistical difference ($p = .081$) existed between the BGLO group ($M = 94.43$, $SD = 9.03$, 95% CI 92.59-96.27) and the non-members ($M = 91.96$, $SD = 11.66$, 95% CI 89.85-94.07) [see Graph 3]. Specifically, these results showed that BGLO members scored higher on the CDRS ($M = 94.4$) than non-members, Welch's $F(1, 212.91) = 3.07$, $p < .10$.

Graph 3:

Boxplot: CDRS by BGLOs and Non-BGLOs



Data Analysis Results for Hypothesis 5 Testing

Hypothesis V: Educational resilience scores will be higher among members of BGLO members than non-members as measured by the College Resilience Questionnaire-Revised (CRQ).

Analysis of variance (ANOVA) was used to examine the differences between BGLO members and non-BGLO members on educational resilience as measured by the (mean) College Resilience Questionnaire-Revised (CRQ). After determining that the assumption of homogeneity of variances was met ($p = .237$), the results revealed a significant effect of CRQ (educational

resilience) on memberships in BGLOs at the $p < .10$ level for the two groups [$F(1, 213) = 3.16, p = .077$]; however the effect was opposite of what I hypothesized. The CRQ score for BGLO members, was 46.15 ($SD = 15.29$; Range = 27 – 131, 95% CI 43.03-49.26) and for non-BGLO members the mean was 50.0 ($SD = 16.4$; Range = 27 – 125, 95% CI 47.07-53.02). Taken together, these results showed that BGLO members had a lower educational resilience (CRQ) than non-members did. Again, this finding was contrary to the proposed hypothesis.

CHAPTER 5: DISCUSSION

Introduction to the Chapter

This chapter begins with a restatement of the study's purpose, variables, participants and data collection procedures. This chapter also discusses the results of the study in relation to previous literature on African-American college student resilience and research on BGLOs and their relationship with collegiate experiences. First, the background variables of participants and context from which they were recruited is presented. Following this summary, results of the study, including sample demographics, descriptive statistics for the main study variables, and research hypotheses analyses are discussed. The limitations of the study, followed by the possible implications of the results for practitioners, rehabilitation/counselor educators and future research are presented. A final summary concludes this chapter.

Summary of the Study

The purpose of this study was to compare resiliency, ethnic identity, race-related stress and educational performance between Black Greek-Letter Organization (BGLO) undergraduate members and African American students attending a Predominantly White Institution (PWI). This study used a correlational design to explore the statistical relationships, and ANOVA examined differences between variables. The purpose of this research design was to two-fold.

First, I explored the relationship differences and relatedness between the variables of ethnic identity, race-related stress, educational resiliency and overall resilience. Second, I compared BGLO members with African-Americans who were not in BGLOs on ethnic identity, race-related stress, educational resiliency and overall resilience. Specifically, the study investigated the relationship between resiliency, educational resiliency, ethnic identity and race-related stressors as a means to further understand how these concepts are affected by participation in campus organizations or BGLOs.

Response Rate

The raw data did not include information regarding response rates, use of extrapolation was used to determine approximate response rates based on reported statistics from two PWIs. From the population of African American students and BGLOs at PWIs, 8,440 were invited to participate in the study. The response rate was 3% of those respondents. Of the 222 surveys returned, only 215 respondents completed all of the items required to participate in the study and could be used. Participants were contacted via email (initial and two follow-ups), and there was no use of incentives, participation was voluntary.

Interpretation of Results

This section discusses the results of statistical analyses reported in the previous chapter. Following is a discussion of the sample's response rate, and the findings from statistical analyses conducted to investigate hypotheses are discussed.

It should be noted that the mean (M) and standard deviation (SD) scores reported for the CD-RISC in this study for BGLO members were , and non-BGLO members were which can be considered extreme. When compared to past studies reported M and SD scores using the CD-RISC with college students were significantly lower (i.e., Australia ($M = 64.3, SD = 12.3; M =$

69.1, $SD = 13.4$); Iran ($M = 68.3$, $SD = 17.5$); Japan ($M = 55.8$, $SD = 14.8$; $M = 64.3$, $SD = 16.7$); Netherlands ($M = 66.4$, $SD = 10.8$); Canada ($M = 28.0$, $SD = 5.7$). When compared to past studies reported M and SD scores using the CD-RISC with African-Americans were also significantly lower (i.e., African American adults ($M = 78.1$, $SD = 12.1$); African-American Diabetics ($M = 83.8$, $SD = 8.5$); First- and Second-generation college students ($M = 73.1$, $SD = 14.1$)).

Results of Hypotheses Testing

Hypothesis 1

Higher average African American student organization hours/per week will predict higher cultural insight/belonging as measured by the Multigroup Ethnic Identity Measure-Revised (MEIM-R).

To test Hypothesis one's constructs, student organization hours/per week and MEIM_R, a comparison using ANOVA was conducted. The ANOVA analysis compared ethnic identity with specifics to cultural insight/belonging (MEIM_R) and the three different levels of student organization hours/per week, low, medium and high. The results revealed there was not a significant difference between the medium participation group and the low or high participation group; therefore, no significance at $p < .10$. However, I did examine Tukey post-hoc tests to observe possible trends in the data. I expected to find that non-BGLO members and BGLO members might report higher statuses of ethnic identity attitudes as they spend more hours weekly within their organization. However, results revealed the opposite between average hours spent per week in campus organization and ethnic identity measure. As such, a surprising finding was that higher hours spent in campus student organizations did not predict a higher ethnic identity.

One possible interpretation to these unexpected results could be attributed to the high amount of hours within organizations or BGLOs can cause students to be surrounded only by those who mirror and identify like themselves. High amounts of time spent in campus organizations may limit participants' time spend with other cultures and ethnicities and yield lower ethnic identity scores and awareness [and academics] (Guiffrida, 2004).

A second possible interpretation to these unexpected results is positive relationships have been observed between lower ethnic identity scores and the Encounter and Immersion-Emersion stages of the ethnic identity model. During the Encounter, idealization of African American culture and rejection of a different culture is salient (Thompson et al, 2000). Thus, it is possible that the current participants' response to environmental pressures to reject environmental, social or political norms may have manifested in decreased levels of ethnic identity. It is also possible that high levels of attitudes reflecting these two conflicting cultures of identity indicate greater sensitivity to environmental stressors. Both kinds of attitudes evolve from Immersion-Emersion stages in which the minority is seeking intense African American involvement in various organizations or encounters (i.e., visiting museums, festival, or reading historical books). Encounter is consistent with conceivable attempts to not only find support for but also transition and adjust to the emerging identity. If Encounter and Immersion-Emersion attitudes are high, individuals may need additional nurturing and attention from their environment to develop. Therefore, high levels of these attitudes may indicate that individuals' coping strategies are not sufficient for protecting themselves from potentially hostile environments or one's identity or sense of self as a member of an ethnic group.

A third possible interpretation of these unexpected results could be the reasons students join BGLOs. African American students join minority organizations and/or BGLOs to cope with

the various race-related stressors, which can occur at PWIs. During the early initiation or joining within a campus organization or BGLO, initial engagement in a new environment may be less attributed to psychological discomfort to external sources, due to those who have learned survival (i.e., resilience or coping) strategies and defenses to buffer the impact of adverse psychosocial data (Chavous, 2005). Students who have reported going through a similar gamut of discriminatory events, stereotypes and barriers associated with being Black in a predominately white environment, note that prior exposure and coping skills gained from these previous experiences that helped them during the acculturation (Chavous, 2000). This finding may indicate a type of bias that is most prominent during earlier joining within the environment. Secondly, perhaps those individuals who adjusted and were assimilated into the campus environment became more aware of environmental stressors as they progressed through their collegiate years. Person-Environment Fit Theory specifically identifies this phenomenon as the subjective environment, which refers to situations, and events as encountered and perceived by the person (Edwards, Caplan and Harrison, 1998). Thus, when African-American students perceive “fit” with their environment, results lead to increased retention, greater satisfaction, lower levels of stress, and higher levels of achievement (Hutz, 2003). Therefore, participants in this study may have prior exposure to discriminatory events which in turn increased their ethnic identity prior to the study.

Even though adjustment and P-E fit are interrelated concepts, there are differences in terms of how students are expected to experience these two variables. Ethnocultural P-E fit is a dynamic relationship between minority students and their environment (Martin & Swartz-Kulstad, 2000), whereas adjustment relates to whether students believe life changes need to be made in order to get the most out of their college experience, also known as subjective P-E fit,

the fit between the subjective person and the subjective environment (Kristof, 1996). My respondents may have believed that increased hours spent in cultural organizations or BGLOs is necessary in order to excel, feel supported, or successfully integrate into the college life. This specific type of “fit” is seen in past studies as organizational fit and recent studies, social fit. Both aspects involve the presence or absence of a specific group for the student’s benefit and influences whether a student believes he or she will be able to fit in with the collegiate social environment (Mansfield & Warwick, 2005).

As such, the subjective person signifies the person’s perception of his or her own attributes (i.e., the person’s self-identity or self-concept); therefore, students who believe that they have the ability to meet the demands of college life believe their needs are adequately met. They will feel supported by the university and feel a sense of ethnocultural fit and belonging to the campus and immediate community (Warwick & Mansfield, 2003). Therefore, it is likely that these students will not perceive a need to make major changes in self in order to be adjusted . Additionally, the relationship between the various types of fit (i.e., P-E, ethnocultural, social and organizational) and adjustment have important implications for minority students at predominantly White universities.

Hypothesis 2:

Higher MEIM-R scores will predict higher resiliency as measured by the Connor-Davidson Resiliency Scale (CD-RISC).

To test Hypothesis two’s constructs, MEIM_R and CDRS, a Correlation Analysis was completed. The Correlation analysis examined the relationship between the two constructs. The results revealed there was not a statistically significant relationship between ethnic identity scores (MEIM_R) and overall resilience (CDRS) as hypothesized. It was hypothesized that

respondents with higher ethnic identity scores would have higher overall resilience scores. On the contrary, the results revealed the opposite outcome with higher MEIM_R scores not predicting higher resiliency. Hence, respondents with lower ethnic identity (MEIM_R) revealed higher overall resilience (CDRS).

One possible way to interpret this unexpected finding is by discerning culture as an adaptive mechanism that helps groups of people (i.e., different cultures) develop strategies to cope with adversity (Weaver, 2010). Students seem to take their cues from their culture and past experiences and incorporate these unique approaches into their own resilience strategies for dealing with difficult circumstances. The pride students feel in themselves and their own ethnic identity appears to generalize to an overall feeling of pride and translates into other areas of their lives, including the academic setting. Thus, participants who possess unique cultural norms and values may be better equipped to adapt to a changing environment and more resilient. This finding suggests that one way to help students be more resilient in the collegiate setting could be to strengthen their ethnic identity. Chavous (2000) found that African American college students who more strongly identified with their socio-racial and ethnic identity background experienced lower levels of ethnocultural P-E fit than did African American college students who were not as strongly identified. In contrast, another study of African Americans attending a predominantly White university found that an Afrocentric worldview was related to higher levels of self-assessed adjustment or subjective fit (Hatter & Ottens, 1998).

A second possible interpretation of these unexpected results is the possibility of respondents being at various stages of the Black Identity Model. Each stage of the Black Identity Model elicits certain behavioral and personality characteristics, which either positively or negatively influences resilience (Weaver, 2010). Though the MEIM-R can determine the

specific stage of each person, this was not examined in the study and could be completed in future studies. Respondents in the beginning stages of the Black Identity Model, Pre-Encounter and Encounter, miseducation and assimilation characteristics are observed by having either an anti-black attitude that mimics White racist attitudes toward African Americans or their focus is primarily on Western cultural history and is more likely to see themselves as “American” as opposed to African American (Phinney and Ong, 2007). Due to race not being a salient feature of identity for African Americans during these initial stages, lower overall resilience can be considered because of Eurocentric perspective and black self-hatred (Worrell, et al, 2001). As discussed in before, respondents operating at these stages, may have expressed a higher resilience due to their inclination to assimilate and be more like the dominate culture.

A third possible interpretation to these unexpected results is positive relationships may have been observed between lower ethnic identity scores and the Encounter and Immersion-Emersion stages of the ethnic identity model. Thus, it is possible that this sample’s response to environmental pressures to reject environmental, social or political norms will have manifested in decreased levels of ethnic identity and a greater sensitivity to environmental stressors. As reiterated, both kinds of attitudes evolve from Encounter and Immersion-Emersion stages in which the minority is seeking intense African American involvement in various organizations or encounters (i.e., visiting museums, festival, or reading historical books) therefore by explaining these unexpected results could interpret the aforementioned results. A past study found that higher Encounter scores were related to higher levels of mental illness, such as depression (Worrell, et al, 2001). The contributions of the person and environment to mental illness have been formalized in the person-environment (P-E) theory of stress (Harrison, 1985). The core premise of P-E fit theory is that stress arises not from the person or environment separately, but

rather by their fit or congruence with one another. This simple yet powerful notion is reflected in numerous studies evaluating the widespread impact of P-E fit theory in relation to various stress-related events and resiliency (Edwards & Cooper, 1990; Eulberg, Weekley, & Bhagat, 1988).

According to the findings of a recent study of African Americans attending a predominantly White university, the more students identified with their own racial or ethnocultural group, the less they perceived a good P-E fit with their university community. In contrast, another study of African Americans attending a predominantly White university found that an Afrocentric worldview was related to higher levels of self-assessed adjustment (Chavous, 2000). These findings reveal the potential for a kind of double-bind conflict in which a minority student must choose between strong racial identity, which often results in higher self-esteem, and a solid P-E fit at the expense of racial group identification or mental illness (Hatter & Ottens, 1998).

Hypothesis 3:

Hypothesis III: Higher Race-Related Stress as measured by the (IRRS-B) will predict lower educational resilience scores as measured by the College Resilience Questionnaire-Revised (CRQ).

To test Hypothesis three's constructs, IRRS_B and CRQ, a Correlation Analysis was completed. The Correlation analysis examined the relationship between the two constructs. The results revealed there was not significant correlation between high race-related stressors (IRRS_B) scores and low educational resilience (CRQ) scores. It was hypothesized that higher IRRS_B scores of race-related stressors would result in lower CRQ scores. The results revealed the opposite with high IRRS_B scores relating to high CRQ scores. Hence, respondents who

underwent higher amounts of race-related stressors, such as racism, discrimination or isolation yielded higher educational resilience scores.

One possible interpretation to these unexpected results is the chronic stressors faced by minority respondents. A past study, found ethnocultural differences related to perceptions of P-E Fit. Specifically, perceived higher levels of P-E Fit at a PWI were different for minority first-year students than non-minorities. This was not a surprising finding; however, it becomes more interesting considered alongside their additional finding that ethnicity moderated the relationship between perceptions of P-E fit and college adjustment for both majority and minority students. Minority students face what Smedley et al. (1993) called "minority status stresses" (p. 435). In other words, they deal with perceptions of a racially hostile climate, social isolation, and an overall sense of incongruence with the university environment (Chavous, 2000; Hurtado & Carter, 1997; Loo & Rolison, 1986; Smedley et al., 1993). Despite perceiving a lower level of ethnocultural P-E fit, the minority students still perceived similar levels of adjustment to the university as did the majority students. This finding could suggest that 1st-year minority students have developed a sense of resiliency and self-reliance and that they have the ability to make successful adjustments to predominantly White educational institutions without necessarily feeling a sense of belonging. Chavous (2000) found that African American college students who more strongly identified with their socio-racial and ethnic identity background experienced lower levels of ethnocultural P-E fit than did African American college students who were not as strongly identified. In contrast, another study of African Americans attending a predominantly White university found that an Afrocentric worldview was related to higher levels of self-assessed adjustment or subjective fit (Hatter & Ottens, 1998).

A second possible interpretation of these unexpected results is the use of stress, particularly race-related stress, as a defense mechanism. Minority stress in particular suggests that minority individuals experience psychosocial “stress as derived from minority status” (Meyer, 1995, p.38) because of sociocultural stigmatization and discrimination (Meyer, 2003). Meyer (1995) delineated three key characteristics of minority stress. First, minority stress is unique in that its effects are additive when compared to general stress experience by all individuals. Additionally, this stress is derived from underlying social structures such as racism, ableism, sexism, and heterosexism, which are relatively stable over an individual’s lifetime. This feature makes minority stress a chronic stressor. Lastly, minority stress is socially based. It is not produced solely from interpersonal interaction with members of dominant social groups. Instead, minority stress also originates at institutional and structural levels that are external to the person experiencing distress. Therefore, participants in this study may exhibit this unique type of chronic stress that is derived from these underlying social constructs, which cannot be accurately measured by the IRRS-B.

Carter Andrews (2009) considered that the most successful black student is one who has embraced his or her *racial* identity and has made a decision to succeed in school. Dei (2010) agrees, but notes that having a professor with high expectations can stand in for a student who does not have a strong affiliation with his or her racial or ethnic community. Dei asserts that minority students who do not consider their race or ethnicity to be a fundamental part of their identity can achieve academically when paired with a professor with high self-efficacy and high expectations for the student. However, Dei cautions that these students are motivated to achieve because of *stereotype threat* – they work hard to achieve in college in order to avoid confirming negative stereotypes (e.g., lazy, unintelligent) about their racial or ethnic group. Therefore,

participants in this study may have produced higher CRQ scores as they try to meet the expectations of professors or mentors within the university, and not able to embrace their own identity for a better long-term efficacy regarding their educational success.

Hypothesis 4:

Hypothesis IV: Resilience scores as measured by the CD-RISC will be higher among members of BGLO's than non-members.

To test Hypothesis four's constructs, CDRS and BGLO members and non-members, an ANOVA analysis was completed. The ANOVA analysis compared overall resilience (CDRS) to the two groups, BGLO members and non-members. The results revealed there was a statistically significant relationship between overall resilience scores (CDRS) and membership in BGLOs as hypothesized. Hence, participation within a BGLO yielded higher scores ($M = 94.4$) when compared to non-BGLO members and membership in BGLOs did have an effect on overall resilience as measured by the Conner-Davidson Resilience Scale (CDRS).

One possible interpretation to these expected results is BGLO members reported responses are based on how each student viewed themselves, person, and their environment. The objective person refers to attributes of the person, as they actually exist and the subjective person refers to the person's perception of his or her own attributes like self-identity or self-concept (Edwards, Caplan & Harrison, 1998). Additionally, the objective environment includes physical and social situations and events, as they exist, independent of the person's perceptions, whereas the subjective environment refers to situations and events as encountered and perceived by the person. The objective person and environment are causally related to their subjective counterparts (Harrison, 1978). These relationships are imperfect due to perceptual distortions

that arise as minority students spend increased time around their own culture, learn more about their cultural history, and face events of discrimination and/or trauma.

P-E Fit combines all four concepts to yield the four types of correspondence between person and environment constructs: (1) objective P-E Fit, which refers to the Fit between the objective person and the objective environment; (2) subjective P-E Fit, or the Fit between the subjective person and the subjective environment; (3) contact with reality, meaning the degree to which the subjective environment corresponds to the objective environment; and (4) accuracy of self-assessment (or accessibility of the self;), representing the match between the objective person and the subjective person (Strange, 1991). These concepts as related to the negative significant results obtained in the study provides a lens in understanding the complexities of ethnic identity and resilience as correlated to perceptions of person and environment. The lens considers the two distinctive types of P-E fit, the fit between the demands of the environment and the abilities of the person, and the match between the needs of the person and the supplies in the environment that pertain to the person's needs (Edwards, Caplan & Harrison, 1998). Therefore, participants in this study each have their own lens or perception regarding their current environment and self that in turn caused varied scoring on overall resilience. Hence, the factors such as needs and supplies of BGLO respondents in this study were met by membership within the organization.

Factors include the demands (i.e., requirements, role expectations, and group and organizational norms) of the University with the minority students abilities (i.e., aptitudes, skills, training, time, and energy the student must muster to meet demands). Secondly, factors also includes students' needs (i.e., innate biological and psychological requirements, values acquired through learning and socialization, and motives to achieve desired ends), and the supplies (i.e.,

extrinsic and intrinsic resources and rewards that may fulfill the person's needs), such as food, shelter, money, social involvement, and the opportunity to achieve (Harrison, 1978). The presence or lack thereof of the various aforementioned factors all affect the identity and success (resilience) of African American students at PWIs, hence, BGLOs did offer some positive factors for these respondents.

Hypothesis 5:

Hypothesis V: Educational resilience scores will be higher among members of BGLO's than non-member students as measured by the College Resilience Questionnaire-Revised (CRQ).

To test Hypothesis five's constructs, CRQ and BGLO members and non-members, an ANOVA was completed. The ANOVA analysis compared educational resilience scores (CRQ) to the two groups, BGLO members and non-members. The results revealed there was not a statistically significant relationship between CRQ scores and BGLOs as hypothesized. On the contrary, the results did reveal that membership in BGLO's did not yield higher CRQ scores but lower CRQ scores.

One possible interpretation to these unexpected results is the interpretation of differences in college achievement as defined by African American students, their cultural and social values, and the values and philosophies associated with the PWI environment. Consequently, African American students at PWIs are vulnerable as they are less likely to fit in, feel alienated, and adjust poorly to PWI campuses (Howard-Hamilton, 2000). Non-members' and BGLO members differing beliefs and philosophies regarding race and how these beliefs and perceptions relate to their academic adjustment in the PWI college environment are further factors that contribute to the findings. This phenomenon is also associated with the person-environment fit (P-E Fit) theory of person and fit. For both needs-supplies, fit and demands-abilities fit, P-E fit theory

requires that person and environment construct are equal, meaning they refer to the same defined construct. For example, needs-supplies fit regarding achievement should entail the comparison of need for achievement with opportunities for achievement in the environment and/or a concrete definition of how achievement will be measured (Edwards, Caplan & Harrison, 1998). Likewise, demands-abilities fit could involve comparing the amount of work to be done, such as based on their major, with the amount of work, the person can do. Commensurate constructs are required for the conceptualization and measurement of P-E fit, because the degree of fit between the person and the environment can be determined only if both refer to the same construct and can be measured on the same or similar scale. Without commensurate constructs, it is impossible to determine the proximity of the person and environment to one another and the notion of P-E fit becomes meaningless. The requirement of commensurate constructs distinguishes P-E fit theory from more general interactionist models of the person and environment, such as those examining the moderating effects of personality on the relationship between environmental stressors and health (Cohen & Edwards, 1989; Parkes, 1994). Therefore, participants in this study may have defined educational resiliency or success differently, such as, high gpa or being able to matriculate from year-to-year. This study measured educational resilience without using gpa's as a construct.

Additionally, a second possible interpretation of these unexpected results can be attributed to hazing and pledging as related to membership. Hazing, as defined by N.C. Gen. Stat. § 14-35 states the following:

"To subject another student to physical injury as part of an initiation, or as a prerequisite to membership, into any organized school group, including any society, athletic team, fraternity or sorority, or other similar group." ("ECU office of," 2013)

Violent hazing has a long history within BGLOs, dating back to the early 20th Century. In response to the rash of hazing deaths and longstanding concerns about hazing within their ranks, National Pan-Hellenic Council (the umbrella organization for the largest BGLOs) organizations banned hazing in 1990 (Harper, 2007). However, from then until now, BGLOs have experienced the injury and death of numerous, aspiring members. First, BGLO pledging has evolved over time and place. Review of various scholarly items on BGLOs (i.e., Brown et al, Jones, Parks, or Kimbrough) —underscores the mental, physical and emotional distress reported. Second, research in cognitive and social psychology as well as organizational behavior has found in our empirical study of BGLO hazing, it likely undermines academic achievement. It seems to foster and enhance personal ties between members (Harper, 2008). It positively predicts organizational commitment on some measures of that concept and fails to predict it on other measures (Kimbrough, 2003). For example, it positively predicts emotional commitment to the organization, but it seems to have little predictive value for paying dues and showing up to meetings (Parks, 2012). Therefore, study participants, particularly, BGLO members may have experienced hazing as a part of joining their organization which will make them predisposed to race-related stressors, effect overall resilience, and educational resilience.

Study Limitations

There were limitations to the current study such as the use a descriptive research design using survey data, which was based on self-reported responses. Although students were assured of the confidential nature of the research methods, current political (i.e., first Black President) and cultural influences within the campus environment (i.e., peers, faculty, mentors) may have biased responses. Those students that did not respond to the survey distribution could also be

attributed to the time frame which occurred during the summer semesters when fewer students are around on campus.

A second limitation of the study was the possibility that the responses of the collegiate students to the survey were influenced by self-reporting bias, which can occur with the use of self-reported survey questionnaires. Self-reporting bias exists when the participants of survey research attempt to conceal attitudes or behaviors they consider negative or inappropriate by providing inaccurate information on the survey (Hayes, 1992).

The third limitation of the study was the purposive sampling approach, which may affect the generalizability of the findings to a larger population. Because of time and funding constraints, the research was limited to two PWI southeastern universities in North Carolina. The possibility exists that a confounding variable in these two universities not accounted for in the research design influenced the data and the findings of the study.

The fourth and final limitation to the study is related to research design, cross-sectional. The data gathered occurred from a snapshot gained from respondents at the given time the study was completed. The MEIM-R only looked at the overall scores as opposed to the sub-categories. The correlational nature of the study only disclosed the presence or absence of relationships among study variables therefore, cause and effect nor longitudinal interpretation cannot be attributed to the findings reported in this study. Even though the results may be useful to those working with the sampled population, a more rigorous longitudinal research design may be even more beneficial.

Survey methodology using self-report measures were used in this investigation. Although such questionnaires are a prominent method of discerning individual attitudes and characteristics (e.g., resilience, educational resilience, ability to handle race-related stressors and ethnic

identity), the use of self-report measures raises a number of research concerns such as minority [underrepresented] groups and can yield low response rates (Milburn, 1991; Fricker and Schonlau 2002; Sheehan and McMillan, 1999). The timing of the present study may have also served as a moderating variable. Data collection began at the beginning of the summer semester and continued into the transition into the fall semester on the university campuses. This resulted in a significant reduction in the actual number of the population of students on campus. During summer semester, many students return to their home of residence, few if any student organizations meet during summer semester, and many students are occupied with jobs or time-compressed academic calendars. Thus, hard-pressed for time due to the rigor of classes, or not present on campus at all, this created a dilemma in regard to how to best access potential volunteers.

Implications of the Study

Results of this study have several implications for rehabilitation counselor research, and for treatment providers. Implications for rehabilitation counselor education are discussed, followed by implications for treatment providers.

Implications for Future Research

This study continued to illuminate possible differences of African-American students at PWIs based upon cultural group membership in BGLOs. It would be interesting for future research to investigate methods for increasing coping efficacy, especially related to matriculation and graduation for cultural minority students, as one possible coping mechanism for increasing levels of perceived college adjustment. While most of my hypotheses were not supported, it is important for future studies to continue to reveal the role of various forms of P-E fit, such as ethnocultural and organizational, of African-American students at PWIs. It seems perceptions of

ethnicity and P-E fit impacts college adjustment, but also impact resilience and educational resilience. More information is needed regarding how an ethnocultural African-American student's perceptions of fit are likely to influence other related perceptions while relating to others in a collegiate environment which is satisfying from both a person and environment perspective. It would be interesting to investigate whether African-American students are aware and utilize multicultural services offered on campus influence perceptions of ethnocultural P-E fit.

Furthermore, educational resilience, perception of race-related stressors, and belief towards one owns ethnicity as related towards the university appear as significant predictors for minority college student adjustment, regardless of cultural group membership (e.g. also see Martin et al., 2000; & Swartz-Kulstad, Martin, & Madson, 1999). Contrary to my hypothesis, BGLO members had significantly lower educational resilience scores as compared to non-BGLO members. It would be beneficial to further understand what factors educational resilience for African-American students, thus allowing counselors to apply this information. Even though ethnic identity did not emerge as a significant predictor for BGLO members, it did present itself as an important construct for African-American students (e.g., also see Phinney, 1990). It would be worthwhile to investigate if ethnic identity, as measured by Cross' model would play a role in perceptions of P-E fit, perceptions of barriers, coping with barriers, educational resilience, and/or attitudes towards the university. Moreover, it would be interesting to investigate whether these variables also are conducive to predicting retention.

The current research utilized a quantitative methodology to examine various constructs of African-American students. Examining the characteristics of African-American students with higher ethnic identity, resilience and educational resilience levels may be explored through

qualitative techniques. Such research might provide richer data about the needs of African-American minority students who have made successful adjustments into college. Qualitative research may also yield interventions to better hypothesize relationships via P-E fit.

Future researchers measuring the constructs as seen in this study can do an exploratory study using the same population, or contrast current population (i.e., African-American students) with majority students. The use of these constructs could be moderated by age or class rank additionally. Future researchers could also change the population's environment of PWIs and HBCUs. In addition, the studies can be exploratory and obtain a 'snapshot' of the sample or design it as a longitudinal study. A longitudinal study with more participants by administering the tools to a larger sample, perhaps at multiple institutions. In closing, this study used the IRRS-B, CD-RISC and MEIM-R tools in its entirety instead of the subscales; therefore, future studies can look at these subscales individually. The use of the subscales separately could also predict different results.

Implications for Rehabilitation Counselor Educators

Making implication for Rehabilitation Counselor Educators is difficult due to the consistently unexpected findings of my study and the aforementioned need for future research.

One reasonable implication to Rehabilitation Counselor Educators is to incorporate training components that mirrors the immersion that African American and other minorities into primarily White dominant environments. This type of immersion and exposure to various diverse cultures will allow Rehabilitation counselor educators to apply textbook concepts into real life situations, and can be done at college campuses counseling centers, community-counseling centers tailored to specific populations, and Faith centers. More importantly, it will teach Rehabilitation Counselor Educators the needed trait of flexibility and person-centeredness as

each minority client may present with similar symptoms but cannot be treated with the same interventions or approaches. Training should be such that it allows counselors to be reflective and flexible practitioners so they may translate knowledge and experiences during training to their work. Efforts should be made to expose counselors to more in vivo experiences such as suggested by Holcomb-McCoy (1999).

From the study, I found that, awareness of ethnicity; race-related stressors, resilience and educational resilience are different for each respondent, as they all perceive the contexts based upon previous exposure and beliefs. Thus, it is important for Rehabilitation Counselor Educators to be trained on subjective and objective thinking regarding multiculturalism; hence, the ability to see constructs of race through various lenses. Rehabilitation Counselor Educators should provide foundational didactic learning along with experiential, in-vivo experiences in culturally diverse communities, encourage journaling, and self-reflection exercises that develop counselors' awareness of their worldview, and those of culturally diverse clients should be a central part of training (Middleton et.al., 2002).

Based on my findings, I encourage Rehabilitation Counselor Educators to design courses, and lessons or activities that educate students on the theory of P-E fit. P-E fit theory looks at how people fit into their environment will not only be beneficial to clients but also to Rehabilitation Counselor Educators in understanding and viewing their fit in the classroom setting. This is important as Rehabilitation Counselor Educators own educational resilience and success in learning and applying this information can be based off their own perceived fit. It sometimes becomes important for Rehabilitation Counselor Educators to provide support for minority students within the program, as it will initiate the understanding, learning, development and advocacy regarding ethnicity and race-related stressors that students may deal with within the

environment of PWIs, businesses and living milieus. Therefore, Using a P-E fit perspective instead of attempting to have minority students strictly adapt to the majority environment, Rehabilitation counselor educators and programs can actually facilitate the process regarding complex constructs of race and model how future Rehabilitation Counselors should face and resolve this issue in future counseling environments.

In closing, we are still early in our research and knowledge in multiculturalism and applying a standard of specific interventions or knowledge toward particular populations may not always be applicable in the field.

Implications for Treatment Providers

Since PWIs continue to attract a substantial number of African American students, the results of this study can benefit counselors, educators and staff members who work closely them. Rehabilitation counselors who work at PWIs continue to be sensible institutions that provide their graduates with skills allowing success in the face of a society that often discounts their value as contributors. Because students live in an environment that holds onto subtle discriminatory practices, counselors and others can develop programs, services and personal insights into addressing feelings and behaviors associated with these practices.

From the study, I found that, in the social adjustment, acceptance and support could impact the environmental adjustment or immersion within the campus environment. Thus, it is important for Rehabilitation Counselors not only to attend to the possibility that some minority students may experience lower levels of social adjustment than usually expected of college students but also to actively seek out methods to help them cope and increase their social support network on campus and within the larger community. Finally, given our finding that minority students perceived lower levels of P-E fit than did majority students, and Chavous's (2000)

earlier finding that when minority students have a strong sense of racial identity development they also perceived lower levels of P-E fit in predominantly White campuses. I encourage Rehabilitation counselors at PWIs to examine, with their minority student clients who have a strong sense of racial identity, whether there are factors prohibiting their development of a strong fit. More specifically, questions regarding environmental stressors such as racism could become routinely asked as part of the therapeutic intake process. Moreover, I recommend that Rehabilitation Counselors actively co-investigate with their clients the extent to which they are getting their needs met and, at the same time, are able to meet the demands of the institution. If deficits emerge from this assessment, then problem solving, modeling, role-playing, and psycho education might work as possible interventions to assist students.

Based on my findings, we encourage Rehabilitation counselors to design a preventive intervention to explain and to increase P-E fit to incoming students, particularly those who could be at risk of not feeling a sense of belonging to the institution. Multicultural specialists often indicate that Rehabilitation Counselors, in addition to developing awareness, knowledge, and skills to effectively work with diverse clients, have a responsibility to become advocates for these clients (e.g., Sue & Sue, 2003). It sometimes becomes important for college Rehabilitation counselors not only to provide support for minority clients within the counseling session but also to develop active advocacy roles to deal with problems that might rest within the environment of PWIs. For example, Smith et al., (2003) described a comprehensive social justice framework for practice in a university counseling center. The framework includes items such as "development and presentation of programming for the community around multicultural and social justice issues, thus promoting an understanding of the impact of oppression on psychological development and well-being" (p. 9). Using a P-E fit perspective instead of attempting to have

minority students strictly adapt to the majority environment, counselors as advocates might learn more about aspects of the minority experience and help facilitate increased inclusivity in the campus environment.

Conclusion

While my findings were largely unexpected, this study highlights the importance of continued efforts to increase our knowledge of racial socialization to promote positive outcomes such as overall resiliency, educational resiliency, ethnic identity, and ability to handle race-related stressors. Overall more research is needed on the connection between ethnic identity, race-related stressors, educational resiliency and resiliency. There appears to be some direct links, but more understanding is needed regarding such links and whether or not true mediation or moderation exists. This focus can be helpful to the field on how we can promote more positive outcomes as the field sees to direct its attention toward positive psychology outcomes. The academic achievement and persistence of Black students attending a diverse institution of higher education with low Black student's enrollment. Furthermore, peers can provide support in the form of motivation and encouragement, as well as teaching valuable characteristics, such as responsibility, dependability, and time-management. Unfortunately, peers can be a hindrance to the achievement of Black students, as they can discourage students from performing to their best abilities. This study has added to previous research and has found new concepts that have yet to be examined. Specifically, this study found teaching orientation to play a role in the achievement of African American students. Black college students learn best when they feel their professors are passionate about the topics they are teaching and motivated to challenge students to learn. What is more, African American students desire professors who are open-minded and amicable, as they will become more comfortable in the classroom, and feel free to express their opinions.

REFERENCES

- (2005). African American student college graduation rates remain low,. *The Journal of African Americans in Higher Education*, Winter 2005/2006(50), 11. Retrieved from http://www.jbhe.com/features/50_African Americanstudent_gradrates.html
- ::: *Alpha phi alpha* :::. Retrieved 3/30/2010, 2010, from <http://www.alpha-phi-alpha.com/Page.php?id=54>
- A brief history (cont'd)*. Retrieved 3/30/2010, 2010, from <http://www.kappaalphapsi1911.com/fraternity/history.asp>
- About iota* Retrieved 3/30/2010, 2010, from <http://www.iotaphitheta.org/page2.html>
- Ahmad, K. Z. (2010). Person-environment fit: A critical review of the previous studies and a proposal for future research. *International Journal of Psychological Studies*, 1(1), P71.
- Allen, W. R. (1988). The education of African American students on white college campuses: What quality the experience. *Toward African American Undergraduate Student Equality in American Higher Education*, , 57-86.
- Allen, W. R. (1988). The education of African American students on white college campuses: What quality the experience. *Toward African American Undergraduate Student Equality in American Higher Education*, , 57-86.
- Allen, W. R. (1988). Social support networks and undergraduate student academic success-related outcome: A comparison of Black students on Black and White campuses. In W. R. Allen, E. G. Epps & N. Z. Haniff, (Eds.), *College in Black and White: African American students in predominantly white and historically Black public universities* (pp. 143 –160). New York: SUNY Press.

- Allen, W. R. (1988). Improving African American student access and achievement in higher education. *Review of Higher Education, 11*(4), 403-416.
- Allen, W. R. (1992). The color of success: African-American college student outcomes at predominantly white and historically African American public colleges and universities. *Harvard Educational Review, 62*(1), 26-44.
- Allen, W. R., Epps, E. G., & Haniff, N. Z. (1991). *College in African American and white: African american students in predominantly white and in historically African American public universities* State Univ of New York Pr.
- Alpha kappa alpha, inc. / honoring the past Retrieved 3/30/2010, 2010, from <http://www.aka1908.com/past/>
- Americans believe in campus diversity, new study concludes. (1998, October 7). Lawrence Journal-World, p. 1A.
- American Council on Education. (1998, August 18). On the importance of diversity in higher education. [On-line]. Retrieved November 18,2001, from [http://www.acenet.edu/programs/DGR/ Report&Docs/AffirmativeAction/diversity.html](http://www.acenet.edu/programs/DGR/Report&Docs/AffirmativeAction/diversity.html)
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* –iv-tr (4th edn), American Psychiatric Association, Washington, DC.
- Arthur, W., Jr., Bell, S. T., Villado, A. J., & Doverspike, D. 2006. The use of person-organization fit in employment decision making: An assessment of its criterion-related validity. *Journal of Applied Psychology, 91*: 786-801.
- Assouline, M., & Meir, E. I. 1987. Meta-analysis of the relationship between congruence and well-being measures. *Journal of Vocational Behavior, 31*: 319-332.

- Baldwin, J. A., Duncan, J. A., & Bell, Y. R. (1987). Assessment of African self-consciousness among Black students from two college environments. *Journal of Black Psychology, 13*(2), 27-41.
- Bagdi, A., & Pfister, I. K. (2006). Childhood stressors and coping actions: A comparison of children and parents' perspectives. *Child and Youth Care Forum, 35*(1) 21-40.
- Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology, 52*, 1-26.
- Belgrave, F. Z., Chase-Vaughn, G., Gray, F., Addison, J. D., & Cherry, V. R. (2000). The effectiveness of a culture and gender-specific intervention for increasing resiliency among african american preadolescent females. *Journal of African American Psychology, 26*(2), 133.
- Berk, L. E. (2000). Ecological systems theory. *Child development* (5th ed. ed., pp. 23-38). Boston: Allyn and Bacon.
- Berry, M. F. (1983). African Americans in predominantly white institutions of higher learning. *The State of African American America, 295-318*.
- Best, J. W., & Kahn, J. V. (2003). *Research in education*, (9th ed.). Boston, MA: Allyn and Bacon.
- Bureau of Labor Statistics, Current Population Survey. Retrieved April 22, 2010 from: <http://www.bls.gov/emp/emptab7.htm>
- Cabrera, N. L., & Padilla, A. M. (2004). Entering and succeeding in the "culture of college": The story of two mexican heritage students. *Hispanic Journal of Behavioral Sciences, 26*(2), 152.

- Campbell-Sills, L., Cohan, S. L., & Stein, M. B. (2006). Relationship of resilience to personality, coping, and psychiatric symptoms in young adults. *Behaviour Research and Therapy*, 44(4), 585-599.
- Capella, M. E. (2002). Inequities in the VR system: Do they still exist? *Rehabilitation Counseling Bulletin* 45 (3) 143-153.
- Carter, D. J., & Wilson, R. (1996). Minorities in higher education. 1995-96 fourteenth annual status report.
- Carver, C. (1998). Resilience and thriving: issues, models, and linkages. *Journal of Soc Issues*, 54, 245-266.
- Chavous, T, (2000). The relationships among racial identity, perceived ethnic fit, and organization involvement for African American students at a predominantly White university. *Journal of Black Psychology*, 26, 79-101.
- Chickering, A. W., & Reisser, L. (1993). *Education and identity* Jossey-Bass.
- Clauss-Ehlers, C. S. (2004). Reinventing resilience: A model of culturally focused resilient adaptation. *Community Planning to Foster Resiliency in Children*. New York: Kluwer Academic/Plenum Publishers,
- Clauss-Ehlers, C. S., Wibrowski, C. R., Wawrzynski, M. R., Pizzolato, J. E., Logue, C. T., Hutchens, T. A., Hector, M. A., Bryant, A. N., & Astin, H. S. (2007). Building educational resilience and social support: The effects of the educational opportunity fund program among first-and second-generation college students. *Journal of College Student Development*, 48(5), 574.

- Clauss-Ehlers, C. S., Yang, Y. T. T., & Chen, W. C. J. (2006). Resilience from childhood stressors: The role of cultural resilience, ethnic identity, and gender identity. *Journal of Infant, Child, and Adolescent Psychotherapy*, 5(1), 124-138.
- Clauss-Ehlers, C. (2008). Sociocultural factors, resilience, and coping: Support for a culturally sensitive measure of resilience. *Journal of Applied Developmental Psychology*, 29(3), 197-212. doi:10.1016/j.appdev.2008.02.004
- Cohen, Jacob. (1988). *Statistical Power Analysis for the Behavioral Sciences* (2nd Ed.). Lawrence Erlbaum Associates.
- Cohen, L., Manion, L., & Morrison, K. (2000). *Research methods in education*. New York, NY: Routledge.
- Connelly, L. M. (2011). Cronbach's Alpha. *Medsurg Nursing*, 20(1), 44-45.
- Connor, K. M., & Davidson, J. R. T. (2003). Development of a new resilience scale: The Connor-Davidson resilience scale (CD-RISC). *Depression and Anxiety*, 18(2), 76-82.
- Constantine, M.; Richards, T.; Benjamin, E.; & Wilson, J. (1997). An overview of African American racial identity theory: Limitations and considerations for future theoretical change. *Applied and Preventive Psychology*, 7, 95-99.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297-334.
- Day, J. C., & Newburger, E. C. (2002). *The big payoff: Educational attainment and synthetic estimates of work-life earnings*. U. S. Department of Commerce. Washington, DC: U.S. Census Bureau.
- Diehl, M., Coyle, N., Labouvie-Vief, G. (1996). Age and sex differences in strategies of coping and defense across the life span. *Psychology of Aging*, 11, 127-139.

- Douglas, K. B. (1998). Impressions: African American first-year students' perceptions of a predominantly white university. *Journal of Negro Education*, 67(4), 416-431.
- DST - founders*. Retrieved 3/30/2010, 2010, from <http://www.deltasigmamatheta.org/history.htm>
- Easley, N. (1993). *African American student retention at Colorado State University*. Unpublished manuscript, Colorado State University at Fort Collins.
- Ecu office of greek life hazing policy*. (2013). Retrieved from <http://www.ecu.edu/cs-studentaffairs/greeklife/hazingpolicy.cfm>
- Edwards, J. R., Caplan, R. D., & Harrison, R. V. (1998). Person-environment fit theory: Conceptual foundations, empirical evidence, and directions for future research. In C. L. Cooper (Ed.), *Theories of organizational stress* (pp. 28-67). Oxford: Oxford University Press.
- Fisk-Skinner, E., & Gaither, T. (1992). Nontraditional students: Ethnic minorities. *BR Clark, & G.R. Neave, the Encyclopedia of Higher Education*, 3, 1658-1666.
- Fleming, J. (1984). *Blacks in college* (pp. 145-148, 154). San Francisco: Jossey-Bass.
- Fowler Jr., F. J. (2002). *Survey research methods* (3rd ed. Vol. 1). Thousand Oaks: Sage Publications.
- Fox, E., Hodge, C., & Ward, W. (1987). A comparison of attitudes held by African American and white fraternity members. *Journal of Negro Education*, 56(4), 521-534.
- Fricke, R.D. Jr and Schonlau, M. (2002), "Advantages and disadvantages of internet research surveys: evidence from the literature", *Field Methods*, Vol. 14 No. 4, pp. 347-67.
- Gay, G. (2000). *Culturally responsive teaching: Theory, research, and practice. multicultural education series*. Teachers College Press, 1234 Amsterdam Avenue, New York, NY 10027 (paperback: ISBN-0-8077-3954-5,

- Gliner, J., & Morgan, G. (2000). *Research methods in applied settings*. Mahwah, NJ: Lawrence Erlbaum.
- Gilchrist, L. Z. (2002). *Personal and psychological problems of college students – FREE personal and psychological problems of college students information | encyclopedia.com: Find personal and psychological problems of college students research*. Retrieved
- Granello, D., H., & Wheaton, J. E. (1998). Self-perceived multicultural competencies of African American and European American vocational rehabilitation counselors. *Rehabilitation Counseling Bulletin, 42*, 2-15.
- Gravetter, F., & Wallnau, L. (2008). *Statistics for the behavioral sciences*. Belmont, CA: Wadsworth.
- Gregory, S., & Horton, H. (1994). Educational opportunity programs for students of color in graduate and professional schools. *The Trotter Review, 8*(2), 16-19.
- Guiffrida, D.A. (2004). How involvement in African-American student organizations supports and hinders academic achievement. *NACADA Journal, 24*, (1 & 2), 88-98.
- Harper, S. R., & Shaun, R. (2008). The effects of sorority and fraternity membership on class participation and African American student engagement in predominantly white classroom environments. *College Student Affairs Journal, 27*(1), 94–115.
- Hatter, D, Y., & Ottens, A, J, (1998). Afrocentric worldview and Black students' adjustment to a predominantly White university: Does worldview matter?, *College Student Journal, 32*, 472-i80.
- Helms, J. E. (1990). *African American and White racial identity*. Westport, CT: Greenwood Press.
- Helms, J. E., & Piper, R. E. (1994). Implications of racial identity theory for vocational

- psychology. *Journal of Vocational Behavior*, 44, 124–136
- Heppner, P. P., Wampold, B., & Kivligham, D. (2008). *Research design in counseling*. (3rd ed.). Belmont, CA: Thomson Brooks/Cole.
- History | phi beta sigma fraternity* Retrieved 3/30/2010, 2010, from <http://www.pbs1914.org/history/>
- Holcomb-McCoy, C. C. & Myers, J. E. (1999). Multicultural competence and counselor training: A national survey. *Journal of Counseling & Development*, 77, 294-302.
- Hoffman, B. J., & Woehr, D. J. 2006. A quantitative review of the relationship between person-organization fit and behavioral outcomes. *Journal of Vocational Behavior*, 68: 389-399.
- Horton, H. W. (2000). Perspectives on the current status of the racial climate relative to students, staff, and faculty of color at predominantly white Colleges/Universities in america. *Equity & Excellence in Education*, 33(3), 35-37.
- Hutz, A., Fabian, T., & Martin, W, (2003), Predictors to college adaptation for ethnocultural majority and minority students, *Arizona Counseling Journal*, 23, 14-21.
- Irvine, J. J., & Armento, B. J. (2001). *Culturally responsive teaching: Lesson planning for elementary and middle grades* McGraw-Hill.
- Kimbrough, W. M. (1995). Self-assessment, participation, and value of leadership skills, activities, and experiences for African American students relative to their membership in historically African American fraternities and sororities. *Journal of Negro Education*, 64(1), 63-74.
- Kimbrough, W. M. (2003). *African American greek 101: The culture, customs, and challenges of African American fraternities and sororities* Fairleigh Dickinson Univ Pr.
- Kline, R. B. (2005). *Principles and practice of structural equation modeling* (2nd ed.). New

York: Guilford.

- Kobasa SC, Maddi SR, Kahn S. Hardiness and health: a prospective study. *J Pers Soc Psychol.* 1982;42:168–177.
- Kristof-Brown, A. L., Zimmerman, R. D., & Johnson, E. C. (2005). Consequences of individuals' fit at work: A meta-analysis of person-job, person-organization, person-group, and person-supervisor fit. *Personnel Psychology*, 58(2), 281-320.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer Pub. Co.
- Lewin, K. (2008). *Principles of topological psychology* Munshi Pr.
- Luhtanen, R., & Crocker, J. (1992). A collective self-esteem scale: Self-evaluation of one's social identity. *Personality and Social Psychology Bulletin*, 18, 302-318.
- Morgan, S. E., Reichert, T., & Harrison, T. R. (2002). *From numbers to words: Reporting statistical results for the social sciences*. Boston: Allyn and Bacon.
- Massey, D. S., Charles, C. Z., Lundy, G. F., & Fischer, M. J. (2003). *The source of the river* Princeton University Press.
- Masten, A. S., Best, K. M., & Garmezy, N. (2008). Resilience and development: Contributions from the study of children who overcome adversity. *Development and Psychopathology*, 2(04), 425-444.
- Meyer, I. H. (1995). Minority stress and mental health in gay men. *Journal of Health and Social Behavior*, 36(1), 38-56.
- Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin*, 129(5), 674-697.

- McClure, S. M. (2006). Voluntary association membership: African American greek men on a predominantly white campus. *Journal of Higher Education*, 77(6), 1036-1057.
- Middleton, R. A., Rollins, C. W., Sanderson, P. L., Leung, P., Harley, D. A., Ebener, D., et al. (2000). Endorsement of professional multicultural rehabilitation competencies and standards: A call to action. *Rehabilitation Counseling Bulletin*, 43, 219-240.
- Milburn, M. A. (1991). *Persuasion and politics: The social psychology of public opinion*. Pacific Grove, CA: Brooks-Cole/Wadsworth.
- Mikolashek, D. (2004). *A meta-analysis of empirical research studies on resilience among students at-risk for school failure*. (Unpublished doctoral dissertation), Available from ProQuest ETD Collection for FIU. (AAI3151972)Retrieved from <http://digitalcommons.fiu.edu/dissertations/AAI3151972>
- National Center for Education Statistics (NCES). 2007a. Integrated Postsecondary Education Data System (IPEDS) Fall 2006 Institutional Characteristics Survey. Dataset.
- Neblett, E. W., Shelton, J. N., & Sellers, R. M. (2004). The role of racial identity in managing daily racial hassles. In G. Philogine (Ed.), *Racial identity in context: The legacy of Kenneth B. Clark* (pp. 77-90). Washington, DC: American Psychological Association.
- Negga, F., Applewhite, S., & Livingston, I. (2007). African American College Students and Stress: School Racial Composition, Self-Esteem and Social Support. *College Student Journal*, 41(4), 823-830.
- Nunnally, J.C. (1978). *Psychometric Theory* (2nd ed.). New York: McGraw Hill.
- Onwuegbuzie, A. J., & Johnson, R. B. (2004). Mixed method and mixed model research. In R. B. Johnson & L. B. Christensen, *Educational research: Quantitative, qualitative, and mixed approaches* (pp. 408-431). Needham Heights, MA: Allyn & Bacon.

- Ortiz, A. M., & Santos, S.J. (2009). *Ethnicity in college: Advancing theory and diversity practices on campus*. Arlington, VA: Stylus.
- Paquette, D., & Ryan, J. (2001). Bronfenbrenner's ecological systems theory. *Bronfenbrenner's Ecological Systems Theory*,
- Parks, G. (2012, September 27). [Web log message]. Retrieved from
http://www.huffingtonpost.com/gregory-s-parks/bglo-hazing_b_1914635.html
- Pascarella, E. T., & Terenzini, P. T. (1991). *How college affects students*. San Francisco: Jossey-Bass.
- Pervin, L. A. (1968). PERFORMANCE AND SATISFACTION AS A FUNCTION OF INDIVIDUAL-ENVIRONMENT FIT. *Psychological Bulletin*, 69(1), 56-68.
- Pewewardy, C., & Frey, B. (2002). Surveying the landscape: Perceptions of multicultural support services and racial climate at a predominantly white university. *Journal of Negro Education*, 71(1), 77-95.
- Phillips, D. R., Cheng, K. H. C., Yeh, A. G. O., & Siu, O. L. (2009). Person-environment (PE) fit models and psychological well-being among older persons in hong kong. *Environment and Behavior*, 0013916509333426v1.
- Phinney, J. (1990). Ethnic identity in adolescents and adults: A review of research. *Psychological Bulletin*, 108, 499-514.
- Phinney, J. S. (1992). The Multigroup Ethnic Identity Measure-Revised: A new scale for use with diverse groups. *Journal of Adolescent Research*, 7, 156-172.
- Phinney, J. S., & Haas, K. (2003). The process of coping among ethnic minority first-generation college freshmen: A narrative approach. *The Journal of Social Psychology*, 143(6), 707-726.
- Porter, K. (2002). *The Value of a College Degree*. ERIC Document Reproduction Service. No

.ED470038.

Portney, L., & Watkins, M. (1993). *Foundations of clinical research: Applications to practice.*

Stamford, Connecticut: Appleton & Lange.

Puccio, G. J., Talbot, R. J., & Joniak, A. J. (1993). Person-environment fit: Using commensurate scales to predict student stress. *British Journal of Educational Psychology*, 63, 457-468.

Redd, K.E. 2000. *HBCU Graduates: Employment, Earnings, and Success after College.*

Indianapolis, IN: USA Group Foundation.

Ray, N.M. and Tabor, S.W. (2003), "Cyber surveys come of age", *Marketing Research*, Spring, pp. 32-7.

Rimer, S. (2004). Today's lesson for college students: Lighten up. *The New York Times*, A1.

Robinson, J. P., Shaver, P. R., & Wrightsman, L. S. (Eds.). (1991). *Measures of personality and social psychological attitudes.* San Diego: Academic Press.

Roberts, B. W., & Robins, R. W. (2004). Person-Environment fit and its implications for personality development: A longitudinal study. *Journal of Personality*, 72(1), 89-110.

Saddlemire, J. R. (1996). Qualitative study of white second-semester undergraduates' attitudes toward african american undergraduates at a predominantly white university. *Journal of College Student Personnel*, 37(6), 684-691.

Sanford, N. (2006). *Self & society: Social change and individual development* Aldine De Gruyter.

Sanford, N., & Adelson, J. (1962). *The american college* Wiley.

Schneider, B. (1987). The people make the place. *Personnel Psychology*, 40(3), 437-453.

- Schneider, B., Smith, D. B., & Goldstein, H. W. (2000). Attraction-selection-attrition: Toward a person-environment psychology of organizations. *Person-Environment Psychology: New Directions and Perspectives*, 2, 61-85.
- Scholl, N., Mulders, S. and Drent, R. (2002), "Online qualitative market research: interviewing the world at a fingertip", *Qualitative Market Research*, Vol. 5 No. 3, pp. 210-23.
- Schonlau, M., Fricker, R. D. J., & Elliott, M. N. (2002). *Conducting research surveys via e-mail and the web*. Santa Monica: Rand.
- Sedlacek, W. E. (1999). African American students on white campuses: 20 years of research. *Journal of College Student Development*, 40, 538-550.
- Sellers, R. M., Chavous, T. M., & Cooke, D. (1998). Racial ideology and racial centrality as predictors of African American college students' academic performance. *Journal of Black Psychology*, 24, 8-27.
- Sheehan, K.B. and McMillan, S.J. (1999), "Response variation in e-mail surveys: an exploration", *Journal of Advertising Research*, Vol. 39, July-August, pp. 45-54.
- Shonkoff, J. P., & Phillips, D. (2000). *From neurons to neighborhoods: The science of early childhood development* National Academies Press.
- Sigma gamma rho* Retrieved 3/30/2010, 2010, from
http://www.sgrho1922.org/page.php?page_id=115397&parent_id=115396
- Soper, D.S. (2012) "Post-hoc Statistical Power Calculator for Hierarchical Multiple Regression (Online Software)", <http://www.danielsoper.com/statcalc>
- Spencer, M. B., Noll, E., Stoltzfus, J., & Harpalani, V. (2001). Identity and school adjustment: Revisiting the "Acting White" assumption. *Educational Psychologist*, 36, 21-30.

- Stage, F. K., & Hossler, D. (1989). Differences in family influences on college attendance plans for male and female ninth graders. *Research in Higher Education, 30*, 301–315
- Steinhardt, M. A., Mamerow, M. M., Brown, S. A., & Jolly, C. A. (2009). A resilience intervention in african american adults with type 2 diabetes: A pilot study of efficacy. *The Diabetes Educator, 35*(2), 274-284. doi:10.1177/0145721708329698
- Striegel-Moore, R. H., & Bulik, C. M. (2007). Risk factors for eating disorders. *American Psychologist, 62*, 181–198.
- Sue, D. W., & Sue, D. (2008). *Counseling the culturally diverse: Theory and practice* (5th ed., p. 302). New York, NY: Wiley.
- Swartz-Kulstad, J. L., & Martin, W. E. (2000). Culture as an essential aspect of person-environment fit. In W. E. Martin Jr. & J. L. Swartz-Kulstad (Eds.), *Person-environment psychology and mental health: Assessment and intervention* (pp. 169-195). Mahwah, NJ: Erlbaum.
- Taylor, E., & Olswang, S. G. (1997). Crossing the color line: African americans and predominantly white universities. *College Student Journal, 31*, 11-18.
- The official website of omega psi phi - about* Retrieved 3/30/2010, 2010, from http://www.omegapsiphifraternity.org/about_omega.asp
- Thompson, C. P., Anderson, L. P., & Bakeman, R. A. (2000). Effects of racial socialization and racial identity on acculturative stress in African American college students. *Cultural Diversity and Ethnic Minority Psychology, 6*(2), 196-210.
- Tranberg, M., Slane, S., & Ekeberg, S. E. 1993. The relation between interest congruence and satisfaction: A meta-analysis. *Journal of Vocational Behavior, 42*: 253-264.

- Torres, V. M., Howard-Hamilton, M. F., & Cooper, D. L. (2003). Identity development of diverse populations: Implications for teaching and administration in higher education. *ASHE-ERIC Higher Education Report*, 29(6).
- Tsabari, O., Tziner, A., & Meir, E. I. 2005. Updated meta-analysis on the relationship between congruence and satisfaction. *Journal of Career Assessment*, 13: 216-232.
- U.S. Census Bureau. Racial and ethnic classifications used in the census 2000 and beyond. Retrieved December 26, 2011, from <http://www.census.gov/population/www/socdemo/race/racefactcb.html>
- Vandiver, B.J. (2001). Psychological Nigrescence revisited: Introduction and overview. *Journal of Multicultural Counseling and Development*, 29(3), 165-173.
- Verquer, M. L., Beehr, T. A., & Wagner, S. H. 2003. A meta-analysis of relations between person-organization fit and work attitudes. *Journal of Vocational Behavior*, 63: 473-489.
- Walker, K. L., & Dixon, V. (2002). Spirituality and academic performance among african american college students. *Journal of African American Psychology*, 28(2), 107.
- Walker, K. L.: (2002). Spirituality and academic performance among african american college students. *The Journal of African American Psychology*, 28(2)
- Warner, R. M. (2008). *Applied Statistics: From bivariate through multivariate techniques*. Thousand Oaks: Sage.
- Waxman, H., Gray, J. & Padron, Y. (2003). *Review of research on educational resilience*. Retrieved 3/31/2010, 2010, from <http://escholarship.org/uc/item/7x695885>
- Waxman, H. C., Gray, J. P., & Padron, Y. N. (2003). Review of research on educational resilience.

- Weaver, D. (2010). *The relationship between cultural/ethnic identity and individual protective factors of academic resilience*. Retrieved from http://counselingoutfitters.com/vistas/vistas10/Article_67.pdf
- Weinberg, M. (1977). *A chance to learn: A history of race and education in the United States*. Cambridge, MA: Cambridge University Press.
- Wilder, D. H., & McKeegan, H. F. (1999). Greek-letter social organizations in higher education: A review of research. *Higher Education: Handbook of Theory and Research*, , 317–366.
- Wilson, K. B., Alston, R. J., Harley, D. A., Mitchel, N. A. (2002). Predicting VR acceptance based on race, gender, education, work status at application, and primary source of support at application. *Rehabilitation Counseling Bulletin*, 30, 132-142.
- Worrell, F.C., Cross, W.E., Vandiver, B.J., (2001). Nigrescence theory: Current status and challenges for the future. *Journal of Multicultural Counseling and Development*, 29, 201-211.
- Yasui, M., & Dishion, T. J. (2007). The ethnic context of child and adolescent problem behavior: Implications for child and family interventions. *Clinical Child and Family Psychology*, 10(2), 137-179.
- Zeta phi beta heritage :: Overview*. Retrieved 3/30/2010, 2010, from http://www.zphib1920.org/heritage_overview.html

APPENDIX A: IRB APPROVAL



EAST CAROLINA UNIVERSITY
University & Medical Center Institutional Review Board Office
4N-70 Brody Medical Sciences Building · Mail Stop 682
600 Moye Boulevard · Greenville, NC 27834
Office **252-744-2914** · Fax **252-744-2284** · www.ecu.edu/irb

Notification of Initial Approval: Expedited

From: Social/Behavioral IRB
To: [Sherra' White](#)
CC: [Paul Toriello](#)
Date: 7/16/2013
Re: [UMCIRB 13-000441](#)
Resilience Differences of BGLO Members and African-American Students at PWIs

I am pleased to inform you that your Expedited Application was approved. Approval of the study and any consent form(s) is for the period of 7/14/2013 to 7/13/2014. The research study is eligible for review under expedited category #7. The Chairperson (or designee) deemed this study no more than minimal risk.

Changes to this approved research may not be initiated without UMCIRB review except when necessary to eliminate an apparent immediate hazard to the participant. All unanticipated problems involving risks to participants and others must be promptly reported to the UMCIRB. The investigator must submit a continuing review/closure application to the UMCIRB prior to the date of study expiration. The Investigator must adhere to all reporting requirements for this study.

Approved consent documents with the IRB approval date stamped on the document should be used to consent participants (consent documents with the IRB approval date stamp are found under the Documents tab in the study workspace).

The approval includes the following items:

| Name | Description |
|--|-------------------------------------|
| Consent Letter for Expedited Survey Research | Consent Forms |
| Dissertation Proposal | Study Protocol or Grant Application |
| Dissertation Proposal PowerPoint | Study Protocol or Grant Application |
| Email Participation Request | Recruitment Documents/Scripts |
| Follow-Up Email Request | Recruitment Documents/Scripts |
| Formal Participation Letter | Recruitment Documents/Scripts |
| Participation Flyer | Recruitment Documents/Scripts |
| Total Questionnaire | Surveys and Questionnaires |

The Chairperson (or designee) does not have a potential for conflict of interest on this study.

APPENDIX B: TOTAL QUESTIONNAIRE

Please complete each question listed that best describes you.

1. Age:_____

2. Sex: Male Female

3. How do you identify yourself?
 - Asian or Asian American, including Chinese, Japanese, and others
 - Black or African American
 - Latino or Hispanic, including Mexican & Central American and Other
 - White, Caucasian, Anglo, European American; not Hispanic
 - American Indian/Native American
 - Mixed; Parents are from two different groups
 - Other (write in): _____

4. What is your current GPA? _____

5. What is your current Classification at this University?

| | | |
|--|--|---|
| <input type="checkbox"/> 1 st Semester Freshman | | <input type="checkbox"/> Junior |
| <input type="checkbox"/> 2 nd Semester Freshman | | <input type="checkbox"/> Senior |
| <input type="checkbox"/> Sophomore | | <input type="checkbox"/> New Transfer Student |

6. The probability of me graduating from this University is? (List % from 1-100) _____%

7. Do you plan to attend Graduate School? Yes N o

8. What campus student organizations are you a member of, if any? (Check All That Apply)

- Not Involved in any campus student organizations
- Black-Lettered Greek Organization - “Divine 9”
- Black (African-American) Student Union (BSU)
- National Association for the Advancement of Colored People (NAACP)
- Gospel Choir
- Residence Hall Association (RHA)
- Student Government Association (SGA)
- Intramural Sports - _____
- Campus Ministries - _____
- Academic or Major-Specific Organizations - _____
- Modeling Troupe
- Other: _____

9. Do you hold an office(s) in any of these organizations? Yes No

10. Are you a member of a Greek organization? Yes No

If so, for how long? _____

11. If not Greek, are you interested or have applied for membership? Yes No

12. How many hours per week (average) do you participate in these organizations?

0-3 Hours

8-10 Hours

4-7 Hours

13. Have you faced Racial Discrimination while a student here? Yes No

14. Which areas have you felt **supported** in while a student here?

- The Classroom
- In the Community
- On the Campus Community
- By Professors
- By College Officials

- By Peers
- By College Staff/Workers
- In the Dormitory
- Family

15. Has a Racial Discrimination event *changed or affected* your academics (grades, attendance, changing major, gpa, etc...)? Yes No

Multi-group Ethnic Identity Measure- Revised

In this country, people come from many different cultures and there are many different words to describe the different backgrounds or ethnic groups that people come from. Some examples of the names of ethnic groups are Hispanic, Black, Asian-American, Native American, Irish-American, and White. These questions are about your ethnicity or ethnic group.

Use the numbers below to indicate how much you agree or disagree with each statement.

(4) Strongly Agree; (3) Agree; (2) Disagree; (1) Strongly Disagree

15. I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs.

(4) Strongly Agree; (3) Agree; (2) Disagree; (1) Strongly Disagree

16. I have a strong sense of belonging to my own ethnic group.

(4) Strongly Agree; (3) Agree; (2) Disagree; (1) Strongly Disagree

18. I understand pretty well what my ethnic group membership means to me.

(4) Strongly Agree; (3) Agree; (2) Disagree; (1) Strongly Disagree

19. I have often done things that will help me understand my ethnic background better.

(4) Strongly Agree; (3) Agree; (2) Disagree; (1) Strongly Disagree

20. I have often talked to other people in order to learn more about my ethnic group.

(4) Strongly Agree; (3) Agree; (2) Disagree; (1) Strongly Disagree

21. I feel a strong attachment towards my own ethnic group.

(4) Strongly Agree; (3) Agree; (2) Disagree; (1) Strongly Disagree

College Resilience Questionnaire

Please indicate how accurately each statement describes you with respect to your own academic success. Use the five-point scale below. If the statement is always true, circle a **5** on the line adjacent to the statement. If the statement is never true, circle/write a **1** on the line.

(5) Always True

(4) Usually True

(3) Neutral

(2) Usually False

(1) Always False

22. I never give up at school. **1 2 3 4 5**

23. I actively pursue my educational goals. **1 2 3 4 5**

24. I have always had good friends to talk to at school. **1 2 3 4 5**

25. I am a self-starter on my homework. **1 2 3 4 5**

26. School excites me. **1 2 3 4 5**

27. I am very optimistic about my education. **1 2 3 4 5**

28. I have a high self-esteem about school. 1 2 3 4 5
29. I learn from tests. 1 2 3 4 5
30. I expect to do well in college. 1 2 3 4 5
31. I make friends in classes easily. 1 2 3 4 5
32. I make the best of each education experience. 1 2 3 4 5
33. I know how to get homework done. 1 2 3 4 5
34. I am able to connect with others at college. 1 2 3 4 5
35. I get along well with others at school. 1 2 3 4 5
36. I am a good problem solver on academic things. 1 2 3 4 5
37. I make good things happen in my education. 1 2 3 4 5
38. Nothing blocks my educational path for long. 1 2 3 4 5
39. I like to take charge of my education. 1 2 3 4 5
40. There are people in school who really believe in me. 1 2 3 4 5
41. I adapt easily to new classes. 1 2 3 4 5
42. I have a lot of faith in how I'll do at school. 1 2 3 4 5
43. I have someone that encourages me. 1 2 3 4 5
44. I keep going when things are tough in classes. 1 2 3 4 5
45. I feel difficult classes have made me a stronger person. 1 2 3 4 5
46. I like the student I have become. 1 2 3 4 5

47. My family encourages me to continue my college education. **1 2 3 4 5**

48. My close friends encourage me to continue my education. **1 2 3 4 5**

Connor-Davidson Resilience Scale – CD-RISC

For each item, please mark an “x” in the box below that best indicates how much you agree with the following statements as they apply to you over the last **month**. If a particular situation has not occurred recently, answer according to how you think you would have felt.

Not True At All (0)

Rarely True (1)

Sometimes True (2)

Often True (3)

True Nearly All the Time (4)

49. I am able to adapt when changes occur. **0 1 2 3 4**

50. I have at least one close and secure relationship that helps me when I am stressed. **0 1 2 3 4**

51. When there are no clear solutions to my problems, sometimes fate or God can help. **0 1 2 3 4**

52. I can deal with whatever comes my way. **0 1 2 3 4**

53. Past successes give me confidence in dealing with new challenges and difficulties. **0 1 2 3 4**

54. I try to see the humorous side of things when I am faced with problems. **0 1 2 3 4**

Not True At All (0)

Rarely True (1)

Sometimes True (2)

Often True (3)

True Nearly All the Time (4)

56. Having to cope with stress can make me stronger. 0 1 2 3 4
57. I tend to bounce back after illness, injury, or other hardships. 0 1 2 3 4
58. Good or bad, I believe that most things happen for a reason. 0 1 2 3 4
59. I give my best effort no matter what the outcome may be. 0 1 2 3 4
60. I believe I can achieve my goals, even if there are obstacles. 0 1 2 3 4
61. Even when things look hopeless, I don't give up. 0 1 2 3 4
62. During times of stress/crisis, I know where to turn for help. 0 1 2 3 4
63. Under pressure, I stay focused and think clearly. 0 1 2 3 4
64. I prefer to take the lead in solving problems rather than letting others make all the decisions. 0 1 2 3 4
65. I am not easily discouraged by failure. 0 1 2 3 4
66. I think of myself as a strong person when dealing with life's challenges and difficulties. 0 1 2 3 4
67. I can make unpopular or difficult decisions that affect other people, if it is necessary. 0 1 2 3 4
68. I am able to handle unpleasant or painful feelings like sadness, fear, and anger. 0 1 2 3 4
69. In dealing with life's problems, sometimes you have to act on a hunch without knowing why. 0 1 2 3 4
70. I have a strong sense of purpose in life. 0 1 2 3 4
71. I feel in control of my life. 0 1 2 3 4
72. I like challenges. 0 1 2 3 4

73. I work to attain my goals no matter what roadblocks I encounter along the way. **0 1 2 3 4**

74. I take pride in my achievements. **0 1 2 3 4**

INDEX OF RACE-RELATED STRESS-BRIEF (IRRS-B)

This survey questionnaire is intended to sample some of the experiences that Black people have in this country because of their "blackness." There are many experiences that a Black person can have in this country because of his/her race. Some events happen just once, some more often, while others may happen frequently. Below you will find listed some of the experiences for which you are to indicate those that have happened to you or someone very close to you (i.e. a family member or loved one). It is important to note that a person can be affected by those events that happen to people close to them; this is why you are asked to consider such events as applying to your experiences when you complete this questionnaire.

Please circle the number on the scale (**0 to 4**) that indicates the reaction you had to the event at the time it happened. Do not leave any items blank. If an event has happened more than once refer to the first time it happened. If an event did not happen **circle 0** and go on to the next item.

0 = This never happened to me.

1 = This event happened, but didn't bother me.

2 = This event happened & I was slightly upset.

3 = This event happened & I was upset.

4 = This event happened & I was extremely upset.

75. You notice that crimes committed by White people tend to be romanticized, whereas the same crime committed by a Black person is portrayed as savagery, and the Black person who committed it, as an animal. 0 1 2 3 4

76. Sales people/clerks did not say thank you or show other forms of courtesy and respect (i.e. put your things in a bag) when you shopped at some White/non-Black owned businesses.

0 1 2 3 4

77. You notice that when Black people are killed by the police the media informs the of the Victim's criminal record or negative information in their background, suggesting they got what they deserved.

0 1 2 3 4

78. You have been threatened with physical violence by an individual or group of White or non-Blacks.

0 1 2 3 4

79. You have observed that White kids who commit violent crimes are portrayed as "boys being boys", while Black kids who commit similar crimes are wild animals.

0 1 2 3 4

80. You seldom hear or read anything positive about Black people on radio, T.V., newspapers or in history books.

0 1 2 3 4

81. While shopping at a store the sales clerk assumed that you couldn't afford certain items (i.e. you were directed toward the items on sale).

0 1 2 3 4

82. You were the victim of a crime and the police treated you as if you should just accept it as part of being Black.

0 1 2 3 4

83. You were treated with less respect and courtesy than Whites and other non-Blacks while in a store, restaurant, or other business establishment. 0 1 2 3 4

84. You were passed over for an important project although you were more qualified and competent than the White/non-Black person given the task. 0 1 2 3 4

85. Whites/non-Blacks have stared at you as if you didn't belong in the same place with them; whether it was a restaurant, theater, or other place of business. 0 1 2 3 4

86. You have observed the police treat White/non-Blacks with more respect and dignity than they do Blacks. 0 1 2 3 4

87. You have been subjected to racist jokes by Whites/non-Blacks in positions of authority and you did not protest for fear they might have held it against you. 0 1 2 3 4

88. While shopping at a store, or when attempting to make a purchase you were ignored as if you were not a serious customer or didn't have any money. 0 1 2 3 4

89. You have observed situations where other Blacks were treated harshly or unfairly by Whites/non- Blacks due to their race. 0 1 2 3 4

90. You've heard reports of White people/non-Blacks who've committed crimes and in an effort to cover up their deeds falsely reported that a Black man was responsible for the crime. 0 1 2 3 4

91. You notice that the media plays up those stories that cast Blacks in negative (child abusers, rapists, muggers, savages, Wild Man of 96th St., Wolf Pack, etc.), usually accompanied by a large picture of a Black person looking angry or disturbed. 0 1 2 3 4

92. You have heard racist remarks or comments about Black people spoken with impunity by white public officials or other influential White people. 0 1 2 3 4

93. You have been given more work, or the most undesirable jobs at your place of employment while the White/non-Black of equal or less seniority and credentials is given less work, and more desirable tasks. 0 1 2 3 4

94. You have heard or seen other Black people express the desire to be White or to have white physical characteristics because they disliked being Black or thought it was ugly. 0 1 2 3 4

95. White people or other non-Blacks have treated you as if you were unintelligent and needed things explained to you slowly or numerous times. 0 1 2 3 4

96. You were refused an apartment or other housing; you suspect it was because you are black. 0 1 2 3 4

APPENDIX C: INSTRUMENTS EMAILS OF APPROVAL

RE: Inquiry: Use of Tool for Dissertation

McMillan, Sherra Vivette

Sent: Wednesday, March 02, 2011 8:17 PM

To: Phinney, Jean s. [jphinne@exchange.calstatela.edu]

Thank you so much for the use of your tool. I truly appreciate the ability to use your tool in my Dissertation.

[Ms. Sherra' McMillan, MAEd, MS, CRC, LPCA](#)

Doctoral Graduate Assistant

Dept. of Rehabilitation Studies & Counseling

East Carolina University

From: Phinney, Jean s. [jphinne@exchange.calstatela.edu]

Sent: Tuesday, March 01, 2011 2:42 PM

To: McMillan, Sherra Vivette

Subject: RE: Inquiry: Use of Tool for Dissertation

Dear Sherra,

I have attached a copy of the MEIM-R. You are welcome to use this in your research. Let me know if you have any further questions.

Jean Phinney

From: McMillan, Sherra Vivette [mailto:MCMILLANS00@students.ecu.edu]

Sent: Monday, February 28, 2011 7:34 PM

To: Phinney, Jean s.

Subject: Inquiry: Use of Tool for Dissertation

Importance: High

Good Evening Dr. Phinney

My name is Sherra' McMillan and I am currently a 3rd year Doctoral Student at East Carolina University in the Department of Rehabilitation Studies and Counseling. I am in the process of preparing my Dissertation on the topic of "Examining the Resilience of African-American Students versus African-American Greek-Lettered Organizations at a Predominately White Institution." I hope to utilize your tool the "**Multigroup Ethnic Identity Measure – Revised (MEIM-R)**". I would like to use your tool to examine the ranging ethnic identities may possess in being an minority at at large public white institution.

I hope to hear from you soon to determine the process I will need in order to use your tool; along with your permission of use. I look forward to hearing back from you soon.

[Ms. Sherra' McMillan, MAEd, MS, CRC, LPCA](#)

Doctoral Graduate Assistant

Dept. of Rehabilitation Studies & Counseling

East Carolina University

APPENDIX C: INSTRUMENTS EMAILS OF APPROVAL

RE: Inquiry: Use of Tool for Dissertation

McMillan, Sherra Vivette

Sent: Wednesday, March 02, 2011 8:21 PM

To: soutsey@vcu.edu

Thank you so much for the use of your tool. I truly appreciate the ability to use your tool in my Dissertation.

[Ms. Sherra' McMillan, MAEd, MS, CRC, LPCA](#)

From: McMillan, Sherra Vivette

Sent: Tuesday, March 01, 2011 8:47 AM

To: Leierer, Stephen

Subject: FW: Inquiry: Use of Tool for Dissertation

Sherra,

Greetings. Thanks for your interest in the IRRS-B. You have my permission to use the instrument in your study. I have attached the IRRS-B and its scoring instructions. Please let me know if you have additional questions.

Shawn

Shawn O. Utsey, Ph.D.,
Chair, Department of African American Studies,
Director, Institute for African American
Mental Health Research and Training,
Professor, Department of Psychology,
(804) 828-1384
Fax: (804) 828-1665

From: "McMillan, Sherra Vivette" <MCMILLANS00@students.ecu.edu>

To: "soutsey@vcu.edu" <soutsey@vcu.edu>

Date: 02/28/2011 10:47 PM

Subject: Inquiry: Use of Tool for Dissertation

Good Evening Dr. Outsey

My name is Sherra' McMillan and I am currently a 3rd year Doctoral Student at East Carolina University in the Department of Rehabilitation Studies and Counseling. I am in the process of preparing my Dissertation on the topic of "Examining the Resilience of African-American Students versus African-American Greek-Lettered Organizations at a Predominately White Institution." I hope to utilize your tool the Index of Race-Related Stress-Brief Version (IRRS-B). I would like to use your tool to examine the ranging stressful events experienced by minorities at large public white institution.

I hope to hear from you soon to determine the process I will need in order to use your tool; along with your permission of use. I look forward to hearing back from you soon.

[Ms. Sherra' McMillan, MAEd, MS, CRC, LPCA](#)

Doctoral Graduate Assistant

Dept. of Rehabilitation Studies & Counseling

East Carolina University

APPENDIX D: RECRUITMENT LETTER

College of Allied Health Sciences
Department of Addictions & Rehabilitation Studies
4425 Health Sciences Building, Mail Stop 677
East Carolina University
Greenville, NC 27834
Office: 252-744-6291
Fax: 252-744-6302



2/21/2012

To Whom It May Concern:

My name is Sherra M. White; I am developing a research proposal for my doctoral dissertation at East Carolina University entitled "Resilience Differences Among Greek-Lettered Organization Members and African American Students at Predominately White Institutions." I am under the direction of Dr. Paul Toriello within the Department of Addictions and Rehabilitation Studies. The purpose of this study will be to compare resiliency and psychosocial issues between African American students and Black Greek-Letter Organization (BGLO) members of college students (ranged freshman to seniors) attending a Predominately White Institution (PWI). Specifically, the study will investigate the relationship between resiliency, educational resiliency, ethnic identity and race-related stressors as a means to further understand how these concepts may interact or relate by memberships in campus organizations or BGLOs may interact or relate to these concepts. The results of this study will help raise the important question of determining if positive cultural social structures support African American students' resilience and success in college. I am requesting your permission to invite African American students and members of your NPHC organizations to participate in my study by completing an online survey. Please find

attached a copy of the survey that I plan to use for my research, which consists of Demographic Questionnaire, Resilience Questionnaires, Race-related Stress and Ethnic-Identity Questionnaire.

I am not requesting email addresses, phone numbers, mailing addresses or any personally identifying information about the African American students and members of NPHC. Instead, I would like you to email my letter of invitation to complete the online survey, on my behalf, to all African American students, African American student organizations, and Presidents of NPHC and its subsidiary organizations. My survey does not ask for any personally identifying information, the study participant's identification will be completely anonymous. I have received IRB approval from East Carolina University, University and Medical Center Institutional Review Board (UMCIRB) and can send Approval copy upon request. I am asking you to send the letter of invitation at this time to invite students and/or NPHC members to complete my survey. The survey will be hosted at Qualtrics with a forthcoming link provided upon IRB approval. I would welcome the opportunity to discuss this with you by phone if that would be helpful. In addition, I would be happy to provide any further information you may require to make this task feasible. Thank you for your time.

Sincerely,

Sherra' M. White, MA.Ed, MS, LPCA, LCAS-A, CRC

Doctoral Candidate

336-608-9021

whiteshe@ecu.edu

APPENDIX E: PARTICIPATION REQUEST LETTER



College of Allied Health Sciences
Department of Addictions & Rehabilitation Studies
4425 Health Sciences Building
Mail Stop 677
East Carolina University
Greenville, NC 27834
Office: 252-744-6291
Fax: 252-744-6302

2/11/2013

To Whom It May Concern:

My name is Sherra´ White and I am developing a research proposal for my doctoral dissertation at East Carolina University entitled "Resilience Differences Among Black Greek-Lettered Organization Members and African American Students at Predominately White Institutions." I am under the direction of Dr. Paul Toriello within the Department of Rehabilitation Studies. The purpose of this study will be to compare resiliency, ethnic identity and race-related stress issues between African American students and Black Greek-Letter Organization (BGLO) members of college students (ranged freshman to seniors) attending a Predominately White Institution (PWI). Specifically, the study will investigate the relationship between resiliency, educational resiliency, ethnic identity and race-related stressors as a means to further understand how social supports such as memberships in campus organizations or BGLOs may interact or relate to these concepts. The results of this study will help raise the important question of determining if positive cultural social structures support African American students' resilience and educational success in college. I am requesting your permission to invite African American students and members of your NPHC organizations to participate in my study by completing an online survey. Please find attached a copy of the survey that I

plan to use for my research, which consists of Demographic Questionnaire, Resilience Questionnaires, Index of Race-related Stress, Brief version and Ethnic-Identity Questionnaire.

I am not requesting email addresses, phone numbers, mailing addresses or any personally identifying information about the African American students and members of NPHC. Instead, I would like you to email my letter of invitation to complete the online survey, on my behalf, to all African American students, African American student organizations, and Presidents of NPHC and its subsidiary organizations. My survey does not ask for any personally identifying information, the study participant's identification will be completely anonymous. I have received IRB approval from East Carolina University, University and Medical Center Institutional Review Board (UMCIRB) and can send Approval copy upon request. I am asking you to send the letter of invitation at this time to invite students and/or NPHC members to complete my survey.

The link to the survey can be found at: https://ecu.qualtrics.com/SE/?SID=SV_dnSWWHSDJs1BEyh. I would welcome the opportunity to discuss this with you by phone if that would be helpful. In addition, I would be happy to provide any further information you may require to make this task feasible. Thank you for your time.

Sincerely,

Sherra' M. White, MA.Ed, MS, LPCA, CRC

Doctoral Candidate

336-608-9021

whiteshe@ecu.edu

APPENDIX F: ACCEPTANCE OF APPROVAL



Department of Greek Life
100 Mendenhall Student Center
Mail Stop 224
East Carolina University
Greenville, NC 27858-4353

252-328-4235 office
252-328-0271 fax

August 19, 2010

Thank you for taking the time to meet with the Greek Life Staff on 8/18/10. Our meeting was informative and we appreciate your continued to Greek Life.

Please accept this letter as a statement of understanding that you will be surveying students involved with ECU Greek Life and have met with us and you have our full consent. As we discussed, the students will remain anonymous and the surveys will be voluntarily.

Please let us know what we can do to help this exemplary study, which I believe will be a benefit to all who are involved.

Truly yours,

Keith Tingley

Director of Greek Life

