RACIAL BATTLE FATIGUE AND COPING IN A "POSTRACIAL" ERA FOR AFRICAN AMERICAN AND MEXICAN AMERICAN STUDENTS: IMPLICATIONS FOR HIGHER EDUCATION INSTITUTIONS AND STUDENTS

by

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ABSTRACT

This study investigates how racial battle fatigue manifests itself for African American and Mexican American students and investigates the most utilized coping strategies students employ to combat racial battle fatigue. The study uses structural equation modeling (SEM) to investigate the differences in racial battle fatigue for African American and Mexican American students. The study responds to an empirical need by examining an under-researched area in higher education, namely, researching the effects of racial microaggressions on students' psychological, physiological, and behavioral stress responses and how students cope with racialized stress.

Findings suggest that both African American and Mexican American students are negatively impacted by racial microaggressions and those microaggressions negatively impact stress responses. The impact of racial microaggressions varies across groups. Secondly, the study found that adaptive coping strategies may help alleviate the impact of racial microaggressions within the racial battle fatigue framework. Implications suggest that universities need to immediately provide services to Students of Color that account for racism as the universities try to address hostile climates and cultures. At the same time, universities need to create opportunities to disrupt Whiteness. That way White students, faculty, and staff are more aware of their privilege to help change the culture of institutions.

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Finally, this dissertation reflects the current realities of People of Color on campuses today. I dedicate myself to research and praxis that fundamentally changes the climates and cultures of higher education institutions and interrogates White privilege.

CHAPTER 1

INTRODUCTION

Universities and colleges proudly advertise their welcoming environment for all students regardless of race and ethnicity in their mission statements and recruitment pamphlets for prospective students. While access for Students of Color[1] has increased compared to before the 1960s and 70s when they first stepped on college campuses in large numbers (Allen & Jewell, 1995; Allen, Teranishi, Dinwiddie, & Gonzalez, 2000; Thelin, 2004), admission to a university does not necessarily correspond with equitable social conditions (Allen, 1992; Feagin, 1992; Hurtado, 1992, 1994, 2002; Museus & Jayakumar, 2012). Strayhorn (2008) states though "college participation rates have increased for all groups over the past 30 years…significant gaps across racial/ethnic groups persist" (p. 301). While there are participation gaps, there are also differences in the climate and culture of higher education institutions for students from different racial and ethnic backgrounds. William A. Smith (2009b) characterizes this discrepancy when he states, "White campus racial culture…promotes Plessy-like environments on post-Brown campuses" (p. 616). Simply put, greater access and opportunity for Students of

[1] People of Color, Students of Color, minoritized students, and historically underrepresented students are used interchangeably in this document to denote students who are not of European American/White descent (e.g., African American, American Indian, Asian American, Latina/o, and Pacific Islander).

Color did not eradicate racism or negative racial ideologies on college campuses. Instead we witnessed a shift in racism from the overt racism of the Jim Crow era to a subtler, "color-blind" racism that is equally injurious to the everyday lives of People of Color (Bobo, Klugel & Smith, 1997; Bobo & Smith, 1998; Bonilla-Silva, 2001, 2006). "Color-blind" racism rejects the Jim Crow, biological explanations of race and takes on a more understated approach in which, "Whites rationalize minorities' contemporary status as the product of market dynamics, naturally occurring phenomena, and Blacks' imputed cultural limitations" (Bonilla-Silva, 2010, p. 2). Color-blind racism interweaves itself into the meritocratic "pull yourself up by your bootstraps" discourse that dominates the everyday thoughts of many in American society and critics of racial diversity and equity in higher education (D'Souza, 1991, 2009; Horowitz, 2007; McWhorter, 2008; Steele, 2008). In 2014, the Voices of Diversity Project released a report that found historically underrepresented People of Color and women continue to face racism and discrimination on college campuses, but racism has taken on a subtle, "color-blind" nature (Caplan & Ford, 2014).

"Postracial?"

With the election of President Barack Obama in 2008, the first African American president, many scholars, columnists, and the public advocated that a "postracial," color-blind society was upon the country and racism was restricted to small pockets of American society (D'Souza, 1991, 1995; 2009; McWhorter, 2008; Sander; 2004; Steele, 2008). Many of these arguments often blame individuals for perceived shortcomings and fail to recognize structural barriers, color-blind racism, and institutional racism. Post-

racial discourse is a romanticized view of racism that does not reflect the racialized realities of People of Color in society at large or in higher education. A more representative, contemporary reality for many People of Color is one filled with stressful, racist environments that has been demonstrated to lead to negative health outcomes (Carter, 2007; Clark, Anderson, Clark, & Williams, 1999; Feagin, 2006; Kressin, Raymond, & Manze, 2008; Krieger, Smith, Naishadham, Hartman, & Barbeau, 2005; Hill, Kobayashi, & Hughes, 2007; Noh, Kaspar, & Wickrama, 2007; Sellers, Copeland-Linder, Martin, & Lewis, 2006; Williams & Mohammed, 2009; Williams, Neighbors, & Jackson, 2003).

Contrary to popular notions of a "postracial" era, scholars have demonstrated that experiences on college campuses of People of Color profoundly contrast with those of White individuals (Feagin, 1992; Feagin, Vera, & Imani, 1996; Hurtado, 1992; Hurtado & Carter, 1997; Smith, 2009). Research demonstrates that fellow students, faculty, staff, and administrators commonly characterize historically underrepresented Students of Color as academically inferior, lazy, illegal, athletes, exotic, criminals/predators, affirmative action beneficiaries, and unwilling or unable to fit into the dominant White culture of today's universities (Feagin, 1992; Feagin et al., 1996; Harper, 2009, 2012; Harper & Hurtado, 2007; Hurtado, 1992, 2002; Perez, 2009; Smith, Yosso, & Solórzano, 2007). In response to negative stereotypes, Students of Color repeatedly express that their experiences, cultural traditions, and opinions are questioned and disputed in academic and social settings on campus (Davis et al., 2004; Harper, Davis, Jones, McGowan, Ingram & Platt, 2011; Picca & Feagin, 2007; Swim et al., 2003). More often than not, there are very few fellow Students of Color in the classroom, and they express

they feel pressured to speak for their entire racial/ethnic group (Davis et al., 2004; Maramba, 2008). These exclusionary practices often engender feelings of not being welcomed into the academic and social community (Hurtado et al., 1998). Students of Color express a general lack of sense of belonging to the university (Hurtado, 1992; Hurtado & Carter, 1997; Strayhorn, 2012).

Recent research points to detrimental psychological, physiological, and behavioral responses to the negative racial climates experienced by these historically underrepresented student populations (Hill et al., 2007; Smith, 2004, 2009a, b). In a study of 40 African American college students, perceived racism in the academic setting predicted an increased level of blood pressure (Hill et al., 2007). Studies have also found an association between perceived discrimination and depressive symptoms among Chinese-Canadian students in Toronto, Canada (Dion, Dion, & Pak, 1992) and African American college students and adults (Sellers, Copeland-Linder, Martin, & Lewis, 2006; Williams et al., 2003). For African American students, racialized stress has been associated with low academic persistence (Neblett, Philip, Cogburn, & Sellers, 2006) and low graduation rates (A. R. Brown, Morning, & Watkins, 2005). Wei, Ku, and Liao (2011) found that the university environment was a significant mediator for the association between minority stress and persistence attitudes among Asian American, African American, and Latino students. The campus environment can significantly affect the levels of stress for many Students of Color, but stress can impact other facets of the life of a person or group. Ojeda, Navarro, Meza, and Arbona (2012) found that ethnicity-related stressors significantly predicted life satisfaction in college students. The racism that Students of Color experience on college campuses is not uniform, but instead often

relies on specific racial, ethnic, and/or gender stereotypes (Smith et al., 2007). As a result, the form of racism actually experienced often depends on the identities a person carries with her/himself and/or the projected identities assumed about an individual. The racism experienced can vary depending if a person is an African American male, a Latina, a Filipino male, and/or a gay Asian American male. Unfortunately, classical discussions of the campus environment and climate omit the nuanced experiences of students and instead assume experiences are similar across race and gender (Rendon, Jalomo, & Nora, 2000; Tinto, 1993).

Campus administrators, leaders, and public policy discourse habitually point to "critical mass" or the raw numbers of Students of Color as the only answer to alleviate unhealthy campus racial climates. Evaluating this assertion, scholars have suggested that campus racial climates are multidimensional, complex, and a single solution is unrealistic (Harper & Quaye, 2009; Hurtado, Milem, Clayton-Pedersen, & Allen, 1998; Milem, Chang, & Antonio, 2005). Besides ecological components that contribute to campus racial climate (Renn, 2004), research has demonstrated that there is a psychological and behavioral climate on today's campuses that is perceived as oppressive by Students and Faculty of Color (Harper & Quaye, 2009). Students of Color experience the everyday stress of being a college student in a highly competitive and demanding academic setting. In addition, Students of Color experience racialized stressors that are based on preconceived stereotypes (Smith, Allen, & Danley, 2007; Sue, 2010; Sue, Bucceri, Lin, Nadal, & Torino 2007; Sue, Capodilupo, & Holder, 2008). Students of Color express greater levels of racialized stress on college campuses than White students (Pieterse, Carter, Evans, & Walter, 2010; Sue et al., 2007). As a result, the perceptions of campus

racial climate for Students of Color and White students are often not analogous (Cabrera, Nora, Terenzini, Pascarella, & Hagedorn, 1999; Harper & Hurtado, 2007). Unfortunately, the majority of higher education research that reviews racism on campus is merely descriptive of the environment and is limited to the educational outcomes of students such as retention and persistence. In the past 20-30 years, scholars in higher education have begun to investigate the negative impact of racial stress on the health of historically underrepresented students.

Background

Researchers have demonstrated deeply rooted inequities for People of Color in educational settings (Allen, 1992; Allen & Jewell, 1995; Allen et al., 2000; Feagin, 1992; Feagin et al., 1996; Lynn, Bacon, Totten, Bridges III, & Jennings, 2010), housing (Lewis, Krysan, Collins, Edwards, & Ward, 2004), employment (Bertrand & Mullainathan, 2004; Giuliano, Levine, & Leonard, 2008; McDonald, Lin, & Ao, 2009), the criminal justice system (Alexander, 2010), healthcare opportunities (Smedley, Smith, & Nelson, 2002), and health outcomes (Harrell, 2000; Smith et al., 2007; Williams & Williams-Morris, 2000). Many of the inequities discussed above occur at a more structural level of society and permeate individual institutions such as the workplace, K-12 education settings, and institutions of higher education. Scholars in some fields have recognized the importance of researching structural inequities and the resulting outcomes for People of Color. While the field of health has made great progress in understanding how racism and discrimination negatively impact the physical and mental health of People of Color (Pierce, 1974, 1995; Williams & Williams-Morris, 2004; Williams et al., 2003), it has

just been in the last 2 decades that higher education scholars have begun to link hostile campus racial climates to negative health impacts for historically underrepresented students (Feagin et al., 1996; Hurtado, 1992; Hurtado & Carter, 1997; Smith et al., 2007, Smith, 2009a, b). Although higher education scholars have made linkages between racism and stress, much of the research focuses on one group at a time and rarely compares and contrasts the stress that groups experience on contemporary college campuses. Research demonstrates a common, underlying experience of racism and discrimination on campuses such as marginalization and tokenism, but other research has gone further to dissect the distinct experiences of specific racial/ethnic groups and even intragroup differences whether it be by gender or sexuality (Ancis, Sedlacek, Mohr, 2000; Chavous, 2005; Harper & Hurtado, 2007).

Racialized stress has a long history in sociology and the medical fields, while research on racialized stress in higher education has only began to appear in higher education journals in the last 2 to 3 decades. Furthermore, the research in higher education has been limited primarily to African American male participants and is qualitative in nature (Hill et al., 2007; Johnson & Arbona, 2006; Reynolds, Sneva, & Beehler, 2010; Smith 2004, 2009a, 2009b; Smith et al., 2007a; Smith et al., 2007b). Still applicable, but outside of the domain of education settings, psychologists and scholars have attempted to understand the psychological and physical effects of racism-related stress on African Americans and other minoritized groups (Harrell, 2000; Utsey et al., 2002).

Health Psychology

Many scholars have found specific psychological, physiological, and behavioral domains that are impacted by racism-related stress (Clark et al., 1999; Harrell, 2000; Smith, 2004; Utsey, Chae, Brown, & Kelly, 2002). Racism-related stress is often cited as the catalyst to creating differential outcomes in the above domains (Harrell, 2000; Smith 2009a, 2009b). In psychological domains, racism-related stress that is associated with racism is known to cause feelings of despair. Therefore, when a person experiences stress, he or she may experience a range of intense emotions that are not limited to anger, fear, anxiety, frustration, helplessness, and hopelessness. In the physiological domain, a response to stress associated with racism may involve an over exertion or failure of one's immune and cardiovascular functioning that can act as a catalyst for physical illness (Clark et al., 1999; Utsey et al., 2002). A host of health outcomes such as hypertension, high blood pressure, and sleep disturbances are linked to racism-related stress (Kreiger, 1990; Kreiger & Sidney, 1996; Williams & Neighbors, 2001). In the behavioral domain, racism-related stress can negatively impact the emotional state of a person (Ahmed, Mohammed, & Williams, 2007). As a result, school and/or job performance may suffer in the form of "stereotype threat" or an individual may experience high effort, prolonged coping in the form of "John Henryism" (James, Harnett, & Kalsbeek, 1983; James, LaCroix, Kleinbaum, & Strogatz, 1984; Massey & Fischer, 2005; Steele, 1992, 1997; Steele & Aronson, 1995).

Education and Health

While most students experience some anxiety when being evaluated in a test situation, Claude Steele (1992, 1997, 2011) argues that students who belong to groups often targeted with negative intellectual stereotypes are at risk of stereotype threat. Steele's stereotype threat theory argues that academic underperformance of students from traditionally marginalized groups can be partly explained by their anxiety associated with the fear that others' judgments or the person's own actions will confirm negative stereotypes about their academic ability. Harrell (2002) described the tax on an individual and his/her collective resources to combat hostile racial interactions as "racism-related stress" (p. 44). For African Americans, the psychological, physiological, and behavioral consequences of racism are a quality of life issue that has to be dealt with on a daily basis and is more present in psychology scholarship (Clark et al., 1999; Jones, 1972; Utsey et al., 2002a; Utsey et al., 2002b).

In order to provide a better understanding of the negative health impacts of institutional and structural racism, Smith (2004, 2009a, 2009b) developed a theoretical concept called racial battle fatigue (RBF). The RBF framework examines the psychological (frustration, anger, resentment), physiological (headaches, a pounding heart, high blood pressure), and behavioral (stereotype threat, impatience, poor school performance) responses from racism-related stressors that are often associated with being a Person of Color (Smith 2004, 2009a, 2009b; Smith et al., 2007a; Smith et al., 2007b). Fundamental to the RBF framework is the cumulative, negative effect of racial microaggressions or the "everyday verbal, nonverbal, and environmental slights, snubs, or insults, whether intentional or unintentional, that communicate hostile, derogatory, or

negative messages to target persons based solely upon their marginalized group membership" (Sue, 2010, p. 3). As a result, People of Color are continually physically and emotionally spent in response to preparing and coping against everyday racial microaggressions (Smith, 2009a).

Racism-Related Stress, Racial Trauma, and Racial Battle Fatigue

Oftentimes research terms that are associated with racism and stress are used interchangeably. Terms such as racism-related stress and racial trauma are regularly used in research studies and are often not properly defined and/or differentiated. Although these terms may suggest similar notions, distinct differences exist between these terms and RBF. While racism-related stress is the racialized transaction or the actions that are associated with racist events, the notion of racial trauma is less clear (Harrell, 2000; Truong & Museus, 2012). Truong and Museus (2012) found the literature does not draw clear distinctions between racism-related stress and racial trauma which leads to their being used interchangeably. Sometimes racial trauma is described as a cause of severe cases of racism-related stress. In their study with doctoral students, Truong and Museus (2012) provide definitions for racism-related stress and racial trauma. They define racism-related stress as "the emotional, physical, and psychological discomfort and pain resulting from experience with racism" while racial trauma is "severe cases of racism-related stress" (Truong & Museus, 2012, p. 228). The definitions employed by Truong and Museus do not appear to reflect that racial trauma is caused by racism-related stress, but is rather a greater degree of racism-related stress. As a result, racial trauma as defined would still be the action related to racism and not necessarily outcomes. Racial

battle fatigue is an encompassing concept that includes racism-related stressors and racial trauma into a larger theoretical conception of stress and outcomes. Therefore, racism-related stress and racial trauma are conceptualized as racist actions and racial battle fatigue is the outcome as a result of those actions.

There is a dearth of research on the psychological, physiological, and behavioral responses of Students of Color to racism-related stress on campuses compared to research in the health sciences field that often focuses on community and family situations (Harrell, 2000; Williams et al., 2003). While we know a great deal about the usefulness of identity development with coping with racism and discrimination and racial microaggressions, little is known about their physiological and behavioral stress responses (Mossakowski, 2003; Smith et al., 2007). We know little about psychological, physiological, and behavioral impact of racism-related stress on Asian Americans, Latinas/os and even less about American Indians and Pacific Islanders in higher education settings. Taken together we know very little about the specific psychological, physiological, and behavioral responses to racism on campus for Students of Color that can lead to disparate health and educational consequences. In the US, the majority of historically underrepresented Students of Color are African American and Latino students. For these reasons, I am going to focus on these populations, but further research is needed on Asian American, American Indian, and Pacific Islander students.

Hostile Campus Racial Climates

While there is common underlying experience for many Students of Color that is replete with racism and discrimination from students, faculty, and staff, incidents are also

nuanced and often raced and gendered (Smith et al., 2007; Solórzano, 1998). Solórzano, Ceja, and Yosso (2002) found that many African American students stated that they felt "invisible" in the classroom and that professors appeared to be less interested in their concerns. Other scholars have demonstrated that African American males experience extreme hypersurveillance from campus police and faculty members who identify them as either academically inferior, trespassers, and/or criminals (Smith et al., 2007). Like African Americans, Solórzano (1998) also found that Chicano students experienced lowered expectations by faculty. Often, this false faculty perception was based on students' personal characteristics such as class, gender, and racial backgrounds. Hurtado and Carter (1997) discovered that Latina/o students often felt more invisible compared to other students on college campuses. In turn, this invisibility affected how students felt in their college environment and their sense of belonging (Hurtado & Carter, 1997). Hurtado and Ponjuan (2005) found that, "Latina/o students who perceive a hostile climate for diversity on a campus also expressed more difficulty adjusting academically, socially, and emotionally as well as more difficulty building a sense of attachment to the college" (p. 237).

Sue and scholars (2007) extended the research on racial microaggressions with Asian American students. Many of the racial microaggressions they found reflect the mindset of Asian Americans as the perpetual foreigner despite whether they have multi-generational US citizenship. Although Asian Americans are often viewed as a model minority, when disaggregated, some subgroups of Asian Americans such as Southeast Asians have a very different educational experience in terms of retention and persistence than other Asian American groups such as Chinese and Japanese students (Census

Bureau, 2004; Lee, 1994; Museus & Chang, 2009; Oyserman & Sakamoto, 1997; Peterson, 1966; Teranishi, 2010; Wong, Lai, Nagasawa, & Lin, 1998). Many of the other groups that are typically lumped into the Asian American category do not make it to college due to various systemic reasons. Groups that are lumped under the Asian American and Latina/o categories are actually a very heterogeneous group with different experiences and practices (Museus & Chang, 2009). As Museus and Chang (2009) have demonstrated with the cultural and ethnic intragroup differences of Asian Americans, Bonilla-Silva (2004) found that Latinas/os in the United States have very different experiences based on their phenotype. Individuals with a darker phenotype experience more overt discrimination and are seen as inferior to individuals with lighter skin (Bonilla-Silva, 2004). Similarly, scholars have demonstrated the intragroup differences based on gender with racial/ethnic groups. Whereas Black misogyny refers to the distaste for Black women, Smith (2010) argued that Black misandry or "an exaggerated pathological aversion toward Black men" exists in the form of stereotyping them all as athletes, criminals, and/or academically inferior (Smith et al., 2007, p. 563).

While Black misandry happens every day in subtle ways often unseen by Whites, more vivid examples shake the conscience of the United States. In 2012, an African American male teenager, Trayvon Martin, was gunned down by George Zimmermann, a neighborhood watch volunteer. Zimmerman described Martin as suspicious because he was wearing a hoodie. While the case garnered national and international media attention that at times questioned the negative stereotypes of African American men, much of the conversation reverted to victim blaming of Trayvon Martin. The acquittal of George Zimmerman, continued shootings of African American males, and the choices not to

prosecute the murders of young African Americans (e.g., Trayvon Martin, Jordan Davis, Eric Garner, Michael Brown, Tamir Rice, Sean Bell, and Oscar Grant) highlights how far the United States as a whole has moved along a "postracial" continuum: not that far. Similar threads along gender lines can be found in other racial/ethnic groups.

Purpose of the Study

The objective of this dissertation is to contribute to literature that pertains to racial battle fatigue for African American and Mexican American/Latino students. Using a structural equation modeling approach, I will explore the similarities and differences of racial battle fatigue of African American and Mexican American/Latino students. The differences and similarities of psychological, physiological, and behavioral stress responses to racial microaggressions within the context of campus climate will be investigated. Furthermore, I seek to understand how coping mediates the relationship between racial microaggressions and stress responses. The research questions will help to understand more about racial battle fatigue for African American and Mexican American/Latino students. This dissertation asks the following questions:

1. Do participants perceive their campus environment as racially hostile?
2. What are the observed variables that makeup each component of racial microaggressions and racial battle fatigue?
3. Is there a difference in the type and degree of severity of racial microaggressions reported by African American and Mexican American/Latino students?
4. What are the differences in racial battle fatigue among African American and Mexican American/Latino students?

5. Which coping strategies are most utilized by African American and Mexican American/Latino students to combat racial battle fatigue? Do coping strategies differ between groups?

The primary data set for this study comes from the Racial Battle Fatigue Stress Scale developed at the University of Utah. The data is a multi-institutional sample of African American, American Indian, Asian American, European American, Latina/o, and Pacific Islander undergraduate students. The majority of responses were from African American and Mexican American students. This dissertation will only investigate the experiences of African American and Mexican American students. These data provide a truly unique approach to studying racism-related stress on college campuses because the purpose of the study was to construct a quantitative measure of racial battle fatigue. Therefore, the data set was specifically designed to capture the theoretical framework of racial battle fatigue. The dimensions of racial battle fatigue are purposefully represented in the data and the final analysis.

Significance of the Study

While researchers and columnists continue to portray higher education institutions as color-blind, meritocratic, and "postracial" (D'Souza, 2009; McWhorter, 2008; Steele, 2008), other scholars illustrate ways in which race and racism matter on campus to students, faculty, staff, and the entire campus climate (Harper & Hurtado, 2007). Despite the elimination of formal and legal barriers of discrimination in education, People of Color continue to document refined, shrewd, colorblind racism that is often harmful to their sense of belonging and health (Hurtado & Carter, 1997; Strayhorn, 2012). Although

colorblind acts may be unintentional and/or intentional, they still impact the lives of People of Color. Colorblind racial ideologies that are perpetuated through elusive actions and words demonstrate how the opportunity of the Civil Rights era and inequality today can coexist in the context of higher education (Bonilla-Silva, 2006).

Like all students, Students of Color must confront the everyday stressors that are associated with being a university student (Smith, 2009a). A difference is the everyday pressures for historically underrepresented students that are compounded by racism-related stress responses that occur far too often on college campuses (Picca & Feagin, 2007; Smith, 2009a, Smith et al., 2007). Research overwhelmingly demonstrates that White students report they do not worry about being discriminated against by faculty members or fellow students (Ancis, Sedlacek, Mohr, 2000; Cabrera et al., 1999; Hurtado & Carter, 1997). This provides an enormous advantage for Whites and numerous disadvantages for Students of Color. As a result, historically underrepresented students may be more likely to be "forced" out of school, exhibit a lack of sense of belonging, academically disidentify, and/or exhibit unhealthy stress responses.

In 2009, the racial composition of the total fall enrollment in degree granting institutions in the United States was composed of 62% White students, 14% African American students, 12.5% Latino students, and 6.5% Asian/Pacific Islander students (National Center for Education Statistics, 2011). Enrollment growth projection data suggest that, from 2009 to 2020 the overall enrollment of African American, Asian American, Latina/o, and White students is expected to increase by 25%, 25%, 46%, and 1% for the respective groups with American Indian student enrollment expected to decrease by 1% (National Center for Education Statistics, 2011). Students of Color are

expected to not only increase their percentage of total college enrollments, but also their raw numbers are increasing on college campuses as the growth of Whites' enrollments are slowing. These enrollment projections present a poor reality for future college students if the present experiences concerning campus racial climate, racial microaggressions, inadequate counseling, and poor health psychology research continue to be representative of student experiences in higher education institutions.

Universities and colleges (particularly 4-year, public institutions) pride themselves, at least verbally and in mission statements on their commitment to diversity and equity. Four-year public and private institutions are also viewed as one of the mechanisms in the US for social and economic mobility. Therefore, one would expect that postsecondary institutions would be welcoming and safe places for historically underrepresented students as compared to other societal institutions that are represented in some of the health psychology literature. The research on campus climate for HWI presents a different picture in which they are not as welcoming as minority serving institutions (MSI) (Hurtado, 1992; Museus & Jayakumar, 2012). As college enrollments of historically underrepresented students are expected to increase over the coming decades, administrators, faculty, and fellow students need to be mindful of the added stress that comes in the form of discrimination as a result of their either intentional or unintentional actions.

This study will provide a picture of the campus racial climate and racial stressors Students of Color face in a so-called colorblind, "postracial" era. Since most campus racial climate studies do not explore the impact of racial stressors on health of historically underrepresented students collectively, this study provides a more comprehensive

perspective of the environment of Students of Color today. This study will not only assist future theoretical conceptions of racism-related stress on college campuses and campus racial climate, but it has the potential of attracting the attention of campus administrators who seek to implement policies that address institutional climate and culture.

This study can help administrators and researchers understand the impact of stress on students, but it may assist in explaining more. Understanding the stressors that Students of Color experience in higher education settings as a result of racism might help researchers and practitioners better understand other phenomena such as racial gaps in retention, graduation, and or poor academic performance. If Students of Color do not feel welcome on campus and experience constant stressors, they may feel that stopping out or dropping out is their best option. Students of Color may choose majors that historically are welcoming to their perspective and presence even though those majors have employment opportunities that have lower lifetime earnings. The ecological systems theory of Bronfenbrenner (1994) is helpful to understand how stress at the individual level can impact other factors for a person and a campus community. Bronfenbrenner (1994) identified five interworking, interrelated systems of a person's environment that influence their development as a child. The five systems or layers (microsystem, mesosystem, exosystem, macrosystem, and chronosystem) range from the most immediate environment of an individual to the most macroenvironment, which includes larger society and culture (Brofenbrenner, 1994).

Prior research has examined universities using the ecological systems model (e.g., microsystem or mesosystem) and authors found that what happens at the individual level often influences the development of students in other parts of the university (Banning &

Luna, 1992; Renn, 2004). The ecological systems model is useful when conceptualizing how an individual act or group of racist activities can have a negative ripple effect on grades, campus climate, and/or retention. Racialized stress may result in outcomes that are not merely health related, but also associated with academic and developmental outcomes. Therefore, understanding these racialized stressors might help us understand other inequities on campuses.

Scope of the Study

This study uses a single database that includes college students. The majority of respondents are African American and Mexican American/Latina/o with an equitable distribution by gender. The sample primarily comes from 4-year nonprofit institutions that vary in geographic location in the United States.

While many scholars have focused on the perpetuators of racial microaggressions and those that hold negative White racial ideologies (Cabrera, 2012; Helms, 1993; Leonardo, 2009; Leonardo & Porter, 2010; Mills, 2007; Roediger, 2005), the focus of this dissertation is on those groups that are often on the receiving end of racial microaggressions and subsequent racial battle fatigue. Although the measurement of racial battle fatigue was the purpose of the initial data collection phase and therefore, intends to capture the underlying theoretical framework, limitations are present in this study. First, the dissertation only focuses on stressors that are related to racism and not other types of stressors such as the financial burden of pursuing a postsecondary education. Second, responses to questions were self-reported and therefore, conclusive evidence is not present that there are definite negative or positive health outcomes due to

students' perception of a hostile campus racial climates. Prior research demonstrates that perceived racism and hostile climates have been tied closely with negative health outcomes for People of Color such as high blood pressure (Harrell, 2000; Krieger, Sidney, 1996; Ryan, Gee, and Laflamme, 2006; Wei, Ku, & Liao, 2011). Finally, most of the analyses are not disaggregated by gender due to sample size and analyses utilized in this dissertation. Therefore, I will not be able to make claims about differences in racial battle fatigue for males and females.

CHAPTER 2

LITERATURE REVIEW

As the previous chapter established, understanding the role of racial battle fatigue for Students of Color is important in understanding the campus racial climate in a "postracial" era. Campus racial climate is not the only element impacted when a student experiences racial microaggressions on campus. A lack of sense of belonging to the greater campus community may occur that can result in attrition from the university (Hurtado & Carter, 1997; Strayhorn, 2012). When putting the problem of racial microaggressions in the larger context, research has demonstrated that long-term negative health outcomes can be the result. To gain a deeper understanding of the impacts of racial microaggression on campuses and its impact on students and the campus environment, a thoughtful review of the empirical literature that crosses race and gender is instrumental in understanding this issue. A fair amount of research has emerged that seeks to better understand campus racial climate and racial stressors. This chapter seeks to review this research by examining several broad areas:

- Access and retention movements in higher education (e.g., policies, debates)
- Campus racial climate (e.g., sense of belonging, the campus environment/ecology)
- Health psychology

- Racial microaggressions and racism-related stress
- Racial battle fatigue
- Coping

Informed by a review of the extant scholarship, this chapter identifies the critical variables, themes, and frameworks as well as empirical gaps in our understanding of the effects of racial battle fatigue for Students of Color on modern day campuses.

Why a Need to Study Racial Battle Fatigue?

For students to experience stress in a higher education setting is not something that seems out of the ordinary, but rather commonplace. The academic stress that comes with reading large amounts of material and critically analyzing the information in papers or in class discussions is normal and is often expected. On top of the typical stressors that come with a college degree, People of Color on college campuses are, and have been, reporting that campuses are generally racially hostile to their presence in and outside of the classroom (Swim et al., 2002). For example, Swim and scholars (2002) found that on a predominantly White campus, African American students reported verbal prejudicial expressions, poor service, staring, and difficult exchanges with White individuals. About one-third of the incidents occurred in public and institutional settings and the majority of the perpetrators were European American (Swim et al., 2002). While higher education scholars have historically been concerned with retention and persistence of students, particularly White Students, their analyses often did not consider the experiences of Students of Color. Early research on persistence and retention assumed the experience was uniform for all students. Their analyses and frameworks did not include the

possibility of an unhealthy campus racial climate for Students of Color (Astin, 1993; Pascarella & Terenzini, 1991; Tinto, 1993). For example, Astin's (1993) "inputs-environments-outcomes" (I-E-O) model asserts that precollege inputs (e.g., demographic background, high school grades) and components of the college environment (e.g., peer interactions, residence hall climate) interact to produce a range of outcomes (characteristics of students after college). Little is mentioned about institutionalized racism and its impact on historically underrepresented groups. As a result, many of the findings of studies using these frameworks were less relevant for Students of Color and hardly reflect what scholars know today about campus racial climates and cultures (Hurtado, 1992, 1994; Museus & Jayakumar, 2012).

White Racial Frame

Often an analysis of race and racism related to the United States is decontextualized, ahistorical, and "color-blind." Feagin (2006, 2010) developed a theoretical frame to understand Whites' perceptions of the People of Color and racism. Called the White racial frame, Feagin (2010) states it "provides the vantage point from which European American oppressors have long viewed North American society" (p. 10). Furthermore, the White racial frame includes 1) racial stereotypes (a belief aspect), 2) racial narratives and interpretations (integrating cognitive aspects), 3) racial image (a visual aspect) and language accents (an auditory aspect), 4) racialized emotions (a feelings aspect), and 5) inclinations to discriminatory action (Feagin, 2010, p. 10). Feagin (2010) argues:

> The 'white racial frame' is an 'ideal type,' a composite whole with a large array of elements that in everyday practice are drawn on *selectively* by white

> individuals acting to impose or maintain racial identity, privilege and dominance vis-à-vis People of Color in everyday interactions. People use what they need from the overarching frame' s major elements to deal with specific situations. (p. 14)

Rooted in a historical account of slavery and the oppression of People of Color, Feagin (2006) recognized that this disposition "is an integrated whole that is learned and reinforced in white social networks overtime" (p. 306). Due to socialization that is based on primarily White surroundings and experiences, the White racial frame is deeply rooted in Whites' minds and persists because it is "reinforced in all major historically white institutional settings" (Feagin, 2006, p. 306). Since it has been routinized for Whites,

> The white racial frame is more than just one significant frame among many; it is one that has routinely defined a way of being, a broad perspective on life, and one that provides a language and interpretations that help structure, normalize, and make sense out of society. (Feagin, 2010, p. 11)

Racial segregation and inequitable conditions did not happen by accident, but instead resources were often funneled away from People of Color by way of school funding policies, vocational and special education tracking, less prepared educators, and many other policies and practices (Anderson, 1988; Bonilla-Silva, 2001, 2006; Feagin, 2006, 2010; Katznelson, 2005; Roediger, 2005). Particularly, institutions of higher education have historically excluded People of Color and adopted "color-blind" ideologies that are rooted in meritocracy (Karabel, 2005). Feagin (2010) directly connected the White racial frame to education in that:

> Children initially learn, and adults continue to learn major aspects of dominant frame by means of everyday socialization processes and regular interactions with others. The frame's key features are transmitted by an often hidden curriculum taught in families and other important social settings. Constant repetition of elements of the frame everyday interactions…is essential to its reproduction across networks, space, and time. (p. 93)

The constant and consistent bombardment of the White racial frame and color-blind ideologies has a harmful impact on the racial socialization of individuals at the earliest of ages and into their college experiences. Although some scholars understand that there is a psychological component to understanding the experiences of Students of Color (Hurtado et al., 1998; Milem et al., 2005), very few recognize that there are psychological and behavioral components to the experience of historically underrepresented students on campuses (Smith, 2009a). Smith's (2009a) racial battle fatigue framework provided the bridge between higher education and health psychology literature. Unfortunately, the majority of the research in higher education and campus racial climate has not made theoretical steps in the literature and analyses to link educational settings to health. The field of health psychology has investigated psychological, physiological, and behavioral responses to racism-related stress and stressful environments. Empirical research on racism-related stress in higher education and health psychology has offered intriguing findings and possibilities, but a more comprehensive understanding of the impact of racism-related stress for Students of Color is needed to better understand how campus racial climate operates in the 21st century.

Retention and Tinto

An often-cited consequence of a hostile campus climate for Students of Color is attrition from the university. In retention literature, a student's ability to create meaningful relationships with their student peers and faculty members affects persistence and degree attainment. Attinasi (1989) stated that the collective affiliations students form at college allow them to navigate physical, social, and cognitive geographies of the

modern university. The affiliations or relationships created among students, their peers, and faculty are seen as indicators of their integration into the academic and social spheres of their college community. Vincent Tinto (1993) introduced his foundational model of student persistence, which not only relied on Durkheim's framework on cultural suicide, but also Arnold Van Gennep's model of rites of passage. Van Gennep's (1960) rites of passage framework were originally concerned with the rituals that individuals in societies undergo as they move from being a child to adulthood. Van Gennep's three-phase model stresses separation, transition, and incorporation in that order. Tinto posits that students enter college with certain individual and family characteristics. At the same time, they have a dual commitment to complete college and stay at the same schools. Tinto argues that both academic and social integration of the student leads the student to stay or leave their institution. According to Tinto's theory, students would persist in college if they separated themselves from their family and previous friends; rather, they engaged in a process in which they assimilated into the culture of their college or university (Tinto, 1993). Tinto (1993) identified three stages an individual goes through in his student persistence model: separation, transition, and incorporation. Tinto asserts that the separation phase is critical to the outcome of incorporation when he states, "in order to become fully incorporated in the life of college, [students] have to physically as well as socially dissociate themselves from the communities of the past" (Tinto, 1993, p. 96). The model assumes that if students do not separate from their past associations, it is impossible for them to be incorporated into their current environment.

Critiques of Tinto

Rendon, Jalomo, and Nora (2000) equated a student's disassociation from their previous culture to assimilation. Therefore, a successful transition requires an abandonment of personal beliefs and an incorporation of the institutional beliefs and values, in addition to those where the institution is located. According to Tinto's model, if integration is to be successful, Students of Color must adopt the values of their surrounding college environment, which is more often than not, a historically White institution[2] (HWI: Smith, Altbach, & Lomotey, 2002; Smith et al., 2007). Critical of Tinto's work, Rendon (2000) questioned the notion that a single cultural pathway leads to success. If a single path exists, it requires that Students of Color assimilate into a dominant culture that is not representative and even contradicts many of their beliefs and cultural norms. If Students of Color choose to follow the single pathway to success, Rendon questions if they will be offered "membership and acceptance in the new college world" (Rendon et al., 2000, p. 133). As a result, Rendon (2000) stated that the "hallmark" of Tinto's model is that "students should find social and intellectual communities to attain membership and receive support" (p. 133).

Tierney (1992, 1999) recognized that Tinto's reliance on Durkheim's and Van Genneps's models in relation to student retention was particularly problematic for

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[2] Following the rationale from Smith and colleagues (2007), I use the phrase "historically White institution" and "historically White universities" rather than "predominantly White universities" to demonstrate that the critical mass of White students has less to do with the actual composition of the group, and more to do with how historically and currently the hostile campus racial climate is supported by post-secondary institutions themselves, and works to benefit Whites at the expense of People of Color (p. 574).

Students of Color. Tinto's model, as do others, stresses the importance of students integrating themselves into their surrounding environments. This can be highly problematic for individuals of color in locations where the norms of the dominant or White culture are highly concentrated.

In response to Tinto's (1993) overemphasis of student rather than institutional responsibility for adaptation to the college campus environment, fellow retention and campus climate scholars constructed alternative ways to discuss a student's sense of belonging on today's college campuses. Tinto's model suggests that a successful transition to college requires managing the academic and social environments. Hausmann, Schofield, and Woods (2007) stated that it is implicit in Tinto's model of student persistence that sense of belonging is determined by the student's social and academic integration. Retention and campus climate scholars have followed suit with Tinto and emphasized the importance of the academic and social environment on all students (Astin, 1993; Braxton, Milem, & Sullivan, 2000; Pascarella & Terenzini, 1980; Rendon et al., 2000; Tinto, 1993). What is also a common thread or concern among retention scholars is the need for students to feel that they are welcomed and valued in the college environment. While scholars have traditionally adopted the importance of integration, some have asserted that sense of belonging be a measure in and of itself (Nora & Cabrera, 1993). Nora and Cabrera (1993) conducted a confirmatory factor analysis to see if sense of belonging measures should be incorporated with other measures of institutional commitment. They found that found the factor structure in which sense of belonging was retained as a unique factor better fit the data than when it was combined with institutional commitment measures. Therefore, the authors found

there was justification and it was worthwhile to study sense of belonging as a unique variable. Later, Hurtado and Carter (1997) argued there is a psychological difference between integration or being involved in the community and sense of belonging, feeling as though you are a valued, embraced member of the community.

Sense of Belonging

Numerous scholars have evaluated, challenged, and adapted Tinto's assertion of integration of college students with sense of belonging research. Hurtado and Carter's (1997) researched on sense of belonging is based on the first of two dimensions proposed by Bollen and Hoyle (1990), having a sense of belonging and moral association. These two dimensions originated from their definition of perceived cohesion. Bollen and Hoyle's (1990) definition of perceived cohesion states, "perceived cohesion encompasses an individual's sense of belonging to a particular group and his or her feelings of morale, associated with membership in the group" (p. 482). Bollen and Hoyle (1990) wanted a definition that "captures the extent to which individuals and group members feel 'stuck to,' or a part of, particular social groups" (p. 482). Bollen and Hoyle (1990) stated that belonging is composed of both cognitive and affective elements. They developed the Perceived Cohesion Scale which has been tested with small populations where people come into face to face contact and also in larger settings, such as cities, where personal interactions with everyone is impossible (Hurtado & Carter, 1994).

Additionally, Baumeister and Leary (1995) suggested that the need to belong is "a need to form and maintain at least a minimum quantity of interpersonal relationships" (p. 499). Their theory of belongingness requires that individuals maintain recurrent, positive

interaction that is void of conflict and the relationship is stable well into the future. They found that people who lack social attachments are more likely to have psychological and physical health problems. Though conducted with a primarily White student body, Freeman, Anderman, and Jensen (2007) found an association among student's class, sense of belonging, their own academic self-efficacy, openness in the classroom, their sense of university belonging, and social acceptance. Their research suggests, if a positive environment exists for students that make them feel welcome in their classroom, then students may exhibit an overall sense of belonging. Hausmann, Schofield, and Woods (2007) found that African American students' sense of belonging declines as their 1st year progresses. While there was a decline in sense of belonging for all African American students, those who received letters and gifts from university administration regarding the student's importance to the campus community experienced a less rapid decline of sense of belonging than those who did not receive any enhanced sense of belonging treatment. The decline was not associated with background characteristics. However, students who expressed greater academic integration exhibited a greater sense of belonging. In addition, African American student peer support was positively associated with sense of belonging. Though sense of belonging declined over the course of the school year, at the beginning of the year peer-group interactions, faculty interactions, peer support, and parental support were associated with a greater sense of belonging (Hausmann et al., 2007). Therefore, universities may be able to affect African American students' sense of belonging with positive sense of belonging interventions.

Hurtado and Carter's (1997) study investigated the effects of college transition and the campus racial climate on Latino students' sense of belonging to their college

campus environment. The authors studied how sense of belonging is affected by the academic activities of Latino students and to what level student participation in student social organizations affected their sense of belonging. In both the 2nd and 3rd years of college, discussions of course content with peers and interactions with faculty outside of class positively influenced a student's sense of belonging. Hurtado and Carter (1997) found that traditional academic activities such as working on a research project with a faculty member or conducting an independent research project were not associated with a sense of belonging. They also found that Latino students who were members of social-community organizations exhibited higher levels of a sense of belonging. This may suggest that informal social interactions may portray an inclusive and caring environment for Latino students. Their findings indicate that perceptions of a hostile campus climate have a direct negative effect on sense of belonging in the 3rd year for Latino students. As a result, Latino students feel less a part of the college community when they experience discrimination or perceive racial tension on a college campus. Similar to the work of Hurtado and colleagues, Hoffman, Richmond, Morrow, and Salomone (2002-2003) found that campus climate, peer interactions, and faculty support assisted in sustaining a sense of belonging. Therefore, a sense of belonging to an overall campus environment correlates with the racial campus climate.

The sense of belonging research of Johnson et al. (2007) extended prior research by investigating other racial/ethnic groups. Their study included African Americans, Asian Americans, Pacific Islanders, Latinos, Multiracial/Multiethnic, and White students. Additionally, Johnson et al. (2007) included the influence of residence hall living into their sense of belonging model. Inclusion of the residence hall setting is important

because college students may spend a majority of their time in interactions with peers in residence halls. Results indicated that White students demonstrated the greatest sense of belonging, except for Multiracial/Multiethnic groups. Additionally, the study found that student perceptions of the residence hall environment were a significant predictor of sense of belonging for all racial/ethnic groups, except Multiracial/Multiethnic students. Finally, perceptions of the campus racial climate had a significant relationship to students' sense of belonging. While Johnson et al. (2007) provided a better understanding of the implications associated with students' personal sense of belonging and racial campus climate, some scholars have moved on to develop a model of sense of belonging that can be applied to other areas other than higher education (Strayhorn, 2012).

Although most sense of belonging research highlighted thus far framed sense of belonging in relation to higher education, Strayhorn (2012) initially framed sense of belonging as "a basic human need and motivation, sufficient to influence behavior (p. 121). Strayhorn (2012) incorporated his general framing of sense of belonging to higher education research in that it "refers to students' perceived social support on campus, a feeling or sensation of connectedness, the experience of mattering or feeling cared about, accepted, respected, valued by, and important to the group (e.g., campus community) or other on campus (e.g., faculty, peers) (p. 122). Strayhorn (2012) found that sense of belonging is particularly significant for traditionally marginalized students. Focusing on Students of Color, women, low-income students, first generation students, and LGBT students, Strayhorn (2012) illustrates the various ways in which the above minoritized groups often lack a sense of belonging at historically White institutions. The work of

Strayhorn (2012) provides a better understanding of the implications associated with students' personal sense of belonging and racial campus climate. Strayhorn's (2012) work is consistent with prior findings that campus racial climate impacts a students' sense of belonging.

Campus Racial Climate

The term *climate* has been used for over 7 decades to describe perceptions of a social environment (Lewin, Lippet, & White, 1939). One of the very first published usages of the term *campus climate* to describe the environment of higher education institutions was in 1949 by sociologist, Professor Hylan Lewis in Phylon Journal/Magazine from Clark Atlanta University. In discussing higher education for African American men and the role of professors, Lewis (1949) stated:

> High morale is the only weapon the college for Negroes has to fight the stultifying and demoralizing effects of insularity. The pivotal point is the Negro college teachers who feel most acutely the necessary conflicts between self-conceptions, roles and statuses that come with working in a college for Negroes; the level on which they make their adjustments goes far to determine the campus climate because they are closest to the student. Important for the teacher is the ability to respect his peers and administrators, and the receipt of recognition and respect from them; it is important that he feel that he and the administrators are interested in and working toward the same ends. (p. 361)

The way in which Lewis conceptualizes campus climate over 70 years ago is very similar, if not the same way that scholars today utilize the terms campus climate and campus racial climate. Like Lewis's nonexplicit description, the idea of a campus climate can be abstracted in many ways. Campus climate and campus racial climate are described as "intangible" because they are often referred to as the perceptions of students, faculty, and administrators and varying components of the campus environment can

contribute to the campus climate (Hurtado et al., 1998). Perceptions are different and therefore, campus climate can be different for White students and Students of Color. Even within larger groups such as African American or Latino students, their perceptions of campus climate differ because they have different experiences (Harper & Hurtado, 2007). Therefore, campus climate varies across groups because groups are often perceived and treated differently based on phenotype, socioeconomic status, language, and other factors. Hurtado (1994, 1998) provided a four-dimensional framework to help dissect and understand the complexities that make up campus climate. The first dimension, historical context of inclusion or exclusion of colleges, is important in understanding the present climate that minoritized students encounter. Since colleges and universities have historically been segregated, the long-standing effects go unnoticed. Therefore, the isolation of Students of Color witnessed today on campuses appears to be the norm, even natural (Harper & Hurtado, 2007). Harper and Hurtado (2007) argued that much of the campus climate literature highlights the prevalence of campus sub-environments where Whiteness is the cultural norm. Gusa (2010) referred to this as White Institutional Presence (WIP), arguing that Whiteness is both present and dominant in much of the campus environment. Within this context, Whiteness is embedded into the very structure of institutions of higher education, and frequently appears normal to beneficiaries of the system.

Higher educational institutions have historically included or admitted White students in general, while they have excluded Students of Color from attendance. Therefore, Hurtado (1992) stated that the present day climate of universities can be determined by their past exclusionary practices. A supportive higher educational

environment depends on the institutional philosophy of education for Students of Color, commitment to affirmative action, support for minority-specific programs, and university attention to the psychological climate and intergroup relations (Peterson et al., 1978). Therefore, racial hostility on college campuses adds to the complexity of the campus climate for universities that are committed to diversity.

The second dimension of campus climate is structural diversity. Hurtado states that increased enrollment of underrepresented students is an important first step to improvement of the campus environment. A commitment to a diverse racial/ethnic composition of a college campus demonstrates a university policy that is inclusive of all students. A larger student body comprised of historically underrepresented individuals allows for more possibilities for social and diverse learning experiences and interactions to occur. Interactions among different racial/ethnic groups have been shown to be beneficial for all students (Antonio, 2004). It is important to note that with the increase in enrollment of Students of Color, resistance from other groups on campus may be created due to competition for limited campus resources (Blalock, 1967). Therefore, a more diverse racial composition on university campuses does not come without its problems. Further alienation and resistance to Students of Color can occur, and thus racial tension on campuses becomes more volatile (Hurtado et al., 1998). Hurtado et al. (1998) stated that when students feel they are valued, racial tension decreases, and this suggests that institutions minimize tension by employing " 'student-centered' environments" (p. 287).

The third dimension of campus climate is the psychological dimension (Hurtado et al., 1998). A negative campus climate can take a psychological toll on Students of

Color. The dynamics of student relationships between fellow peers and faculty affect how students view the campus climate. Cabrera and Nora (1994) found that African American students were more responsive to discrimination and prejudice on college campuses than White students. As a result, White students did not have the equivalent tools to recognize instances of subtle discrimination (Cabrera & Nora, 1994). Therefore, the path a White student walks across campus may be very different psychologically from that of a Student of Color because of the various prejudicial or discriminatory instances that may occur.

Finally, Hurtado and colleagues (1998) stated that the fourth dimension of campus climate is a behavioral component that consists of: a) general social interactions; b) interactions among different racial/ethnic groups; and c) the nature of intergroup relations on campus. Student involvement in on-campus activities and programs plays an important role in their experience on college campuses. College campuses are often balkanized environments in which White students only associate and interact with fellow White students, and respectively for Students of Color. According to Villalpando (2003), Latina/o and Chicana/o students cluster in an effort to combat hostile campus climates and navigate the racialized foundation of today's college campuses. Therefore, the student's perceived self-segregation in higher education settings can lead to their persistence and staying at the university. Without self-segregating into groups, underrepresented students may not have the social support that is often needed to persist in harsh racial climates. Historically marginalized students are not afforded the comfort level that the dominant White student population is accustomed to on college campuses. The perceived self-segregated groups provide a type of therapy and coping mechanism,

which cannot be experienced by their fellow White students. Students of Color are situated and surrounded among White students with very different racial ideologies in historically White institutions and self-segregation is a response to such conditions. Therefore, the reason for balkanization on college campuses of different minoritized racial/ethnic student groups may be a strategic tactic to persist and preserve their traditional cultural ways of life in a hostile or unwelcoming environment.

Milem, Chang, and Antonio (2005) amended Hurtado's four-dimensional framework with a fifth dimension, splitting up the structural component of campus climate. Milem and authors argue that structural diversity needs to be divided between the compositional diversity of a university and the organizational diversity of the university. Thus, there is a compositional diversity dimension that encompasses the enrollment and hiring diversity of a university and an organizational/structural dimension that includes the diversity of the curriculum, tenure policies, budget allocations, and general university policies. Numerous policies such as affirmative action and the Higher Education Act of 1965 have been put into place at the federal, state, and university level to address inequitable conditions in higher education and create additional opportunities for historically underrepresented groups. Many of the proponents of affirmative action suggest that there are benefits to having a diverse learning environment for all students whether it concerns future employment opportunities, economics, or democratic values (Allen & Solórzano, 2000; Antonio, 2004; Antonio et al., 2004; Chang, 1999, 2001; Engberg, 2007). More critical understandings of diversity and the benefits of diversity point out that much of research tends to show that benefits of diversity primarily flow one-way, to White students. Although this study or literature review is not trying to

answer that question, much of the research points out that diverse learning environments can address some aspects of the campus racial climate (Harper & Hurtado, 2007; Hurtado et al., 1998; Hurtado, Alvarez, Guillermo-Wann, Cuellar, & Arellano, 2012; Rankin & Reason, 2005; Reid & Radhakrishnan, 2003; Torres & Johnson, 2012).

Benefits of Diversity and Healthy Campus Racial Climates

In California, racial incidents at UCSD have forefronted the negative impact of racism on the campus racial climate and race relations. Shortly thereafter, the "Coalition to Defend Affirmative Action" filed a suit on the basis that California's Proposition 209 has in effect excluded Students of Color from California's system of higher education, violating the Equal Protection Clause of the 14th amendment. It may be that anti-affirmative action and nonrace conscious policies in fact exacerbate negative campus racial climates. Research indicates that cross-racial interaction can lead to positive effects for all students, especially Whites, such as greater intellectual, social, and civic development (Antonio, 2004; Antonio et al., 2004). Additionally, cross-racial interaction is associated with greater self-confidence, greater social interaction, and positive attitudinal changes in all students (Antonio, 2004; Antonio et al., 2004; Chang, 1999, 2001; Engberg, 2007).

Although some universities had a history of gradually enrolling Students of Color, the vast majority of the history of America's universities and colleges actively excluded Students of Color well into the 1960s (Allen, 1992; Allen & Jewell, 1995; Allen et al., 2000; Karabel, 2005; Thelin, 1985). Hurtado (1992) stated that a historical legacy of exclusion can determine the current climate of universities. After the bans on affirmative

action in California and Michigan, the numbers of enrolled historically underrepresented college students plummeted. Therefore, when the number of Students of Color drops, there are fewer opportunities for greater cross-racial interactions. Though conducted before Michigan's ban on affirmative action, Allen and Solórzano (2000) found that the negative campus racial climate at the University of Michigan Law School "exacts psychological and behavioral tolls on Students of Color that interfere with their academic achievement" (p. 299). In their report, Allen and Solórzano (2000) highlighted that instances of race discrimination being experienced by students were subtle and covert as opposed to the overt types of racism traditionally referenced. Detractors of affirmative action used color-blind tactics by attempting to reframe the policy as reverse racism against Whites.

A growing body of literature investigating the benefits of diversity has emerged since the Supreme Court case of *Grutter v. Bollinger* and the earlier Supreme Court decision in *Regents of the University of California v. Bakke.* The diversity rationale (first spelled out in Justice Powell's *Bakke* opinion)—that educational benefits flow from a diverse student body—is regarded as the remaining legally allowable use of race in admissions. As a result, scholars have looked at the benefits of diversity and a diverse learning environment to defend the usage of affirmative action in higher education settings. Though such race-conscious policies have been overturned, much research continues that higher education administrators can use when developing positive racial campus climate policies and defending the values of diversity and inclusion.

For instance, the benefits of diversity as it pertains to educational opportunities and achievement are far-reaching for all students. Specifically, research points to the

importance of cross-racial interaction in intellectual, social, cognitive, and civic development (Chang, Astin, & Kim, 2004; Chang, Denson, Saenz, & Misa, 2006; Engberg, 2007; Gurin, 1999; Gurin, Dey, Hurtado, & Gurin, 2002; Hurtado, 2007; Hurtado, Engberg, Ponjuan, & Landreman, 2002; Milem & Hakuta, 2000; Pike & Kuh, 2006). Additionally, cross-racial interactions increase self-confidence, greater social interaction, complex thinking, and positive attitudinal changes in all students (Antonio, 2004; Antonio et al., 2004; Chang, 1999, 2001; Engberg, 2007). Faculty-student interracial interactions were particularly important in that students with mentoring relationships are more likely to report gains in intellectual self-concept (Cole, 2007). Some research indicates that students benefit from being enrolled on a campus where other students are more engaged with forms of diversity, irrespective of their own level of engagement (Denson & Chang, 2009). Therefore, it is important for institutions to develop an institutional commitment to safe campus racial climates and diversity in such ways (structurally, pedagogically) that increase the opportunity for the types of interactions that bring educational benefits to students (Hurtado, Griffin, Arellano, & Cuellar, 2008; Hurtado et al., 1998; Milem, 2003; Villalpando, 2002). Such efforts would likely enhance student development, learning, persistence, graduation rates, and the physical and mental health of all students. Although there are many benefits to diversity for all students, the majority of the benefits appear to flow to White students in the form of intellectual, social, and civic development (Chang, 1999, Chang et al., 2004). This has serious implications for universities stressing the importance of "diversity" and to what end. Scholars have investigated the role that societal institutions undertake in making choices that benefit one group to the disadvantage of another group (Bell, 1980;

DeCuir & Dixon, 2004).

While the aforementioned studies investigated race-conscious policies, campus racial climate, and critiqued interest convergence in policy decisions using various methods and with different populations, there are very few studies that critically examined the negative health impacts of hostile environments. Instead, much of the research starts and stops in the college setting assuming that the only impact of a hostile climate is academically related, and sometimes psychologically related. As a result, a distorted view of the student experience with racism and discrimination on campus is presented without a consideration of other health attributes such as physiological and behavioral responses, and coping strategies that can be connected to academic and social outcomes. Other areas such as health psychology have investigated the negative health consequences associated with harsh environments.

Health Psychology

While the field of education has just started to investigate racism-related stress, the field of health psychology has a long history of researching stress for particular racial and ethnic groups. A number of conceptual models identifying racism and racial and/or ethnic discrimination as psychological stressors (Carter, 2007; Clark et al., 1999; Contrada et al., 2000; Harrell, 2000) provided useful frameworks in which to examine and understand the complex association between experiences of racial and/or ethnic discrimination and stress. Many of the models find that individuals perceive events to be discriminatory and the events to be stress inducing. Clark, Anderson, Clark, and Williams (1999) found that the extent to which the stress is associated with psychological

distress often depends on the combination of individual and environmental-level factors. These perceptions and how people are treated often vary by racial/ethnic group, gender, and/or other characteristics (Carter, 2007).

Racism-Related Stress

According to Harrell (2000), racism-related stress is defined as "the race-related transactions between individuals or groups and their environment that emerge from the dynamics of racism, and that tax or exceed existing individual and collective resources or threaten well-being" (p. 44). Harrell (2000) suggested that racism-related stress is characterized by situations that are often experienced as overwhelming and where feelings of helplessness and hopelessness are direct consequences of these events. Although racism-related stress appears to be the same as racial battle fatigue, it is conceptually different. Racism-related stress is the actions that occur that result in the outcome of racial battle fatigue. As Harrell (2000) stated, “race related stress are the race-related transactions” or racial micro- and macroaggressions that manifest into racial battle fatigue. Therefore, racism-related stress is conceptualized as the individual racist actions and racial battle fatigue is the health outcome for People of Color. Empirical research has found a wealth of evidence to suggest that racism-related stress negatively affects the psychological and well-being of an individual. Racism-related stress models and a great deal of the research have historically been based on the African American experiences. More recently, examinations of racism-related stress and ethnic discrimination have been extended to other populations such as Asian Americans (Alvarez, Juang, & Liang, 2006; Liang, Alvarez, Juang, & Liang, 2007) and Latinas/os

(Utsey et al., 2002).

Klonoff, Landrine, and Ullman (1999) investigated the relationship between racism-related stress and mental health symptoms among a sample of African Americans. Findings suggest that racial discrimination significantly predicted total health symptoms and anxiety. Additionally, stress accounted for symptoms of obsessive-compulsive behavior and depression. The results of this study are important because they highlight the associations that exist among racism and discrimination, stress, and negative psychological health. Kessler, Mickelson, and Williams (1999) investigated the psychiatric correlates of experienced racism and discrimination. Approximately 34% of participants reported experiencing events such as not being hired for a job or being forced to leave a neighborhood because of racial discrimination. Approximately 60% of participants indicated that they experienced some form of racism on a day-to-day basis. For mental health outcomes, Kessler et al. (1999) found that major life events associated with racism and discrimination significantly predicted major depression and distress, but not generalized anxiety disorder. These results provide further evidence that racism negatively impacts the psychological and emotional welfare of People of Color.

Contributing to the understanding of the psychological basis of racism-related stress has been Carter's (2007) proposed model of race-based traumatic stress. More often than not, racism is a pervasive and inescapable reality of daily life for ethnic minorities. For this reason, the repeated exposure to racist events and the profound stress experienced present trauma-like symptoms including intense fear, arousal, vigilance, irritability, difficulty sleeping, restlessness, hopelessness, avoidance, intrusion, numbing, and difficulty concentrating (Carter, 2007). Similarly, Bryant-Davis and Ocarno (2005)

supported this model arguing that race-based trauma has similar features to other traditionally more accepted precursors to trauma such as rape and domestic violence.

Research has illuminated the reality that in addition to affecting psychological health, racism negatively influences physical health. Because racism is such a salient factor in our society, People of Color inevitably combat its practices within organizations or in the larger society. The racial practices encountered by ethnic minorities include, but are in no way limited to negative stereotypes, unequal access to resources, occupational distress, and limitations in job promotions. Wei, Ku, and Liao (2011) found that the university environment was a significant mediator between the stress of Students of Color and their persistence attitudes. A positive perception of the university environment was associated with persistence attitudes for African American, Asian American, and Latino students. Additionally, the perception of the university environment mediated the association between stress for Students of Color and their persistence attitudes. As suggested in previous studies, Wei and coauthors found that stress for historically underrepresented students is distinct from general stress (Harrell, 2000).

In a 7-year-long longitudinal study of racial discrimination and physical health, Krieger and Sidney (1996) found evidence to support a relationship between racism-related stress and blood pressure changes in particular. They found that for working class African American adults who accepted the unfair treatment, blood pressure was higher compared to those who challenged the unfair discriminatory practices. Furthermore, they found that African Americans had higher blood pressure on average, but it was attenuated by accounting for behavioral responses to discrimination such as countering the racist acts. These findings suggest that racism negatively affects cardiovascular health;

however, it also raises the fact that participants who countered these practices had less negative health consequences.

One study in particular has extended the stress and health relationship data among African Americans to other groups including Latinos. Ryan, Gee, and Laflamme (2006) looked at the relationship between self-reported discrimination, physical health and blood pressure among African Americans, Black immigrants, and Latino immigrants. According to the authors, "...individuals who reported some discrimination had lower blood pressures than those who reported no discrimination while those reporting a substantial amount of discrimination had higher blood pressure than both those who reported no or some discrimination" (p. 123). Additionally, there was a negative relationship between overall physical health and discrimination. Ryan, Gee, and Laflamme (2006) found evidence to support that gender differences were present. They found that men's blood pressure was significantly higher than women's blood pressure in the study. This study helps inform my dissertation about the differences in physiological stress as related to racism. While gender differences were present, it is important to note that both men and women had higher blood pressure.

Gender and Racism-Related Stress

Prior research has investigated the role of gender in health disparities and the risk of developing cardiovascular diseases. From a diverse sample of 1003 male public service workers, Carroll (2001) found that blood pressure was predictive of hypertension over 10 years. Limitations of the study include that it was conducted in a laboratory and the study had significant time lags between data collection, which can confound the

results. Matthews, Gump, and Owens (2001) found that men had higher diastolic blood pressures when performing arithmetic tasks and public speaking tasks than women. Also during recovery, men had higher diastolic, systolic, and epinephrine responses during recovery from the tasks than women. These findings are similar to other studies that explore gender differences in physiological stress responses and health. Krieger and Sidney (1996) found that Black men had higher blood pressure (diastolic and systolic) compared to Black women. A consistent finding among studies that investigate gender differences in racism-related stress is that there are gender differences and scholars have provided some explanations.

Some scholars have suggested reasons for health differences based on gender. Research has suggested that males are not encouraged as much as women to pay attention to their health (Nathanson, 1977; Reagan, 1997). In 1998 the US Department of Health and Human Services found that regardless of ethnicity or income, men were significantly more likely than women to not have visited a physician recently. When men do visit a physician they not only spend less time in the doctor's office (Pinkhasov et al., 2010; Weisman & Teitelbaum, 1989), but men are also provided fewer services (Pinkhasov et al., 2010; Verbrugge & Steiner, 1985), not as thorough explanations (Weisman & Teitelbaum, 1989), and less advice for their medical issues compared to women (Friedman, Brownson, Peterson, & Wilkerson, 1994; Sciamanna, Tate, Lang, & Wing, 2000). Other scholars suggest that the socialization processes of historically underrepresented men may lead to these disparities (Boyd-Franklin, 2006; Courtenay, 2000; Martin, 1995). When talking about African American males, Boyd-Franklin (2006) stated, "if a young Black man 'acts weak,' he will be ostracized by his peer

group" (p. 93). Furthermore, Boyd-Franklin (2006) stated that "above all, many African American males learn that they must be 'cool' " no matter what is going on in their life (p. 93). The research suggests that stereotypes and socialization processes lead to differences in health by gender. Before accounting for gender in studies it is important to see how health is impacted by racism. This dissertation will account for gender by investigating the coping processes by gender. Therefore, coping strategies are related to socialization processes of individuals.

Stereotype Threat

Perhaps one of the most researched forms of racism-related stress across disciplines and especially in education is Claude Steele's (1992, 1997) theory of stereotype threat. Stereotype threat has been categorized as a form of racism-related stress. Stereotype threat is experienced by People of Color during "...situations in which other people view them stereotypically in ways likely to increase performance pressures" (Steele, 1997, p. 5). Steele and Aronson (1995) conducted a highly cited study to introduce how implicit stereotypes about the intellectual inferiority of African Americans produced stereotype threat and therefore, undermine a student's performance in a testing situation. Other scholars have found similar results to Steele's when investigating the influence of stereotype threat on academic performance of African Americans (Aronson, Fried, & Good, 2002; McKay, Doverspike, Bowen-Hilton, & Martin, 2002; Osborne, 2001) and Latinos (Gonzales, Blanton, & Williams, 2002; Schmader & Johns, 2003).

Some scholars have begun to extend the link of stereotype threat beyond academics to health outcomes. Aronson (2004) found that repeated exposure to

stereotype threat might lead to “disidentification” with a domain of study with which the student was previously identified. Steele (1992) describes disidentification as the "process that occurs when people stop caring about their performance in an area, or domain that formerly mattered a great deal" (p. 12). Disidentification can lead to unhealthy psychological, physiological, and behavioral responses. Blascovich, Spencer, Quinn, and Steele (2001) explored the role of stereotype threat among African Americans. They found that African Americans under high stereotype threat exhibited larger increases in mean blood pressure (Blascovich et al., 2001). Taken together, research has indicated significant concern over cardiovascular and physiological health among People of Color. Research suggests that daily racism-related stressors are associated with lower academic performance and poorer health. However, to better understand the relationships that have emerged from these findings, it is also important to consider possible emerging mediators of racism-related stress and health outcomes such as racial identity, ethnic identity, gender, environments, and coping. These are important factors that often provide important causal links regarding the degree to which ethnic minorities are impacted by racism.

Racism has been identified as a major contributing factor to the poor health status of People of Color in the US. Negative stereotypes and perceived racism in conjunction with poor health care services is detrimental to their general well-being. From this perspective, the stress experienced from these racialized practices is the mechanism by which higher stress and worse health status are achieved. Hence, racism-related stress, which stems from racism and discrimination, is a major source of strain that leads to psychological and physical health problems. This dissertation will assess much of this

literature as to how racialized stress can negatively impact the health of People of Color.

Racial Microaggressions and Stress

Numerous studies have investigated the relationship of the racial climate on college campuses and racial microaggressions. Solórzano, Ceja, and Yosso (2000) defined the campus racial climate as the overall racial environment of the college campus. Unlike a general campus climate, numerous studies have found that there are racial differences in the perceptions of campus climate (Ancis et al., 2000; Hurtado, 1992; Pfeifer & Schneider, 1974). Students of Color are more likely to report negative climates, especially academic climates (Hurtado, 1994; Hurtado & Carter, 1997; Nettles, Thoeny, & Gosman, 1986). Therefore, the term "campus racial climate" is more relevant to the experiences of Students of Color than the general campus climate because there is a racialized component to their postsecondary experience (Hurtado, 1992). When referring to the overall college campus environment, it is important to note that there are multiple components that exist in and outside the classroom. The campus racial climate has an effect on student persistence, access, graduation, and transfer of students. They further state that a positive campus racial climate includes at least the four following elements as previously reported by other scholars (Carroll 1998; Guinier, Fine, & Balin, 1997; Hurtado, 1992; Hurtado et al., 1998): a) the inclusion of underrepresented students, faculty, and administrators; b) a curriculum with an underlying historical context of People of Color; c) programs that encourage the recruitment, retention, and graduation of Students of Color; and d) a university commitment to a racially diverse college campus. Universities though may need a fundamental shift in their climates and

cultures, which some literature does not address. Including diverse perspectives and faces is only one step in changing the culture of an institution. Often that means fundamentally changing the leadership and faculty of an institution (Museus & Jayakumar, 2012).

Similar to Sue's (2010) definition, Solórzano, Allen, and Carroll (2002) state racial microaggressions are "layered" in that they attack "one's race, gender, class, sexuality, language, immigration status, phenotype, accent or surname" (p. 17). Racial microaggressions, whether intended or not, present a specific image to historically underrepresented and marginalized groups that they are not welcome. Solórzano, Ceja, and Yosso (2000) found that many African American students stated that they felt "invisible" in the classroom and that professors appeared to be less interested in their concerns as a result of racial microaggressions. Not only have African Americans reported invisibility, so have Asian American students (Sue, Bucceri, Lin, Nadal, & Torino, 2007). Solórzano, Ceja, and Yosso (2000) found that racial microaggressions made students feel "personally diminished." It is important to note that these racial microaggressions may not be the "gross and obvious," but rather are subtle "miniassaults" of discrimination (Pierce, 1974, p. 516). As a result of their experiences, African American students felt unwanted in the classroom and in nonclassroom settings. They were negatively affected in both the academic and social settings of the university. The experience of racial microaggressions exhausted the students; therefore, they felt they could not perform well academically. The students reported a fully frontal or overtly hostile campus climate.

In 2007, Sue, Bucerri, Lin, Nadal, and Torino proposed classifying

microaggressions into three forms: microassaults, microinsults, and microinvalidations. Microassaults are explicit racial verbal slurs or more overt actions, while microinsults, and microinvalidations are more subvert, subtle actions such as insensitivity or taking for granted the experiential reality of a person. From a focus group with 10 self-identified Asian America students, eight themes emerged in a discussion of racial microaggressions: alienation, ascription of intelligence, exoticization of Asian women, invalidation of interethnic difference, denial of racial reality, pathologizing cultural values/communication styles, second class citizenship, and invisibility (Sue et al., 2007). Sue's work recognizes the differences in racial microaggressions among groups. While the work of Solórzano and Smith have focused on systemic racial microaggressions in societal institutions, the work of Sue and colleagues (2007, 2008) focused more on counseling situations and settings.

Picca and Feagin (2007) investigated the campus racial climate by analyzing the journals of 1,000 White students who kept a log of witnessed acts of racism and discrimination, on and off their college campuses. The journals provided 9,000 accounts of racial events that consisted of racial commentary, actions, and inclinations by other students and relatives. The authors found that racist events occur on the frontstage (out in public, sometimes in front of minoritized individuals) and the backstage (within closed setting with primarily other White students). Picca and Feagin (2007) findings are consistent with Pierce (Pierce, 1974, 1975a, 1975b, 1995; Pierce, Carew, Pierce-Gonzalez, & Wills, 1978), which he defined as racial microaggressions or subtle racism. Racial microaggressions occur in everyday conversation among individuals who have been socialized by a dominant population.

Although modern day higher education institutions tout their welcoming environment for Students of Color (look at any university mission statement), their Eurocentric culture and historically highly concentrated populations of White students and faculty are settings that enable racial microaggressions and discrimination (Smith, 2004, 2006, 2009a, 2009b; Smith, Altbach, & Lomotey, 2002; Smith et al., 2007a; Smith et al., 2007b). Pierce (1995) stated, "in and of itself a microaggression may seem harmless, but the cumulative burden of a lifetime of microaggressions can theoretically contribute to diminished mortality, augmented morbidity, and flattened confidence" (p. 281). Smith (2004, 2009a, 2009b) investigated the long-term impact of racial microaggressions against African Americans. Although much of the work on racial battle fatigue has specifically focused on African American males, the foundations of the framework are applicable to other racial/ethnic and gender groups. It is this framework that serves as the theoretical foundation of this study.

Racism-Related Stress to Racial Battle Fatigue

Chester Pierce (1995) provided a link between racism and our understanding of stress. Pierce asserts that the *space, time, energy,* and *motion* (*STEM*) of African Americans are interrupted oppressive social conditions. The severity of the racist and discriminatory environment will reflect the intensity of racial microaggressions. Furthermore, experiences in historically White spaces can be considered what Pierce (1974, 1975a, 1975b, 1995) and Carroll (1998) reported as *Mundane Extreme Environmental Stress (MEES)*. Racism-related stress is mundane because of the endless daily stress that is normally taken for granted; extreme because the stress impacts

psychological, emotional, and cognitive reactions; environmental because stress is part of the ecology of ideological, cultural, institutional, and policy practices employed against Black males; and stressful due to the combination of these factors which consistently drain energy and waste precious time (Solórzano, Ceja, & Yosso, 2000). Smith et al. (2007) stated that *MEES* conditions are an indicator of:

> lessened environmental control and comfort (safety, happiness, sense of belonging, supportive), heightened physiological or emotional strain (anger, upset, disappointment, frustration, withdrawal, shock, hopelessness, helplessness, fatigue, increased blood pressure), and personal threats or maltreatment (intimidation, hypersurveillance, rejection). (p. 559)

Racial Battle Fatigue

Smith (2009b) asserted that racial battle fatigue occurs over time in response to daily racial microaggressions. Smith (personal communication, July 2012) defined racial battle fatigue as:

> Psychological and physiological stress from specific race-related relationships between a racially marginalized individual (or group) and his or her environment that is appraised by the individual (or group) as taxing or exceeding his or her resources and thus endangering his or her well-being. This disturbed person-environment racial relationship is mediated, in part, through coping as a method toward change. Therefore, unless we focus on change, we cannot learn how racially marginalized individuals learn how to manage race-related stressful events, conditions, and environments.

Possible stress responses of racial battle fatigue are exhibited in Figure 1. Psychological stress responses may include frustration, anger, resentment, or fear. Physiological stress responses may include headaches, a pounding heart, high blood pressure, or sleep disturbances. Finally, behavioral responses to racial battle fatigue may be stereotype threat, impatience, increased use of alcohol or drugs, or poor school performance due to academic disidentification. Racial battle fatigue is unlike typical occupational or

academic stress in that it "is a response to the distressing mental/emotional conditions that result from facing racism daily" (Smith, 2004, p. 180). As a result, People of Color are continually spent in response to preparing and coping against everyday racial microaggressions. The long-term exposure to racial microaggressions from the time of childhood makes the health side effects of racial battle fatigue physically, psychologically, and emotionally detrimental. The responses to racial battle fatigue make predominantly White settings where racial microaggressions occur particularly hostile and uncomfortable places for People of Color (Smith, 2004, 2009a, 2009b). The stress associated with the process of being a student and attaining a higher education degree is compounded by additional racism-related stress for historically minoritized students. Though People of Color have experienced racial microaggressions most of their lives, the added stress of a higher education institution may be overwhelming for some individuals.

Communities and housing are still largely segregated and a college campus may be the first time in which a Student of Color is continually in contact with White students. Therefore, a college campus may be their first experience with continual racial microaggressions. Living on a college campus and going to the grocery story are very different experiences. In a college setting, you are expected to raises issues, discuss issues, and often give your perspective. These issues often include individuals with varying opinions that may result in racial microaggressions. When you go to a grocery store or mall, these exchanges often do not occur. If they do occur they may not be as constant as when you attend a 2-hour class or live in a residence hall. Reaction to these places and experiences therefore may be very different due to ability to remove yourself from the setting and coping strategies. Therefore, strategies and coping techniques that

People of Color employed in their home communities may not be adequate to handle the discrimination that occurs on predominantly White campuses. The onslaught of racial microaggressions could be a reason for dissatisfaction with campus environments and higher departure rates for Students of Color. Racial microaggressions and the added stress reflect the harmful reality that minoritized students have to experience on today's college campuses. These factors do not engender an environment that is conducive to living and learning for these student populations.

Coping

Although racism on campus can take a toll on Students of Color, they continue to persist in higher education and graduate. Coping with racism can play a critical role in the experiences of Student of Color on historically White campuses. Lazarus and Folkman (1984) defined coping as "constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding that resources of a person" (p. 141). It is important to distinguish between coping and resilience because they are often used interchangeably. Resilience is the ability to either thrive when faced with adversity and often individuals utilize coping strategies and skills to face such challenges. Therefore, resilience may be made up of personal characteristics (Masten et al., 1999). Coping on the other hand is a "process oriented rather than trait oriented" (Lazarus & Folkam, 1984, p. 141). Students may come to campus without any coping skills, but institutions of education can help students gain coping strategies.

When studying racism-related stress and resulting racial battle fatigue it is

critically important to investigate buffers or defenses that attenuate the harmful impact of stress on both mental and physical health. According to Lazarus (1990), coping mediates the relationship between a stressor and the experience of stress. Coping is the mechanism by which individuals understand, reframe, or react to events. How an individual copes with racialized events can regulate whether the person is stressed by the experience.

Lazarus and Folkman (1984) proposed a phenomenological model of stress that consists of cognitive processes. Lazarus and Folkman (1984) stated, "psychological stress is a particular relation between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being" (p. 19). As a result, they conceptualize coping as set of flexible responses to a specific situation and argue that coping is meant to be evaluated within a specific context, and in response to a specific stressful situation. First, an individual establishes whether an event is stressful or nonthreatening and then he or she assesses available coping responses in relation to the potential efficacy given the situation (Lazarus & Folkman, 1984). Kessler (1979) found a historically underrepresented group status has been shown to limit one's access to coping resources. Research has demonstrated that dealing with racism related stress requires distinctive responses compared to those dealing with general life stress (Clark et al., 1999; Feagin & Sikes, 1994; Shorter-Godden, 2004). Individuals who infer experiences as stressful and those who are unable to implement proper coping responses suffer from poor long-term mental and physical health (Williams, Spencer & Jackson, 1999; Williams, Yu, Jackson & Anderson, 1997; Williams, Neighbors & Jackson, 2003). Engagement coping or an attempt at gaining either primary or secondary control over a stressful situation is a type of coping strategy

often cited in racism literature (Brondolo et al., 2009; Compas et al., 2001; Harrell, 2000; Miller & Kaiser, 2001; Wei et al., 2010;). Changing the stressful situation is referred to as primary control coping and secondary control coping refers to adapting to stressful events (Crocker et al., 2007; Miller & Kaiser, 2001). Coping responses that do not attenuate stress experienced are considered maladaptive, while those that mitigate the effects of stress are referred to as adaptive coping strategies (Clark et al., 1999).

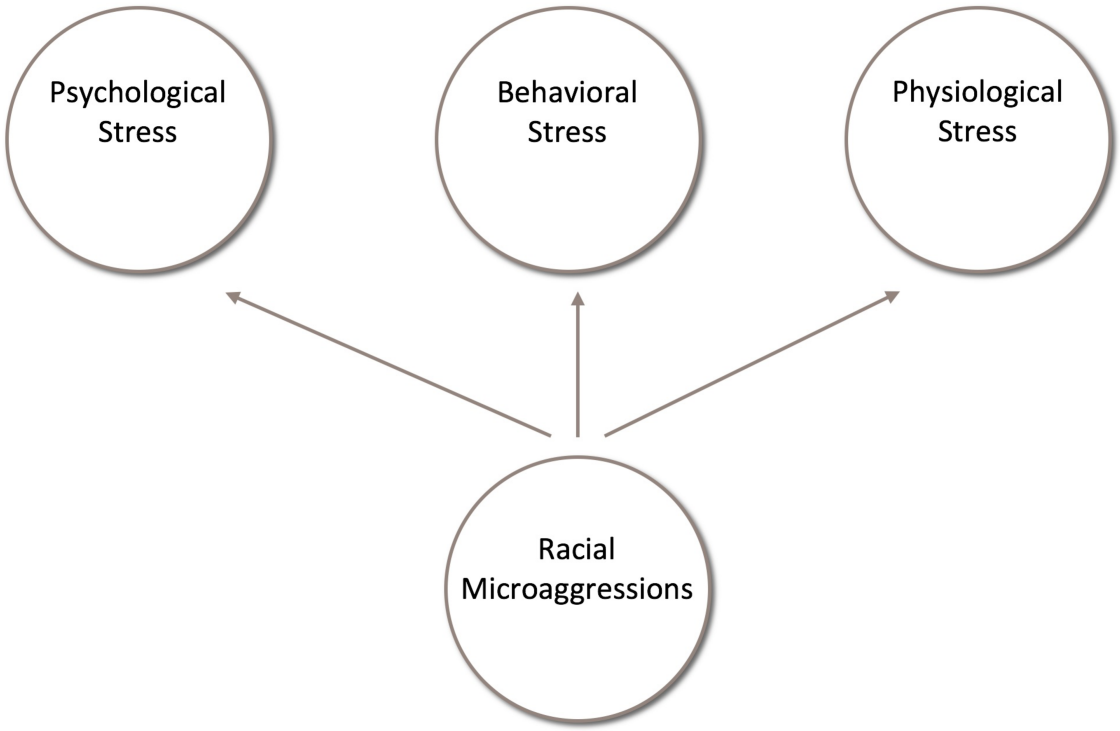


Figure 1. Model of Racial Battle Fatigue

CHAPTER 3

METHODS

Historically underrepresented students have consistently described campus climates as hostile and campus cultures as Eurocentric across decades of research (Allen, 1992; Museus & Jayakumar, 2012). Some claim that we now live in a "postracial" era in which race is inconsequential, but higher education research seems to refute that assertion especially when considering access, retention, persistence, and graduation (Bowen, Chingos, & McPherson, 2009; Museus & Jayakumar, 2012). As a result, a rich understanding of students' current experience with racism-related stress in a "postracial" era would prove to be salient and timely. The broad purpose of this study is to investigate quantitatively the features of racial battle fatigue that manifest in African American and Mexican American/Latino student populations. There are opposing views on the campus climate and this study seeks to further illuminate the perspective of African American and Mexican American students. The intent is to extend prior theoretical discussions and qualitative findings regarding racial battle fatigue using a quantitative approach that is able to understand a larger sample of Students of Color. A secondary purpose is to compare and contrast the experiences of student groups because the groups are quite heterogeneous even though there can be a common experience with unwelcoming campus climates (Harper & Hurtado, 2007). This chapter offers an account

of the methods employed in addressing the research questions that guide this study.

The main research questions for this study are as follows: Do participants perceive their campus environment as racially hostile? Is there a difference in the type and degree of severity of stressors reported by students from different racial/ethnic and gender groups? How is the relationship similar and different of stress responses to racial battle fatigue for varying racial/ethnic and gender groups? What are the differences in racial battle fatigue among student of varying racial/ethnic and gender groups? Finally, which coping strategies are most utilized by Students of Color to combat racial battle fatigue? Do coping strategies differ for racial/ethnic and/or gender groups? The research questions connect the theoretical framework of Racial Battle Fatigue, prior qualitative research, and self-reports of Students of Color for understanding race-related stress on contemporary university campuses. Racism-related stress literature and the racial battle fatigue framework inform these questions. The questions suggest that perceived hostile campus racial climates and assimilating campus cultures preserve inequitable social conditions for Students of Color.

Data

The dataset employed in this dissertation was collected as a part of the Racial Battle Fatigue Scale (RBFS) study at the University of Utah. The RBFS (2012) study was a multiple PI study led by William A. Smith and Man Hung at the University of Utah. The study was funded through an Interdisciplinary Research Grant Award from the Vice-President for Research at the University of Utah that was intended to be a seed grant. The goal of the project was to develop a scale to help understand the racial battle

fatigue that Students of Color, both past and present, experienced on historically White campuses. The study intended to capture the diversity and variability of the experiences of individuals by surveying individuals from numerous universities and alumni organizations across the United States. The data collection effort surveyed individuals who were current and past undergraduates. Survey participation was restricted to individuals who had experience as undergraduate students. The questionnaire asked participants for many demographic variables such as race, ethnicity, gender, sexuality, religion, and level of education

Methods of Data Collection

The data for the RBFS were collected from November 2011 through December 2012. The study included current and past undergraduate students. Several methods were used to gather data. Initially, personal network sampling was used to elicit participation from professors and colleagues in other universities and national organizations to administer paper questionnaires to their courses, student organizations, and organizational members. To increase the sample size and variability of the sample, an online questionnaire was developed using the online questionnaire software, SurveyMonkey.com. Paper surveys were sent to close colleagues, while the online questionnaires were reserved for individuals who did not want to administer a paper survey and social networking websites such as Facebook, Twitter, and a couple of blogs.

Individuals who administered the paper questionnaire (Appendix A) received a packet with the number of questionnaires they requested, the background of the study (Appendix B), the procedures for administering the survey (Appendix C), and two manila

envelopes (one for completed surveys and one for the follow-up study questionnaire). The background of the study informed the administrator of the survey about the purpose of the RBFS study and how the researchers intended to develop the scale. The procedures for the paper questionnaire included a script that the administrator of the survey was to read before handing out the questionnaire to participants. Although many of the questionnaires were given out in classrooms and student organizations, individuals in those settings were not required to participate in the study as outlined in the IRB protocols.

Sample

For this research, a subset of the RBFS was selected. Specifically, African American and Mexican American/Latino students were selected from the total survey responses from the larger data set of the RBFS. Students were asked to identify as Latino (e.g., Mexican American, Puerto Rican, Central America, and Other Latino or Hispanic). Additionally, participants were asked how they racially identify (e.g., African American, other White, European American). Of the 1200 survey respondents, 399 African American and Mexican American/Other Latino students were selected for this analysis. While some of the participants were in graduate school or are no longer in school, the questions they responded to were focused on their undergraduate experience. Table 1 provides sample demographic information of the participants. The majority of the sample is female (58.9%, n=235). Table 2 presents the race and ethnicity by gender breakdown of the sample. The sample skews African American with 239 responses (59.9%). For the purposes of final analyses, Mexican American and Other

Latino/Hispanic students were combined (limitations will be explained in Chapter 5), but the majority of Latino students were Mexican American (26%, *n*=103). The majority of the sample identifies as heterosexual (93.3%) and more than three quarters of the sample did not identify as multiracial. Over 75% of the sample attends or attended a public 4-year institution. Over a quarter of the sample worked more than 20 hours a week while an undergraduate.

Independent Variables: Racial Microaggressions

The independent variable in the proposed SEM model is a racial microaggressions latent construct. The racial microaggressions construct had the possibility of being made up of six observed variables for both African American and Mexican Americans/Other Latino: Because of your racial/ethnic background… a) you are treated with less respect than other people, b) you receive poorer service than other people, c) people act as if they think you are not smart, d) people act as if they are afraid of you, e) people act as if they think you are dishonest, and f) you have experiences you think are racially discriminatory in nature. The variables were measured on a scale ranging from 1 (never) to 5 (very often).

Independent Variables: Campus Racial Climate

The second independent variable in the model is perceptions of campus racial climate. The climate of an institution can shape the experience of students and factor into the racial battle fatigue of students (Smith, 2009a). The perceptions of campus racial climate construct were made up of various observed variables depending on the

racial/ethnic group. Generally, these questions asked about how White faculty, staff, and students treated the participants and in which ways participants may have been discriminated against on campus or their perceptions. The variables were measured on a scale ranging from 1 (never) to 5 (very often). Appendix A lists all of the possible variables for each construct in the model that were later entered into a factor analysis.

Dependent Variables: Stress Responses

In the racial battle fatigue framework, psychological, physiological, and behavioral stress responses are as a result of racial microaggressions. The dependent variables in the model are the three types of stress responses. The psychological stress responses latent variable had a possibility of up to 17 variables that included frustration, defenselessness, mood changes, worrying, etc. The physiological stress responses latent variable had a possibility of up to 21 observed variables that included muscle aches, being frequently ill, back pains, sleep disturbances, etc. Finally, the behavioral stress responses latent variable had the possibility of up to 23 variables that included becoming inpatient, procrastination, exhibiting nervous habits, feeling you did not perform as well as you could have on tests, etc. All of the stress responses were measured on a scale ranging from 1 (never) to 5 (very often).

Mediating Variable: Coping

Coping is important when experiencing a stressor and research demonstrates that students cope in various ways depending on the situation and the student themselves. Therefore, coping was added as a mediating variable to investigate how racial

microaggressions mediate the stress responses of racial battle fatigue. The coping latent variable had the possibility of being made up of 29 variables such as, I concentrated my efforts on doing something about the situation I was in, I received emotional support from others, I took action to try to make the situation better, etc. Like the other variables, coping variables were measure on a scale ranging from 1 (never) to 5 (very often).

Data Analysis Procedures

While the majority of this dissertation will utilize structural equation modeling and factor analysis to answer the research questions, the first two and final research questions will be answered using different analytical methods. For the first question that asks if students perceive their campus as hostile, simple descriptive statistics will be provided. For the second question that asks about whether increased racial microaggressions predicts greater psychological, physiological, and behavioral stress responses, three different ANOVAs will be conducted. The final question will be analyzed using the results from the SEM model, factor analysis, and investigating the means of the coping variables. Aside from the first two and last research questions, the rest of the questions will be answered using confirmatory factor analysis and structural equation modeling which is further discussed in the section below.

Structural Equation Modeling

The research questions and specifically the theoretical framework proposed for this study necessitate a quantitative research design and more specifically structural equation modeling (SEM). Since I want to clearly understand the causal relationships

within a system of variables, I will be using a structural equation modeling approach to analyze the data to answer the research questions (Pearl, 2000; Simon, 1953; Wright, 1921). For example, I want to understand how psychological stress responses differ and are similar for various racial and ethnic groups.

SEM is a statistical methodology that follows a confirmatory or hypothesis testing approach regarding a proposed causal model generated from theory (Byrne, 2001). Byrne describes two aspects of SEM: "(a) that the causal processes under study are represented by a series of structural (i.e., regression) equations, and (b) that these structural relations can be modeled pictorially to enable a clearer conceptualization of the theory under study" (p. 3). SEM is a statistical method that provides researchers a comprehensive method for quantifying and testing theories (Raykov & Marcoulides, 2000). This form of multivariate correlational analysis offers a method for measuring latent or unobserved variables with maximal reliability and validity and a powerful test of causal relationships specified by a theory (Gall, Borg, & Gall, 1996).

SEM has features that differentiate it from other multivariate analytical procedures. First, SEM takes a confirmatory approach to data analysis by testing a specified pattern of relationships among observed variables, which facilitates inferential analysis of data. In contrast, other multivariate procedures are exploratory and descriptive in nature (Byrne, 2001). Second, Stage (1990) explained that SEM allows for the estimation of reciprocal causal flow between two variables that mutually affect one another (e.g., academic and social integration). Third, SEM analytic techniques are useful in the estimates of constructs based on both unobserved (latent) and observed variables (Byrne, 2001). SEM models usually contain theoretical or hypothetical

constructs that are not directly measurable by a single question. Therefore, the constructs are likely not well-defined by a single question, but require many questions to get at the underlying construct. Researchers in the behavioral sciences are often interested in studying these theoretical constructs that cannot be observed directly, which are called latent constructs. SEM procedures use observed variables to serve as "indicators of the underlying construct that they are presumed to represent" (Byme, 2001, p. 5). Fourth, while researchers using traditional multivariate procedures need to assume that variables are measured without error, one main reason for the use of SEM is that it explicitly takes into account measurement error in the model variables (Raykov & Marcoulides, 2000). Byme explained that by ignoring error, other multivariate procedures may lead to inaccuracies in analysis, especially when errors are sizeable. When considering several of these benefits, Stage (1990) concluded that SEM affords a "more comprehensive test of a model's empirical adequacy as an explanatory system" (p. 429). Combining these characteristics offers a global overview of SEM as a use of sample statistics to estimate unknown aspects of a studied phenomenon that are related to the distribution of variables considered in a model.

SEM draws upon several powerful and influential analytical techniques. The two most influential techniques are path analysis and confirmatory factor analysis. Path analysis is a way to visualize a theory by translating a diagram into a set of algebraic equations (Wright, 1918, 1921, 1934). Therefore, path analysis gives a visual element to regression analyses by demonstrating a set of simultaneous regressions that depict the relationships among a set of variables. Path models imply causality, but they do not actually test causality as with regression. As a result, the researcher is forced to fully

consider the relationships among the variables to generate an overall model. The research questions (below) in this dissertation explore the relationships among campus racial climate perceptions and the psychological, physiological, and behavioral stress responses that lead to racial battle fatigue.

The structural equations within a model include specifications of paths from exogenous to endogenous variables and among endogenous variables (Stage, 1990). Byme (2001) distinguished between exogenous and endogenous variables, stipulating that exogenous latent variables are independent variables that cause variation in other latent variables in the model. In contrast, endogenous latent variables are dependent variables influenced by the exogenous (or other endogenous) variables in the model.

Factor analysis, the second most influential statistical technique in SEM, is used to verify the factor structure of a set of observed variables. Confirmatory Factor Analysis (CFA) is employed to determine the adequacy of the model fit to the data. CFA allows the researcher to test the hypothesis that a relationship between the observed variable and the underlying latent construct exists. A researcher postulates a relationship pattern a priori and then tests the hypothesis statistically based on a theory and/or empirical research. A full SEM model combines both path analysis (the structural model) and CFA (the measurement model). The measurement model SEM can be applied to many forms of data such as cross-sectional data, group comparisons, longitudinal data, and experimental, nonexperimental, quasi-experimental data. Furthermore, SEM takes into account measurement error, correlated error, correlated independent variables, nonlinearity, and interaction. It helps us think of causality by visually specifying causal relationships in statistical models.

As implied earlier, structural equation modeling has a visual aspect that is often absent in other statistical analyses. SEM models can be drawn as path models to display a relationship between the observed and latent variables (see Figure 2). Rectangular or square boxes signify the observed variables or actual questionnaire questions, whereas the latent (constructs) or unobserved variables are denoted with circles or ovals. Variables that are not enclosed by a shape represent a disturbance term (i.e., variation that cannot be explained by the equation or measurement). A straight arrow represents the assumption that the variable at the base of the arrow causes the variable at the head of the arrow. A curved two-headed arrow signifies an unanalyzed, correlated association between two variables. Two straight single headed arrows connecting two variables signify a feedback relation or reciprocal causation.

Latent variables are unobserved, hypothesized, and/or created variables, which are inferred from variables that were directly measured. Since latent variables are created, they need to be defined by a scale (Kline, 1998). This is often done by fixing the path from one of the observed variables to the latent variable to 1 or by fixing the factor variance to 1 (Bollen, 1998).

Traditional statistical methods typically utilize one statistical test to determine the significance of the analysis. SEM and CFA rely on several statistical tests to determine the adequacy of model fit to the data. The chi-square test indicates the amount of difference between the expected and observed covariance matrices. A chi-square close to zero indicates little difference between the expected and observed covariance matrices. Chi-square is an absolute fit index in that it does not use an alternative model for comparison. Absolute fit indices are derived from the fit of the obtained and implied

covariance matrices and the maximum likelihood minimization function. A non-significant chi-square means that the model has adequate fit. Unfortunately, chi-square is not always useful because it is easily impacted by very small and very large sample sizes. Additionally, models with more variables tend to have larger chi-squares. The Comparative Fit Index (CFI) compares the fit of a target model to the fit of an independent model, a model in which the variables are assumed to be uncorrelated (Bentler, 1990; McDonald & Marsh, 1990). The CFI represents the ratio between the discrepancy of the target model to the discrepancy of the independence model. Values that approach 1 indicate acceptable fit.

The Root Mean Square of Approximation (RMSEA) is one of the most popular fit indices reported (Brown & Cudeck, 1992; Steiger, 1990). It tells how well the model with unknown but optimally chosen parameter estimates would fit the population's covariance matrix. RMSEA is a noncentrality based fit index that assumes the null is true. SEM is seeking to reject the null hypothesis. As a result, indices test to reject the alternative hypothesis. Rather than using a chi-square distribution, noncentrality indices use a noncentral chi-square distribution. Though noncentrality indices are some of the best performing, they are difficult to interpret. RMSEA favors parsimony in that it will choose the simpler model or the model with the lesser number of parameters. RMSEA values range from zero to one. Unfortunately, there are no strict guidelines as to what indicates adequate fit. Brown and Cudeck (1992) suggest that values less than .05 indicate a close fit while values around .08 indicate an adequate fit. Brown and Cudeck (1992) suggest that values over 0.10 indicate poor fit.

The Standardized Root Mean Square Residual (SRMR; Bentler, 1995) is an

absolute measure of fit and it takes the average of the unique off diagonal elements from the standardized residual correlation matrix. Like chi-square, SRMR is an absolute fit index. SRMR tends to be smaller as the sample size increases and as the number of parameters increase. SRMR is impacted by model complexity. Hu and Bentler (1999) suggest that a value less than .08 is considered good fit. Due to the limitations of other indices, Hu and Bentler (1995) suggest to use SRMR and supplement with CFI and/or RMSEA. Although this is not an exhaustive list of fit indices, these are some of the indices to judge model fit.

Proposed Model

The proposed SEM model will encompass the many factors that are associated with campus racial climate and racial battle fatigue. Figure 3 demonstrates the model proposed to be tested using a stacked SEM approach that permits the researcher to compare groups.

Each of the circles in Figure 3 is a latent variable that is composed of many observed variables or specific questions from the questionnaire (See Appendix A). The specific questions and number that comprise the latent variable will be determined after a factor analysis is completed for African Americans and Mexican American/Other Latino students. The model demonstrates that the campus environment impacts racial microaggressions and racial microaggressions impact how students perceive the campus environment. Additionally, racial microaggressions have a direct effect on coping and racial battle fatigue, but there can be an indirect effect of racial microaggressions on racial battle fatigue by way of coping. Therefore, an individual may experience racial

microaggressions, but their coping strategies may mediate their stress responses. Finally, the interaction among the racial microaggressions, physiological, psychological, and behavioral domains represent racial battle fatigue. Together these latent variables will be tested simultaneously. Institutional type, socioeconomic status, political orientation, parents' education, and other demographic variables will be controlled for when testing the model. When testing for a relationship, controlling for a variable means to minimize or eliminate the impact of the control variable on the relationship being tested.

Design Issues: Internal Validity

Internal validity has been defined as "the power of a study to create a consensus that the appropriate interpretation of the evidence is that the variables are linked in a relationship—to support an inference linking cause to effect" (Krathwohl, 1998, p. 138). SEM combines both a measurement model and a structural model. Since one of the purposes of the structural model is to assess whether the relationships among latent variables are valid, it is crucial that the measurements of latent variables in the model are psychometrically tested (Byne, 2001). CFA is conducted to test the validity of the measurement model and the hypothesized indicator variables for each of the constructs. If there are indications of multicolinearity (two or more variables are highly correlated) a second CFA model can be included in which only one of the correlated variables will be specified (Byne, 2001).

In the output provided by MPLUS, the SEM software used, it provides estimates for identified parameters. Even before fit of the model is considered, parameter estimates will be examined to ensure that they have the correct sign and magnitude. In addition,

standard errors associated with each parameter will be examined to ensure that they are not too large. If they are too large, it indicates that the model does not provide dependable information (Raykov & Marcoulides, 2000).

To determine if a model is consistent with the data, the output provides a fit measure. If it has an adequate fit measure, then the model provides a possible explanation among the variables (Byme, 2001). The fit indices are used to measure whether the model reproduces the sample covariance matrix (Stage, 1990). While the measure of model fit provides information to determine model fit by investigating the covariance matrix, there is no information about specific components of the matrix. As a result, it is still important to review other information to determine if there is any misfit of the model (Joreskog, 1993). The standard residuals and the modification indices provide information about model misspecification (Byme, 2001). Investigation of the standardized residuals may provide information about problems with the paths or covariances that could help improve model fit.

Modification indices are another indication of model misspecification. Modification indices provide a numerical representation if the model is described accurately. For every parameter of the model, there is a corresponding modification index that can be investigated. Like the standard residuals, modification indices provide information on how the model can be improved or changed to improve model fit (Stage, 1990). These methods though are not helpful if a model is totally misspecified, but rather assisting in helping improve models (Raykov & Marcoulides, 2000). Since SEM relies on theory, any modifications to a model should be supported by prior research or theories that pertain to the model.

External Validity

External validity can be defined as the extent to which findings can be generalized (Krathwohl, 1998). An assumption in SEM is that there is a linear relationship among observed variables. Regression models that have structure test theories with relationships among constructs or latent variables (Raykov & Marcoulides, 2000). The relationships among the variables are based on the background knowledge of the researcher and thus, the researcher specifies a causal model (Stage, 1990).

Unlike other analytic methods, SEM looks to find a model that fits the specific data. With SEM, the researcher usually wants to keep the proposed model that is based on their theories and therefore accept the null hypothesis. Testing a theory about phenomena with empirical data with SEM is called the confirmatory model (Raykov & Marcoulides, 2000). If there is a lot of doubt about the applicability of a theoretical model, then a research claim may not offer a strong contribution to our understanding or may need to be studies further than at the present moments. As evidence grows and reduces uncertainty, the theory or contribution provides a greater value to understanding the phenomena.

Table 1. Sample Demographic Information

		n	Percent
Gender			
	Female	235	58.9
	Male	174	41.1
Ethnicity			
	African American, non-Latino	239	59.9
	Mexican American	103	26
	Other Latino	57	14.3
Sexual Orientation			
	Heterosexual	372	93.3
	Gay	8	2
	Lesbian	1	0
	Bisexual	6	1.5
	Queer	2	0
Multiracial			
	No	301	76.2
	Yes	94	23.8
Institutional Type			
	Public 4-year	301	76.8
	Private 4-year (nonprofit)	73	19.6
	Private 4-year (for profit)	18	4.6
Level of Education Intended to Complete			
	Some college	26	6.6
	Bachelor	58	14.7
	Some graduate	38	9.6
	Graduate	272	69
Educational Standing			
	Undergraduate	223	55.9
	Graduate	82	20.5
	No longer in college	94	23.5
Hour working while attending college			
	0	77	19.4
	1 to 5	16	4
	6 to 10	59	14.9

Table 1. continued

Hour working while attending college	*n*	Percent
11 to 15	53	13.4
16 to 20	87	21.9
More than 20	105	26.4
Approximate undergraduate GPA (on a 4.0 scale)?		
A or A+	28	7.1
A-	50	12.6
B+	83	20.9
B	88	22.2
B-	73	18.4
C+	44	11.1
C	25	6.3
D	6	1.5
Approximate combined household income before taxes last year		
Less than $20,000	93	24
$20,000 to $29,999	38	9.8
$30,000 to $39,999	40	10.3
$40,000 to $59,999	68	17.6
$60,000 to $79,999	50	12.9
$80,000 to $99,999	27	7
$100,000 to $199,999	50	12.9
More than $200,000	21	5.4
Student groups on campus, other than a sorority or fraternity?		
No	134	33.8
Yes	263	66.2

Table 2. Race and Ethnicity by Gender Makeup

	Female	Male	Total
African American	134	105	239
All Mexican American/Latino	101	59	160
Mexican American	69	34	103
Other Latino	32	25	57

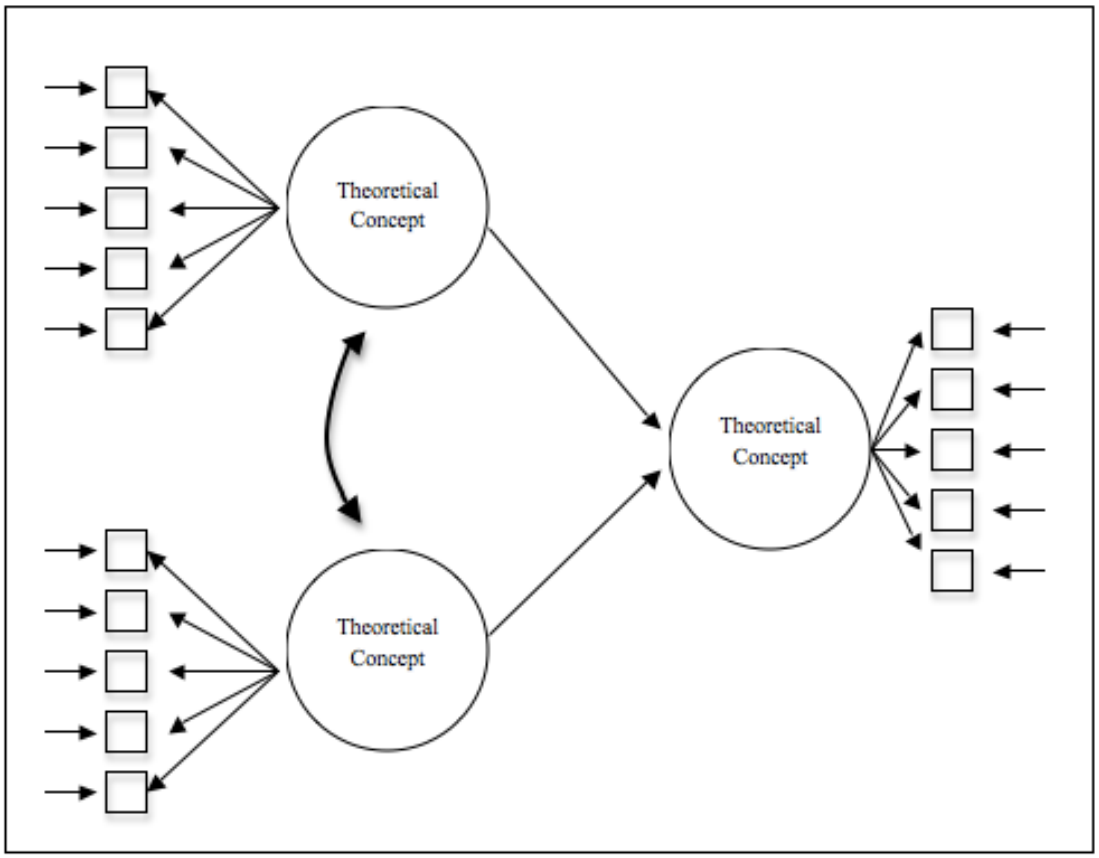


Figure 2. Sample SEM Model

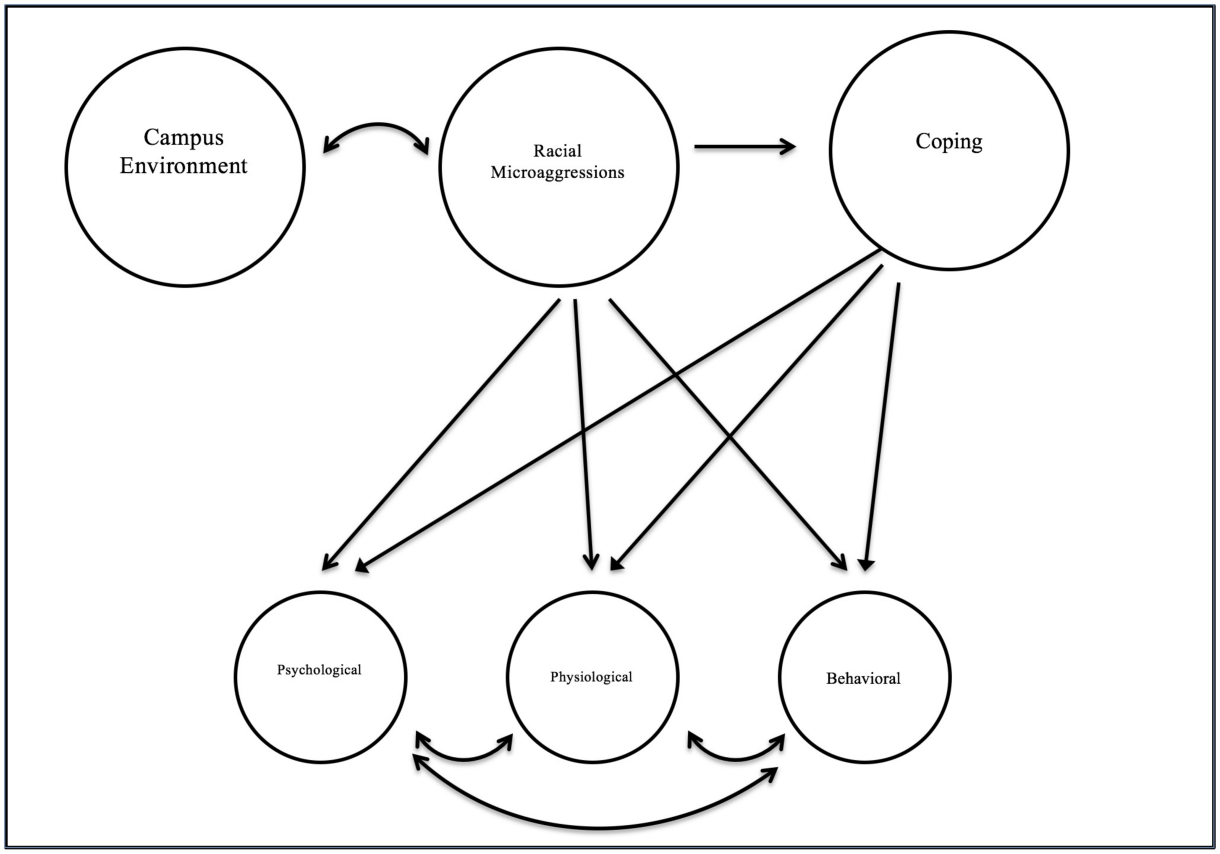


Figure 3. Proposed SEM Model

CHAPTER 4

RESULTS

The purpose of this chapter is to describe the results of the multiple data analyses used to investigate the research questions for this dissertation. Understanding how racial battle fatigue manifests itself among African American and Mexican American and other Latino students can be obtained by using a combination of descriptive and multivariate statistics. The purpose of this study is to test the racial battle fatigue model quantitatively, which will help researchers and practitioners better understand the "postracial" experience of Students of Color. In addition, findings may illustrate what factors campus practitioners may witness that impact sense of belonging and affect the overall campus racial climate. The dissertation asks five research questions: a) Do participants perceive their campus environment as racially hostile?, b) What are the observed variables that make up each component of racial microaggressions and racial battle fatigue?, c) Is there a difference in the type and degree of severity of racial microaggressions reported by African American and Mexican American/Latino students?, d) What are the differences in racial battle fatigue among African American and Mexican American/Latino students?, e) Which coping strategies are most utilized by African American and Mexican American/Latino students to combat racial battle fatigue? Do coping strategies differ between groups?

This chapter is organized into six different sections. The first section summarizes the descriptive statistics for the variables used in this study. Subsequent sections describe and answer each of the five research questions in order as they build off of each other and contribute to each other.

Descriptive Analysis

The analysis in this dissertation requires 25 observed variables that compose the latent variables. Prior to the final SEM analyses, over 120 variables were analyzed and narrowed down to the final 25 using correlation analyses and factor analysis. While the final analyses will be of the latent variables, it may be helpful to understand the descriptive statistics of the observed variables that make up each latent variable in the final model. The means and standard deviations of all of the variables considered in this dissertation provide a simple way of describing racial battle fatigue components and coping. Table 3 provides the means and standard deviations of all of the variables used in the structural equation models for all of the groups included in the model including a breakdown by gender. This table offers a brief description of the students considered in this study using the variables that were inputted into the structural equation model after a factor analysis. Before answering the research questions that require a structural equation model, this chapter will first answer research questions that require descriptive and analysis of variance analyses.

Question 1: Perceived Campus Racial Climate

The first research question of this dissertation asks how students perceive campus racial climate of their institution. To answer these questions, descriptive statistics are provided. The descriptive statistics provide as picture of how participants perceive their campus (see Table 4). When participants were asked about where racist incidents happened most often on campus, participants rated that the classroom, residence halls, walking across campus, and student run organizations were settings in which racist events occurred most often. While the racist events did not occur on average more than sometimes, they still occurred. Additionally, participants rated that White faculty, students, and staff mistreated them on average more often than historically underrepresented persons not of their own race or ethnicity and persons of their same race and/or ethnicity. Participants reported that more often than other campus community members, fellow students made racially insensitive or disparaging remarks.

Finally, students reported that they "sometimes" witnessed racial epithets that they deemed racially insensitive. Students felt excluded from events of gatherings because of their racial or ethnic makeup and they witnessed racial discrimination on campus. Means from the campus climate variables demonstrate that they did perceive treatment from White faculty, students, and staff differently than from other faculty, students, and staff. Students expressed there were some symbolic gestures such as curriculum and racial epithets that represented a hostile campus racial climate.

Question 2: Components of the Model

In order to better understand the relationship of racial battle fatigue to campus racial climate and coping, the numerous observed variables that were asked on the questionnaire need to be analyzed to demonstrate which variables actually fit or are associated with each construct. Exploratory factor analyses were conducted separately on all of the theorized components of the model: perceptions of campus climate, racial microaggressions, psychological stress responses, physiological stress responses, behavioral stress responses, and coping mechanisms. Followed by the exploratory factor analyses, confirmatory factor analyses were conducted to make sure the observed variables actually fit the underlying concepts.

Item-Level Analysis

The range of responses for all items was 1 to 5. Maximum and minimum means scores were 3.40 and 1.94, respectively. Four of the final 26 items from all constructs were negatively skewed. Kurtosis statistics ranged from -1.116 to 0.227 with a standard error of .244. Tabachnick and Fidell (2013) suggested that acceptable ranges for skewness and kurtosis is below 1.50 and above -1.50. Additionally, histograms of the items were investigated to make sure that they were bell curve shaped.

Sampling Adequacy

The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was between .726 and .913 for all of the factor analyses. The Barlett's Test of sphericity was (p<.000). Together, the KMO and Bartlett's test statistics indicated that factor analysis assumptions

had been met and the data were suitable for factor analytic procedures.

Exploratory Analysis: Racial Microaggressions

Principal Axis Factoring without any rotation was initially conducted on the initial six items representing racial microaggressions. The initial factor analysis yields one factor with an eigenvalue over 1. The one-factor model described 66.52% of the variance of the intercorrelation matrix. Although all six items could be retained, one item ("People act as if they are afraid of you") demonstrated a factor loading much lower (0.705) than the other five items. A final factor analysis was conducted eliminating the one item and the explained variance increased to 69%. The first factor had an eigenvalue of 3.755. The racial microaggressions factor demonstrated a Cronbach's Alpha of 0.916 which suggests high internal reliability.

Exploratory Analysis: Perceptions of Campus Climate

Principal Axis Factoring yielded three factors with eigenvalues over 1. The three-factor model was examined using exploratory analysis and was found to describe 59.97% of the variance of the intercorrelation matrix. The first three factors had eigenvalues of 11.57, 1.75, and 1.02.

Following the initial factor analysis subsequent factor analyses were conducted in which items that cross-loaded and negatively loaded were eliminated. The final factor was a single factor solution that included four items and had an eigenvalue of 2.816. The single factor described 60.54% of the variance in perceptions of campus climate. The Cronbach's Alpha of the retained four variables was 0.859.

Exploratory Analysis: Psychological

The initial factor analysis on the 17 psychological variables demonstrated a two-factor solution with many variables that cross-loaded. The two-factor solution described 66.41% of the variance. Items that were highly cross-loaded were eliminated and the factor analysis with Principal Axis Factoring was rerun, resulting in a single factor solution that described 62.78% of the variance. Although the analyses resulted in a single factor, variance accounted for lowered and some variables did not demonstrate higher loadings. After eliminating items with low loadings (less than 0.75), a single factor solution was retained that accounted for 73.72% of the variance described. The single factor with six items demonstrated high internal reliability with a Cronbach's Alpha of 0.943.

Exploratory Analysis: Physiological

The first factor analysis of the physiological variables resulted in an initial four-factor model that described 56% of the variance, but there was no clear pattern and many of the variables had low loadings or negatively loaded onto factors. Subsequent factor analyses eliminated factors that high cross loadings or negatively, highly loaded onto factors. After eliminating, 13 of the 21 initial variables a single factor model emerged that explained 52.45% of the variance, but some of the factors had loadings less than 0.600. Therefore, additional factor analyses using Principal Axis Factoring were conducted that resulted in a factor made up of four items that described 57.25% of the variance. The physiological stress factor demonstrated a Cronbach's Alpha of 0.840 which suggests good internal reliability.

Exploratory Analysis: Behavioral

The initial factor analysis yielded a four-factor solution that described 60.38% of the variance. The first four factors had eigenvalues of 10.46, 2.48, 1.37, and 1.07. The four-factor solution did not yield interpretable results and had many items with very low factor loadings (less than 0.600), cross-loading variables, and variables with negative factor loadings. After eliminating poorly loaded items, a one-factor solution explaining 60.07% of the variance emerged. Factor analyses that followed eliminated items that loaded poorly onto the single factor. The resulting factor was a three-item factor that described 78.09% of the variance in behavioral stress responses. The single factor with three items demonstrated high internal reliability with a Cronbach's Alpha of 0.911.

Exploratory Analysis: Coping

The initial factor analysis resulted in a six-factor solution that had numerous items with low loadings and negatively loaded items. The six-factor solution accounted for 61.90% of the variance to describe coping. Factors with a loading of less than 0.700 were eliminated along with factors that negatively loaded on the first factor. The number of items was reduced to seven, which produced a single-item factor that described 67.64% of the variance of coping. Items with loadings less than 0.800 were then eliminated. A single factor with four items was produced that accounted for 74.29% of the variance. All of the items had factor loadings greater than 0.800. The coping stress factor demonstrated a Cronbach's Alpha of 0.919 that suggests very good internal reliability.

Confirmatory Factor Analysis

Prior to testing the proposed structural equation model, a confirmatory factor analysis (CFA) was conducted to ensure the six latent variables were reliable constructs and that there was an adequate measurement model. Standard fit indices were reported to indicate how well the data fit each factor. Table 5 demonstrates the fit indices for each of the latent variables.

Confirmatory factor analyses demonstrate that some constructs are stronger than others. The RMSEA of many of the constructs indicate poor fit, but this could be due to a small sample size. In addition, Kenny, Kaniskan, and McCoach (2013) state that it might not even be worthwhile to compute the RMSEA for models with low degrees of freedom, which many of the latent constructs have in this confirmatory factor analysis. Hu and Bentler (1990) though recommend reporting the RMSEA, SRMR, and CFI and letting readers choose which fit indices to use when analyzing models. While the RMSEA is adequate to poor, the CFI and SRMR demonstrate very good fit of each of the latent constructs.

Correlation of Factors

Prior to running the final SEM model using the items identified with EFA and CFA, the correlations among the factors were examined to make sure there was a relationship among the factors. Table 6 demonstrates that the factors vary from correlations as little as 0.223 to the highest correlation of 0.702. As expected, racial microaggressions and perceptions of campus climate are very highly correlated with a correlation of 0.702. Racial microaggressions demonstrate a strong correlation with

psychological ($r = 0.573$) and behavioral ($r = 0.441$) stress responses, but not a very high correlation ($r = 0.223$) with physiological stress responses.

The stress responses of the racial battle fatigue framework were highly correlated with each other demonstrating they are related to each other. The correlations are not so high that they may be explaining the same underlying phenomena, but rather that they are distinct, yet related. The lowest correlation between the factors was the correlation of physiological stress responses to behavioral stress responses ($r = 0.433$). Finally, coping responses also correlated well with all of the components of the model except with physiological stress responses. Overall, the factor with the lowest correlation with other factors was physiological stress responses.

Question 3: Racial Microaggressions

To investigate if there is a difference in the racial microaggressions reported by African American and Mexican American/Other Latino students, an Independent Samples *t*-test was conducted. The five observed variables representing the latent construct of racial microaggressions in the SEM model were tested. These variables were, 1) being treated with less respect than others, 2) receiving poorer service than others, 3) people acting as if you are not smart, 4) people acting as if you are dishonest, and 5) having experiences you think are racially discriminatory in nature.

The Levene's Test for Equality of Variances demonstrated equal variances should be assumed and that all of the variables not different from each other for African American and Mexican American students ($p < 0.05$). When investigating the Independent Samples *t*-test of equality of means, the 2-tailed test demonstrated that two

of the variables were statistically significant indicating a difference in the scores between African American and Mexican American students. There was a significant difference in the scores for African American (M=2.77, SD=1.055) and Mexican American students (M=2.45, SD=1.105) that reported poor service; $t(397)=2.476$, $p = .014$. Additionally, a significant difference was present when asking African American (M=3.08, SD=1.138) and Mexican American students (M=2.62, SD=1.163) participants if they have had experiences that are racially discriminatory in nature on campus; $t(396)=3.978$, $p = .000$. Even though both rated that they had racially discriminatory experiences on campus, there was a difference between the two groups.

Efficiency scores represent the extent to which decision-making units operate efficiently. The score is calculated based on the designated inputs and outputs and compared with other decision-making units in the model. Efficiency scores are the main output of a data envelopment analysis. An efficiency score of one indicates that the institution is operating efficiently. Efficiency scores of less than one indicate that the institution is operating below the efficiency frontier.

This section presents efficiency scores and ranks for the three analyses including small, medium, and large rural community colleges. Three results are presented for each classification group including: efficiency scores and ranks for each institution in the model, descriptive analysis of efficiency scores, and comparison of efficiency scores between efficient and inefficient institutions.

Question 4: The SEM Model

The fourth research question asks "What are the differences in racial battle fatigue among African American and Mexican American/Latino students?" The previous research questions and their findings provided insights into this research question and helps answer it. Up until now, the questions and analyses only illuminated some of the components of racial battle fatigue without testing the entire model for each group. Therefore, the proposed model described in Chapter 3 was tested using SEM. The proposed model tested the linkages among the variables in the study and tested the plausibility of assertions about the explanatory relationships among the multiple variables.

Independent Variable: Racial Microaggressions

The independent variable in the SEM model is a racial microaggressions latent construct. The racial microaggressions construct was made up of five observed variables: Because of your racial/ethnic background… a) you are treated with less respect than other people, b) you receive poorer service than other people, c) people act as if they think you are not smart, d) people act as if they think you are dishonest, and e) you have experiences you think are racially discriminatory in nature.

The second independent variable in the model is perceptions of campus racial climate. The climate of an institution can shape the experience of students and factor into the racial battle fatigue of students (Smith, 2009a). The perceptions of campus racial climate construct was made up of four observed variables: a) you have experienced any racial/ethnic discrimination or racial insensitivity toward your racial/ethnic group in your

college curriculum, b) you have experienced mistreatment because of your racial/ethnic identity in extracurricular activities in college, c) you feel you have been excluded from events or gatherings because of your racial or ethnic makeup, and d) you witnessed racial discrimination against a fellow student, faculty, and/or staff member.

Dependent Variables: Stress Responses

In the racial battle fatigue framework, psychological, physiological, and behavioral stress responses are a result of racial microaggressions. The dependent variables in the model are the three types of stress responses. The psychological stress responses latent variable was made up of six variables: After experiencing racism and/or discrimination on campus were you… a) frustrated, b) defenseless, c) more aware of racism, d) irritable, e) mood changes, and f) agitated? The physiological stress responses latent variable was made up of four observed variables: After experiencing racism and/or discrimination on campus you experienced… a) muscle aches, b) racing heart, c) sleep disturbances, and d) pain in joints. Finally, the behavioral stress responses latent variable was made up of three observed variables: After experiencing racism and/or discrimination on campus did you … a) ate more or less, b) slept too much or too little, and c) procrastinated. Physiological stress responses construct had Cronbach alpha coefficient of 0.840 and the behavioral latent variable had a Cronbach's coefficient of 0.911.

Mediating Variable: Coping

Coping is important when experiencing a stressor and we know that students cope in various ways depending on the situation and their own experience with stress. Therefore, coping was added as a mediating variable to investigate racial battle fatigue after accounting for coping to examine how students respond to experiencing racism on campus. The coping latent variable was made up of four observed variables: a) I received emotional support from others, b) I received comfort and understanding from someone, c) I tried getting advice or helping from other people about what to do, and d) I sought help and advice from other people.

Stacked SEM Model

A stacked SEM model allows for direct comparisons of groups that would otherwise not be possible with a similar model ran separately for each group. Using MPlus 7, a stacked model was constructed using data from African American and Mexican American/Other Latino students. Table 7 shows that the model had good fit. The Chi Square was 1138.271 and was significant at $p< 0.000$ indicating good fit. The RMSEA was 0.065, which indicates fairly good model fit. The CFI indicates very good model fit as it is near 0.95. The SRMR of 0.068 is between good and acceptable (Bentler, 1995; Hu & Bentler, 1999; Worthington & Whittaker, 2006). Since the fit indices indicate the proposed model is good to adequate (Worthington & Whittaker, 2006), the results are interpreted below.

Figure 4 and 5 demonstrate the visual representation of the model with the path coefficients of each group. As seen in the model, racial battle fatigue and coping

operates differently for African Americans and Mexican American students. Table 8 provides a direct comparison of the path coefficients.

Overall, the path coefficients for each group are very similar. As expected, there is a strong correlation between perceptions of campus racial climate and racial microaggressions for each group with correlations of 0.772 and 0.867 for African American and Mexican American students, respectively. This indicates that the perceptions of campus racial climate and racial microaggressions are highly related and that one may impact the other. This is particularly important to further understand how campus climate manifests itself and how university administrators can address hostile climates. Furthermore, the relationship between racial microaggressions and coping was strong for each group with a path coefficient of 0.544 for African American and 0.496 for Mexican American/Latino students. Prior to accounting for coping, both models demonstrate a relationship among the components of racial battle fatigue.

For African American students, the relationship between racial microaggressions and psychological ($\beta = 0.443$, $p < 0.05$) and behavioral stress ($\beta = 0.395$, $p < 0.05$) responses was significant. The path from racial microaggressions to physiological stress was not significant ($\beta = 0.114$, $p < 0.05$) after first running the stacked model and therefore was removed from the analysis that accounted for coping. This finding suggests that experiences with racial microaggressions did not predict physiological stress for African American students, while psychological and behavioral stress was impacted by racial microaggressions.

For Mexican American students, racial microaggressions predict a little more psychological stress ($\beta = 0.540$, $p < 0.05$) than for African Americans, but this difference is

not large. The relationship between racial microaggressions and behavioral stress responses was significant (β =0.365, p<0.05) and the direct effect was slightly lower for Mexican American and Latino students. The effect of racial microaggressions on the physiological stress responses was significant for Mexican American students (β =0.420, p<0.05). These findings indicate that racial microaggressions predict stressors for Mexican American and Latino students. The findings above are not representative of the full model because coping is not accounted for in these results. When investigating how coping mediates the relationship between racial microaggressions and stressors in the racial battle fatigue framework, interesting findings are present.

Question 5: Coping

Important to the discussion of racial microaggressions and racial battle fatigue is the role of coping to alleviate the impact of subtle racism. Additionally, coping mechanisms are important when discussing the effects of racism in general. The fifth research question asks "Which coping strategies are most utilized by African American and Mexican American/Latino students to combat racial battle fatigue?" and "do coping strategies differ between groups?" To answer this question, an SEM model is employed. In addition, descriptive statistics of observed variables about coping that are not included in the SEM model are investigated. The coping items that made up the factor included: a) I received emotional support from others, b) I received comfort and understanding from someone, c) I tried getting advice or help from other people about what to do, and d) I sought help and advice from other people. Many of these variables could also be thought of a social support network that helps students to cope. Social support networks

can act as coping mechanisms and students often seek more formal social support networks like MEChA and Black Student Union

After accounting for coping by way of mediation of racial microaggressions through coping mechanisms to predict stress responses, differences exist that demonstrate that coping may help mediate the effects of racial microaggressions. Almost all of the effects of racial microaggressions were lessened after accounting for coping. Many of the differences were very large. For African Americans, both psychological (β =0.256, p<0.05) and behavioral stress (β=0.211, p<0.05) responses were partially mediated by coping. The effect of racial microaggressions on psychological (β =0.287, p<0.05) and behavioral (β =0.317, p<0.05) stress for Mexican Americans was also partially mediated by coping. The effect of racial microaggressions on physiological stress responses was completely mediated by coping as indicated by the nonsignificant path (β =0.032, p<0.05).

The lower direct effects demonstrate that coping may alleviate some the impact of racial microaggressions on some stress responses. For Mexican American students, the mediated effect of racial microaggressions on physiological stress is not significant. These findings raise three questions about physiological stress responses as a result of racial microaggressions for both groups. First, it may be that the best coping strategy may not be employed to reduce physiological stress responses. It may be the case that students do not necessarily know how to cope with the physiological stress that results from racial microaggressions. Coping strategies are often employed to deal with stress, but coping strategies may not work for every type of stress response. Second, it may be that physiological stress may be more complicated than this model can explain or that the

physiological measure is not a reliable measure in the context of the model. Finally, it might also be the case that coping is difficult and may not easily impact the physiological responses associated with racial microaggressions. Perhaps it is the case that clinical measures are needed, as it may be hard for participants to recall such specific responses. These findings will be explored further discussed in Chapter 5. In addition to the SEM model that accounts for coping, I provide the means and standard deviations of all of the coping mechanisms that students answered on the questionnaire. The additional information may provide more insight into how African American and Mexican American and Latino students cope with racial microaggressions despite not being in the model. In Table 9, the means of each of the variables by different grouping variables is presented. The highest mean for all the participants is receiving emotional support from others. It is also the highest mean for African American students, female, and male participants. For Mexican American students, receiving comfort and understanding from others is the most prevalent coping strategy when investigating the means. Mexican American men exhibit the lowest mean for all of the coping variables. When investigating each question, seeking advice has the lowest mean across the board, which may have implications for counseling about racism and awareness of counseling.

Table 9 has the means and standard deviations of all of the coping mechanisms answered by participants. Means are divided by race, ethnicity, and gender in order to get a granular understanding of how participants coped with the racial microaggressions they experienced on campus. Overall, one of the most common ways of coping with racial microaggressions was "I accepted the reality of the fact that it happened." Whether this is actually a coping strategy and what this means for students confronting racial

microaggressions and racial battle fatigue will be discussed in Chapter 5. The second most common coping strategy for all students was "I received emotional support from others." For African American students, turning to religion and spirituality and receiving emotional support from others were the most common coping strategies. For Mexican American students, turning to work or other activities along with receiving comfort from others were the most common coping strategies. When comparing males to females, males generally had lower means for coping strategies than females. In some cases, male participants exhibited larger means but this was only for a few coping strategies like making fun of the situation. As with the larger African American group, the females specifically turned to religion to cope with racial microaggressions. While African American males also turned to religion or spirituality, they also stated they tried to take action to make the situation better. African American females took action too, but not with a mean that was as high as with African American males. Female Mexican Americans did something to think about it less and received emotional support from others to cope with racial microaggressions. For Mexican American males, they turned to other activities to think about the racial microaggressions less and they also received emotional support from others. When averaging the means of the coping strategies by each group, African American females have the largest prevalence of coping strategies with a mean of 2.57. Additionally, females generally use coping strategies more than males. The group with the lowest mean was Mexican American men. These findings have implications for practice and policy on college campuses related to campus climate and counseling related to racism. More recently, counselors on college campuses have become interested in understanding the toll that racism takes on college campuses and

these findings may help inform the discussion of coping with racism on college campuses in a "postracial" era.

The findings from the data analysis in this study provide valuable information about the postsecondary experiences and potential health impacts of racial microaggressions on African American and Mexican American students. The results provide insights into the research questions of this study. In the next chapter, the data analyses results are discussed in an effort to detail an elaborated understanding of how the components of racial battle fatigue work together in a "postracial" context and what this means for African American and Mexican American students who experience racial battle fatigue.

Table 3. Means and Standard Deviations for all Variables in the Model*

		All Students		African American		Mexican American		Female		Male	
		Mean	*SD*	Mean	*SD*	Mean	*SD*	Mean	*SD*	Mean	SD
Racial Microaggressions											
	Respect	2.67	1.06	2.75	1.07	2.55	1.05	2.71	1.08	2.61	1.03
	Poorer Service	2.66	1.08	2.77	1.06	2.49	1.11	2.69	1.06	2.62	1.12
	Not think you are smart	2.97	1.21	3.06	1.16	2.83	1.26	2.98	1.22	2.95	1.19
	Dishonest	2.47	1.15	2.56	1.12	2.34	1.18	2.41	1.14	2.56	1.15
	Discrimination	2.90	1.17	3.08	1.14	2.62	1.16	2.89	1.16	2.91	1.19
Campus Climate											
	Insensitivity	2.49	1.18	2.56	1.15	2.39	1.21	2.56	1.20	2.40	1.14
	Mistreatment	2.16	1.12	2.23	1.13	2.05	1.10	2.11	1.14	2.22	1.09
	Excluded	2.30	1.09	2.34	1.13	2.25	1.04	2.29	1.10	2.31	1.09
	Witness racial discrimination	2.57	1.06	2.51	1.06	2.66	1.05	2.60	1.07	2.53	1.03
Psychological											
	Frustrated	3.15	1.26	3.11	1.27	3.20	1.25	3.34	1.25	2.87	1.23
	Defenseless	2.68	1.25	2.66	1.25	2.70	1.24	2.85	1.29	2.42	1.15
	More aware of racism	3.40	1.39	3.42	1.44	3.36	1.32	3.57	1.35	3.15	1.42
	Irritable	3.01	1.34	2.97	1.37	3.06	1.29	3.23	1.31	2.69	1.31
	Mood change	2.87	1.29	2.80	1.31	2.99	1.27	3.09	1.30	2.56	1.22
	Agitated	2.93	1.29	2.92	1.28	2.93	1.30	3.09	1.29	2.70	1.25
Physiological											
	Racing heart	2.22	1.15	2.04	1.15	2.48	1.10	2.38	1.16	1.98	1.09

Table 3. continued

		All Students		African American		Mexican American		Female		Male	
		Mean	*SD*	Mean	*SD*	Mean	*SD*	Mean	*SD*	Mean	*SD*
	Muscle Aches	2.23	1.17	2.04	1.14	2.52	1.16	2.40	1.20	1.99	1.08
	Sleep disturbances	2.55	1.37	2.32	1.33	2.89	1.36	2.85	1.40	2.12	1.20
	Pain in joints	1.94	1.14	1.79	1.06	2.17	1.22	2.07	1.21	1.75	1.01
Behavioral											
	Ate more or less	2.07	1.22	2.00	1.22	2.16	1.22	2.17	1.27	1.91	1.13
	Slept too much or too little	2.22	1.30	2.09	1.25	2.42	1.33	2.37	1.35	2.02	1.19
	Procrastinate	2.35	1.34	2.22	1.31	2.54	1.38	2.49	1.38	2.15	1.26
Coping											
	Emotional Support	2.96	1.26	3.02	1.27	2.88	1.24	3.10	1.30	2.76	1.17
	Comfort from others	2.94	1.27	2.94	1.27	2.96	1.29	3.09	1.35	2.74	1.14
	I tried to get help about what to do	2.87	1.29	2.94	1.27	2.78	1.32	3.00	1.33	2.70	1.22
	I sought advice	2.70	1.28	2.76	1.26	2.60	1.30	2.81	1.34	2.54	1.18

*Scale: 1 = Never, 2 = Almost never, 3 = Sometimes, 4 = Fairly often, and 5 = Very often

Table 4. Means and Standard Deviations of Campus Climate Variables

Where racist events occurred most often...	*N*	Mean	Std. Dev.
Classroom	397	2.52	1.079
Residence halls/Dorms	385	2.31	1.190
Recreation facilities	388	2.04	1.034
University Union	389	1.97	1.016
Faculty offices	386	1.97	1.047
Student services offices (e.g. Financial Aid Office)	391	2.04	1.064
Library	393	1.80	0.931
Walking across campus	395	2.24	1.097
Cafeteria	384	1.97	1.018
Student run organizations (e.g. Greek affairs, Intramural sports)	387	2.20	1.201
Student government	391	2.07	1.169
Off campus residence/home	385	2.14	1.127
Off campus stores	392	2.51	1.195
Off campus in shopping areas	391	2.61	1.212
Off campus in general	396	2.85	1.194
Off campus with police	393	2.84	1.318
Which group mistreats you most often because of your racial/ethnic background?			
White faculty	398	2.11	0.995
Minority faculty, not of your own race/ethnicity	391	1.79	0.860
Faculty of your own race/ethnicity	397	1.59	0.772
White students	394	2.26	1.034
Students of Color, not of your own race/ethnicity	395	1.83	0.853
Students of your own race/ethnicity	397	1.78	0.857
White staff	394	2.06	1.000
Staff of Color not of your own race/ethnicity	396	1.60	0.714
Staff of your own race/ethnicity	393	1.55	0.702
Heard racially insensitive remarks directed to yourself from?			
Students	396	2.68	1.135
Faculty	395	1.85	0.903
University staff	395	1.73	0.860
Campus police	393	1.72	1.005
Community police	394	2.25	1.210

Table 4. continued

Other campus climate questions	*N*	Mean	Std. Dev.
Racial insensitivity in college curriculum	397	2.49	1.178
Mistreatment in extracurricular activities	396	2.16	1.121
Mistaken to be a different racial/ethnic group	396	2.42	1.407
Witnessed racial epithets	395	2.76	1.132
Excluded from events	394	2.30	1.092
Witnessed racial discrimination	394	2.57	1.056

Table 5. Confirmatory Factor Analysis Fit Results

Latent Construct	$\chi 2$*	RMSEA	CFI	SRMR
Racial Microaggressions	18.283	0.082	0.990	0.016
Campus Climate	18.440	0.144	0.976	0.024
Psychological	79.222	0.140	0.968	0.027
Physiological	2.008	0.003	1.000	0.008
Behavioral	0.000	0.000	1.000	0.000
Coping	54.948	0.258	0.957	0.031

* Chi-Square

Table 6. Correlation of Factors

Factors	Racial Microaggressions	Campus Climate	Psychological	Physiological	Behavioral	Coping
Racial Microaggressions	1					
Campus Climate	0.702	1				
Psychological	0.573	0.650	1			
Physiological	0.233	0.299	0.438	1		
Behavioral	0.441	0.508	0.540	0.433	1	
Coping	0.469	0.473	0.504	0.232	0.427	1

*All correlation significant at the 0.01 level (2-tailed)

Table 7. Model Fit Results

	Model Fit				
	N	$\chi 2$	RMSEA	CFI	SRMR
Model	399	1138.271	0.065	0.94	0.068

Table 8. Standardized Path Coefficients Between Latent Variables

Latent Variables	African American	Mexican American
	β	β
Racial Microaggressions		
Psychological	0.443*	0.540*
Physiological	-	0.420*
Behavioral	0.395*	0.365*
Coping		
Psychological	0.256*	0.287*
Physiological	-	0.032**
Behavioral	0.211*	0.317*
Correlation Between Factors		
Behavioral		
Psychological	0.339*	0.270*
Physiological	-	0.233*
Psychological		
Physiological	-	0.428*

* Statistically significant $p < 0.05$

** Not statistically significant $p > 0.05$

Table 9. Means and Standard Deviations of Coping Items by Grouping

	All Students			African American			Mexican American		
	N	Mean	Std. Dev.	*N*	Mean	Std. Dev.	*N*	Mean	Std. Dev.
I turned to work or other activities to take my mind off things.	398	2.93	1.237	239	2.91	1.262	159	2.96	1.201
I concentrated my efforts on doing something about the situation I was in.	397	2.92	1.215	237	3.00	1.269	160	2.79	1.122
I prayed or meditated.	398	2.89	1.452	239	3.21	1.429	159	2.42	1.356
I made fun of the situation.	396	2.42	1.269	236	2.42	1.264	160	2.42	1.281
I received emotional support from others.	398	2.96	1.256	238	3.02	1.266	160	2.88	1.241
I took action to try to make the situation better.	395	2.94	1.216	236	3.06	1.264	159	2.77	1.125
I tried to see it in a different light, to make it seem more positive.	398	2.68	1.220	238	2.67	1.233	160	2.69	1.204
I tried to come up with a strategy about what to do.	398	2.94	1.254	238	3.08	1.289	160	2.73	1.175
I received comfort and understanding from someone.	396	2.94	1.274	236	2.94	1.265	160	2.96	1.290
I looked for something good in what happened.	399	2.58	1.239	239	2.49	1.233	160	2.71	1.242
I made jokes about it.	398	2.42	1.288	238	2.38	1.270	160	2.49	1.317
I did something to think about it less, such as going to movies…	397	2.90	1.342	237	2.74	1.307	160	3.14	1.362
I accepted the reality of the fact that it happened.	399	3.33	1.334	239	3.39	1.343	160	3.23	1.319

Table 9. continued

	All Students			African American			Mexican American		
	N	Mean	Std. Dev.	*N*	Mean	Std. Dev.	*N*	Mean	Std. Dev.
I tried to find comfort in my religion or spiritual beliefs.	399	2.78	1.472	239	3.09	1.475	160	2.32	1.343
I tried getting advice or helping from other people about what to do.	398	2.87	1.293	238	2.94	1.272	160	2.78	1.322
I questioned or second-guessed myself on whether I caused the event to happen.	399	2.39	1.251	239	2.35	1.192	160	2.44	1.335
I learned to live with it.	398	2.95	1.295	239	3.03	1.304	159	2.88	1.280
I said to myself "this isn't real."	394	2.07	1.100	237	2.12	1.126	157	1.99	1.056
I used alcohol or other drugs to make myself feel better.	396	1.53	.945	236	1.58	.970	160	1.44	.902
I gave up trying to deal with it.	398	1.90	1.105	238	1.89	1.124	160	1.92	1.081
I refused to believe that it happened.	399	1.64	.900	239	1.65	.904	160	1.62	.896
I said things to let my unpleasant feelings escape.	396	2.20	1.155	237	2.22	1.181	159	2.16	1.117
I sought help and advice from other people.	395	2.70	1.280	236	2.76	1.263	159	2.60	1.302
I used alcohol or other drugs to help me get through it.	398	1.47	.874	238	1.48	.835	160	1.45	.930
I criticized myself.	397	2.00	1.144	238	1.87	1.102	159	2.20	1.179
I gave up the attempt to cope.	397	1.66	.884	238	1.60	.907	159	1.74	.844
I expressed my negative feelings.	396	2.60	1.186	237	2.65	1.196	159	2.52	1.168
I thought hard about what steps to take.	397	2.75	1.285	238	2.85	1.264	159	2.60	1.307
I blamed myself for the things that happened.	397	1.73	.985	238	1.63	.918	159	1.89	1.061
Total Mean		2.49			2.52			2.44	

Table 9. continued

	Female			Male			Female African American		
	N	Mean	Std. Dev.	*N*	Mean	Std. Dev.	*N*	Mean	Std. Dev.
I turned to work or other activities to take my mind off things.	234	3.05	1.237	164	2.77	1.221	134	3.01	1.262
I concentrated my efforts on doing something about the situation I was in.	234	2.94	1.187	163	2.89	1.257	133	2.99	1.228
I prayed or meditated.	234	3.01	1.466	164	2.73	1.420	134	3.36	1.400
I made fun of the situation.	232	2.34	1.249	164	2.52	1.294	131	2.37	1.223
I received emotional support from others.	235	3.10	1.297	163	2.76	1.170	134	3.11	1.302
I took action to try to make the situation better.	232	2.91	1.224	163	2.99	1.207	132	3.01	1.281
I tried to see it in a different light, to make it seem more positive.	235	2.65	1.208	163	2.72	1.240	134	2.62	1.213
I tried to come up with a strategy about what to do.	234	2.98	1.262	164	2.88	1.245	133	3.12	1.279
I received comfort and understanding from.	233	3.09	1.346	163	2.74	1.136	132	3.02	1.351
I looked for something good in what happened.	235	2.59	1.249	164	2.56	1.229	134	2.48	1.218
I made jokes about it.	234	2.31	1.223	164	2.58	1.366	133	2.28	1.208
I did something to think about it less, such as going to movies…	235	3.08	1.353	162	2.65	1.288	134	2.93	1.313
I accepted the reality of the fact that it happened.	235	3.41	1.309	164	3.21	1.365	134	3.49	1.273
I tried to find comfort in my religion or spiritual beliefs.	235	2.87	1.509	164	2.66	1.412	134	3.23	1.476
I tried getting advice or helping from other people about what to do.	234	3.00	1.333	164	2.70	1.215	133	3.05	1.333
I questioned or second-guessed myself on whether.	235	2.46	1.291	164	2.29	1.187	134	2.33	1.188
I learned to live with it.	235	3.07	1.274	163	2.82	1.314	134	3.17	1.283

Table 9. continued

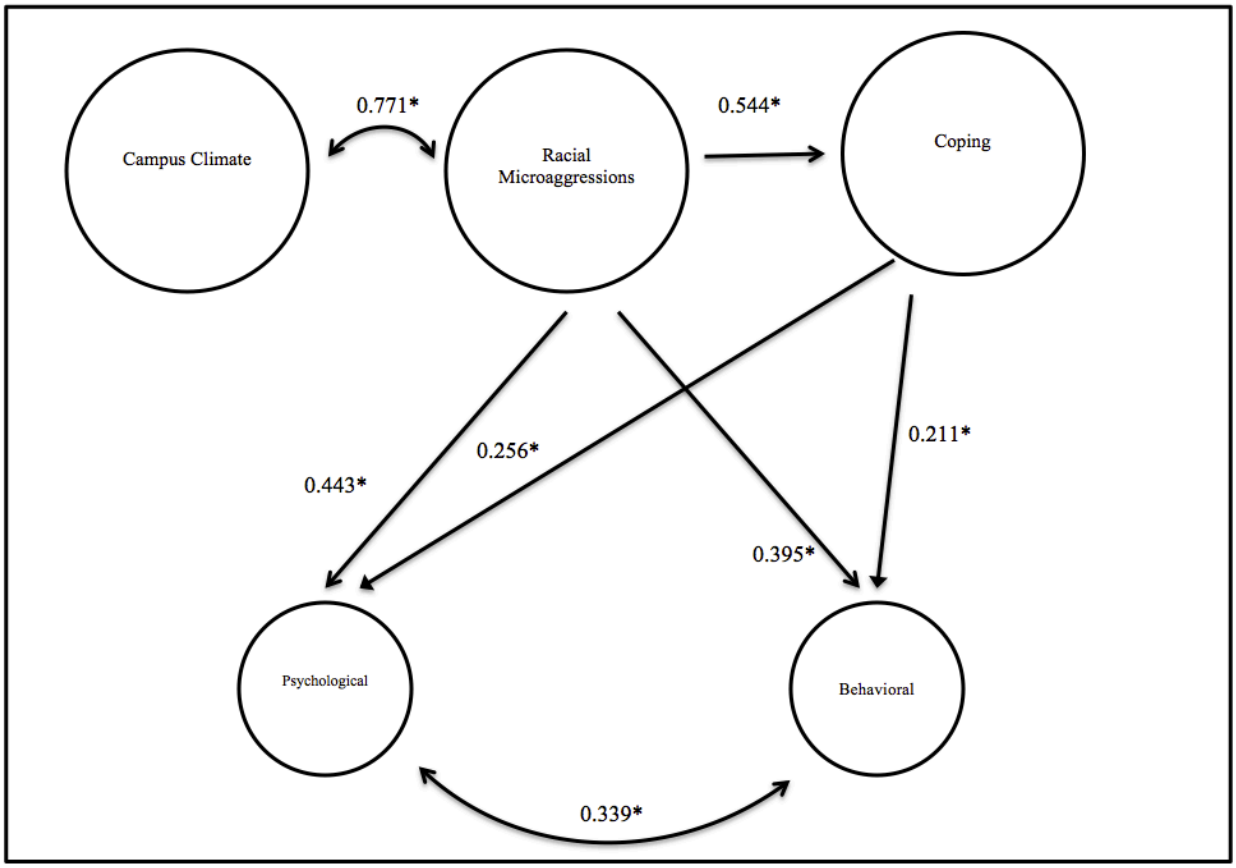
	Female			Male			Female African American		
	N	Mean	Std. Dev.	*N*	Mean	Std. Dev.	*N*	Mean	Std. Dev.
I said to myself "this isn't real."	234	2.18	1.156	160	1.90	.992	134	2.25	1.166
I used alcohol or other drugs to make myself feel better.	233	1.48	.866	163	1.59	1.047	132	1.65	.973
I gave up trying to deal with it.	234	1.94	1.104	164	1.85	1.109	133	2.02	1.155
I refused to believe that it happened.	235	1.66	.888	164	1.60	.918	134	1.70	.893
I said things to let my unpleasant feelings escape.	233	2.20	1.135	163	2.20	1.186	133	2.29	1.166
I sought help and advice from other people.	233	2.81	1.340	162	2.54	1.175	133	2.83	1.327
I used alcohol or other drugs to help me get through it.	234	1.44	.833	164	1.51	.930	133	1.53	.858
I criticized myself.	234	2.07	1.193	163	1.90	1.063	134	1.85	1.107
I gave up the attempt to cope.	233	1.69	.865	164	1.61	.910	133	1.62	.832
I expressed my negative feelings.	232	2.62	1.200	164	2.57	1.167	132	2.62	1.195
I thought hard about what steps to take.	234	2.84	1.344	163	2.62	1.187	134	2.90	1.320
I blamed myself for the things that happened.	233	1.75	.987	164	1.71	.984	133	1.59	.896
Total Mean		2.54			2.42			2.57	

Table 9. continued

	Male African American			Female Mexican American			Male Mexican American		
	N	Mean	Std. Dev.	*N*	Mean	Std. Dev.	*N*	Mean	Std. Dev.
I turned to work or other activities to take my mind off things.	105	2.78	1.256	100	3.09	1.207	59	2.75	1.168
I concentrated my efforts on doing something about the situation I was in	104	3.01	1.326	101	2.86	1.132	59	2.68	1.105
I prayed or meditated.	105	3.03	1.451	100	2.55	1.431	59	2.19	1.196
I made fun of the situation.	105	2.49	1.316	101	2.32	1.288	59	2.59	1.261
I received emotional support from others.	104	2.89	1.214	101	3.09	1.297	59	2.53	1.056
I took action to try to make the situation better.	104	3.13	1.244	100	2.79	1.140	59	2.75	1.108
I tried to see it in a different light, to make it seem more.	104	2.74	1.262	101	2.69	1.206	59	2.68	1.210
I tried to come up with a strategy about what to do.	105	3.03	1.304	101	2.79	1.219	59	2.63	1.097
I received comfort and understanding from someone.	104	2.83	1.144	101	3.17	1.342	59	2.59	1.116
I looked for something good in what happened.	105	2.51	1.257	101	2.74	1.278	59	2.64	1.186
I made jokes about it.	105	2.50	1.338	101	2.36	1.246	59	2.71	1.415
I did something to think about it less, such as going to movies…	103	2.50	1.267	101	3.28	1.386	59	2.90	1.296
I accepted the reality of the fact that it happened.	105	3.27	1.423	101	3.30	1.353	59	3.12	1.261
I tried to find comfort in my religion or spiritual beliefs.	105	2.91	1.462	101	2.39	1.421	59	2.20	1.200
I tried getting advice or helping from other people about what to do.	105	2.80	1.180	101	2.93	1.336	59	2.51	1.265
I questioned or second-guessed myself on whether I caused the event to happen.	105	2.37	1.203	101	2.62	1.406	59	2.14	1.152
I learned to live with it.	105	2.85	1.314	101	2.94	1.256	58	2.78	1.325
I said to myself "this isn't real."	103	1.96	1.056	100	2.10	1.142	57	1.79	.861

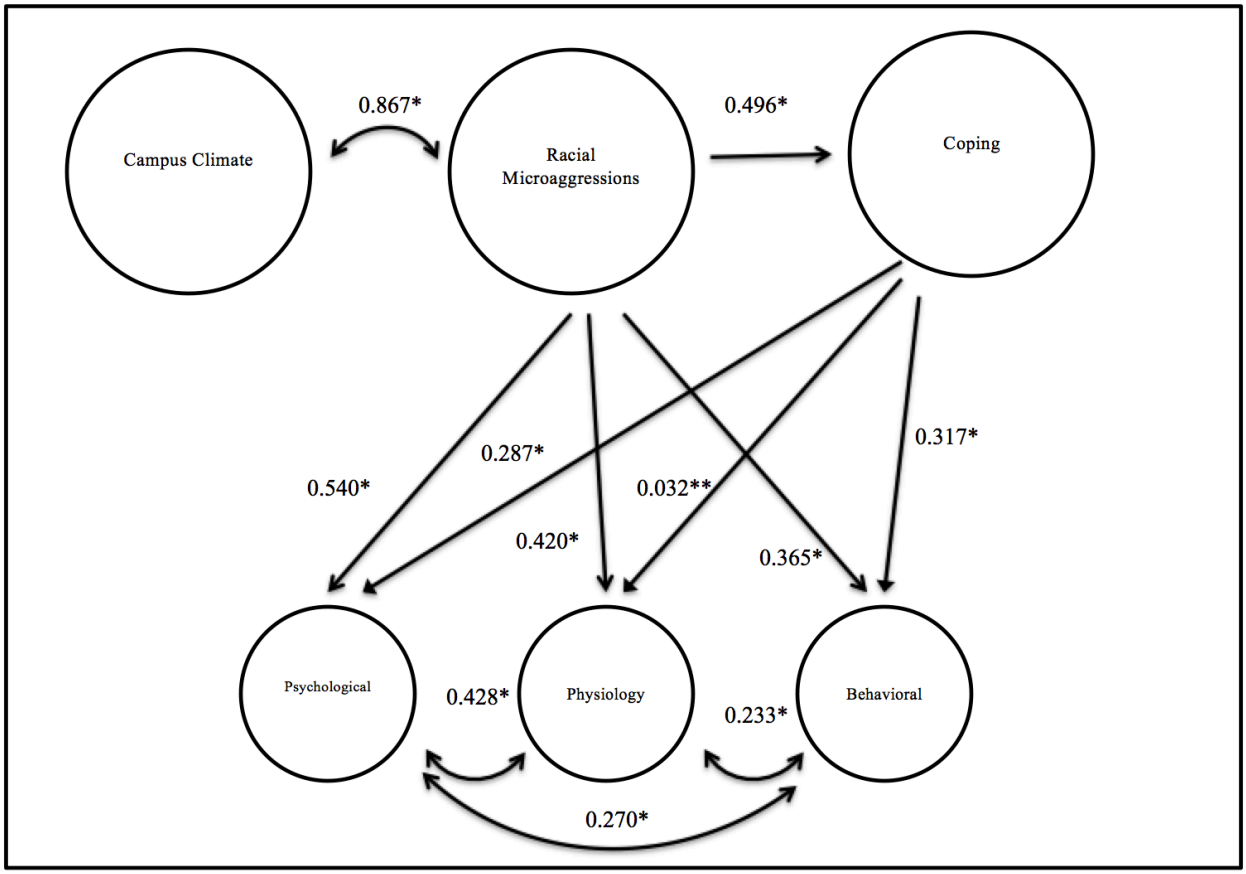
Table 9. continued

	Male African American			Female Mexican American			Male Mexican American		
	N	Mean	Std. Dev.	*N*	Mean	Std. Dev.	*N*	Mean	Std. Dev.
I used alcohol or other drugs to make myself feel better.	104	1.50	.965	101	1.26	.643	59	1.75	1.168
I gave up trying to deal with it.	105	1.73	1.068	101	1.83	1.030	59	2.07	1.158
I refused to believe that it happened.	105	1.58	.918	101	1.61	.883	59	1.63	.927
I said things to let my unpleasant feelings escape.	104	2.13	1.199	100	2.07	1.085	59	2.31	1.163
I sought help and advice from other people.	103	2.67	1.175	100	2.77	1.362	59	2.32	1.151
I used alcohol or other drugs to help me get through it.	105	1.42	.806	101	1.33	.789	59	1.66	1.108
I criticized myself.	104	1.88	1.100	100	2.37	1.244	59	1.92	1.005
I gave up the attempt to cope.	105	1.58	.998	100	1.79	.902	59	1.66	.734
I expressed my negative feelings.	105	2.70	1.202	100	2.61	1.214	59	2.36	1.079
I thought hard about what steps to take.	104	2.78	1.190	100	2.76	1.379	59	2.34	1.139
I blamed myself for the things that happened.	105	1.67	.947	100	1.95	1.067	59	1.78	1.052
Total Mean		2.46			2.49			2.34	



* Path statistically significant $p < 0.05$

Figure 4. Racial Battle Fatigue Model for African American Students



* Path statistically significant $p < 0.05$
** Path not statistically significant

Figure 5. Racial Battle Fatigue Model for Mexican American/Other Latino Students

CHAPTER 5

DISCUSSION AND IMPLICATIONS

The election of President Barack Obama provided an opportunity for the US to discuss and confront its history of racism and violence against People of Color. While many Whites claimed that a "postracial" society was upon us, we simultaneously witnessed a number of African American males murdered in high profile cases in Ferguson, Missouri and New York City. Explanations of the killings in media and by the perpetrators were often rooted in "color-blind" explanations, yet People of Color and some Whites evoked the long history of racism and White supremacy of the US to explain the murders. The murders of Trayvon Martin, Jordan Davis, Eric Garner, Michael Brown, Tamir Rice, and fellow African American men and boys exposed racial tensions that were always present, often expressed by People of Color, but obscured by "color-blind" ideologies. The murders did not occur on college campuses, but college students and faculty linked the violence to their everyday experiences on college campuses. Students expressed that they often felt unsafe on campus, discriminated against, and often meant to feel unwelcomed. In particular, African American college students expressed that they could be the next Eric Garner or Michael Brown (Mangan,

2014). The murders raised many questions about societal racism, but they also provoked students to publicly question racism on campus, safety, campus policing, and the values of higher education institutions (Mangan, 2014). A result of the killings and decisions not to prosecute the officers involved, students held rallies and protests both on campuses and online. The events in Ferguson and New York sparked a renewed resurgence about discussions of campus racial climate and safety of historically underrepresented groups. The descriptions by students and faculty of their perceptions and experiences on campus reflect the overt discrimination and subtle racism that exist on campuses, but also potential outcomes when people act on stereotypes they carry about Black men and fellow historically underrepresented groups.

Investigating the impact of racial microaggressions and how students cope with overt and subvert racism is imperative as the narrative of a "postracial" society becomes more imbedded in the cultural milieu of the United States and the events in Ferguson and New York that had ripple effects on campuses. The last 3 decades of research in higher education and health psychology has seen growth in the number of studies that have examined racial microaggressions. Researchers have named and identified racial microaggressions as subtle in delivery, yet racial microaggressions are still detrimental to the academic and health well-being of people (Solórzano et al., 2000; Sue, 2010). The research on racism in higher education and sociology of education has highlighted deficiencies in postsecondary institutions related to campus climates and cultures. Concurrently, a narrative about the United States becoming a more "postracial" society has emerged that conflicts with the very real and everyday concerns of minoritized communities that express that racism endures, but often in a different form than overt

racism. People of Color have expressed and research has demonstrated that racism has impacts beyond lost educational opportunities, including lost job opportunities, and poor housing situations to include deleterious health impacts (Carter et al., 1999; Soto et al., 2012). Still many questions remain unexplored, under-explored, or are currently being explored. The increased focus on campus climates, cultures, racism, and their impacts on the health of students suggests the need for additional and refined empirical evidence.

The purpose of this dissertation sought to respond to an empirical need by examining an under-researched area in higher education, namely, researching the effects of racial microaggressions on students' psychological, physiological, and behavioral stress responses and how students cope with such stressors. Existing research and personal narratives have already established that Students of Color experience racism on campus and that there are some harmful impacts (Hurtado, 1992; Swim et al., 2003), yet the research has not adequately addressed the complicated interrelationship of various health responses and how students cope with racial microaggressions (Johnson et al., 2014). Understanding students' stress responses and coping behaviors with "postracial" racism can serve to illuminate how racism operates. Furthermore, this research may inform college campus administrators and practitioners on how they can better prevent racial microaggressions and respond to students who experience racial microaggressions.

In this study, I investigated how racial battle fatigue manifests itself for African American and Mexican American students. A questionnaire asked how students reacted psychologically, physiologically, and behaviorally to perceived racial microaggressions on college campuses. Moreover, I investigated how students cope with racial microaggressions. Questions were asked about how students cope with racial

microaggressions they experience on campus. To understand how the concepts in this dissertation relate, I utilized literature in higher education, sociology, and health psychology. The majority of literature in higher education only addresses how students react to racial microaggressions. In tandem, we need to know how students cope with racial microaggressions. That way institutions can provide services to students. In answering the questions, I was able to assess the racial battle fatigue theoretical framework and to investigate how African American and Mexican American students cope with the everyday racial microaggressions on so-called "postracial" college campuses.

This dissertation accomplishes two main objectives. First, it quantitatively assesses racial battle fatigue by testing the model using SEM. Second, the dissertation investigates and reports the most utilized coping strategies students employ stress responses of racial battle fatigue. With the assistance of prior research in higher education regarding persistence and academic factors as related to general stress, race-related stress, and perceptions of campus climate, this dissertation fills the gap in higher education literature pertaining the "postracial" experience of African American and Mexican American students. The dissertation helps researchers and practitioners better understand racial battle fatigue and how students are impacted and react to racial microaggressions.

This chapter includes a discussion of the findings, implications, and limitations. The discussion of findings is arranged in the order of the questions as they build on each other and illuminate the experiences of minoritized students with racial microaggressions and racial battle fatigue. From perceptions of campus racial climate all the way to coping

strategies are discussed. In addition, the chapter will discusses the implications for the health of students and implications for higher education including those for researchers and practitioners who are concerned with the higher education experience and outcomes of Students of Color. Finally, the chapter concludes with limitations of the dissertation and directions of my future research. The dissertation highlights some of the post-secondary experiences of Students of Color in the 21st Century and how racist events may impact students and how they respond.

Question 1: Perceived Campus Racial Climate

When investigating the perceived campus racial climate, African American and Mexican American students rated that they experience racism on college campuses (see Table 5). This findings is not surprising considering the vast literature, life experiences, and social media posts from Students of Color about hostile college campuses (Harper & Hurtado, 2007; Hurtado, 1992;). When investigating the places that racist events occurred most often, participants rated the classroom and residence halls the locations where racist events often occur. In both the classroom and residence halls, one would expect that you should feel safe. One setting is a learning community and the other is a living community. Universities regularly promote their safe learning environments and the safety of the living environments they provide to students. Results demonstrate though that students do not feel safe in these settings and this aligns with previous research that demonstrates similar findings. Prior research has demonstrated that the classroom is often the place where Students of Color experience a great deal of racism (Johnson et al., 2014; Swim et al., 2003). Part of this is due to White professors who do

not challenge racism in the classroom, and also when conversations about race and ethnicity are raised, Students of Color are asked to speak for their entire racial or ethnic group (Swim et al., 2003). Furthermore, White students are often meant to feel safe as opposed to Students of Color in so-called safe spaces (Cabrera, Watson, & Franklin, in press; Leonardo & Porter, 2004). Scholars have argued that safe-spaces are often where color-blind rhetoric is prominent and Students of Color are often hurt in these settings (Leonardo & Porter, 2010). In residence halls, students live and learn, but we know that acts of racism occur in these settings. Universities have responded to hostile living climates by creating living learning communities that are often focused on certain cultures (Inkelas & Weisman, 2003). Though some universities have created such living and learning communities and some research demonstrates the benefits of such communities (Inkelas & Weisman, 2003; Inkelas, Daver, Vogt, & Leonard, 2007), universities can do more regarding safety in residence halls. Students rated that just walking across campus is when racist events occurred in postsecondary institutions. The ratings of participants speak to the differing climates that a student can experience on campus just walking across campus (Musesus & Jakaymar, 2012). A student may begin their day in a racial/ethnic center or organization space and go to a class that is racially hostile and then walk by a group of students who are reenacting something they saw on TV that denigrates People of Color, and finally end their day at a campus event celebrating the accomplishments of one of their fellow Students of Color. The varying climates on campus speak to how different the experience can be for a student depending on where they are and the time of day. Negative and positive events on campus contribute to the overall campus climate for the student (Harper & Hurtado, 2007;

Solórzano et al., 2000). Racist events occur to varying degrees in different parts of campus and this speaks the varying campus climates that a students can experience as they walk across campus (Musesus & Jakaymar, 2012).

Participants reported that the groups that mistreated African Americans and Mexican American students most frequently were White faculty, students, and staff compared to minority faculty. This finding is supported in the literature that finds Students of Color often report much of the discrimination they experience on campus coming from White groups (Johnson et al., 2014). Participants overwhelmingly rated that their student peers are the ones who make the most disparaging remarks directed at the participants. Finally, the students rated that there was racial insensitivity in their college curriculum and that they witnessed racial epithets and racial discrimination on their campuses. Musesus and Jakaymar (2012) critiqued that hostile campus racial climates are actually embedded within the culture of higher education institutions. While the climate and the culture are different aspects of a university environment, they are related to each other in that a hostile climate is a feature of the culture of an institution. Hostile and unwelcoming climates are something that some Students of Color come to expect, but a college campus is often the first time that a student of color is in an environment that provides constant racial discrimination (Musesus & Jakaymar, 2012; Pounds, 1987). A hostile climate can have many impacts for Students of Color that are not merely academic such as retention, persistence attitude, and GPA implications (Johnson et al., 2014; Wei et al., 2001), but also negative perceived health outcomes (Hill et al., 2004; Smith 2009a, 2009b).

Additionally, students expressed that they experience racial microaggressions and

exhibit specific stress responses due to racial microaggressions. The types of racial microaggressions and stress responses varied across groups. Generally African Americans rated racial microaggressions happening more often than Mexican American and other Latino students. When investigating gender, both groups rated that they experience racial microaggressions. Males experienced racial microaggressions such as discrimination and dishonesty more often, while females rated they are treated with less respect and received poorer service more often. Overall, the campus climate for African American and Mexican American students was not indicative of a welcoming environment.

Welcoming climates is interesting to think about in relation to other societal settings. Campuses and other settings in society may seem similar, but the reasons people are on campus are often different from why they are in a public place. Additionally, the time that people are on campuses as opposed to other place varies. Campuses have historically been places about academic inquiry in which issues are raised, discussed, and debated. Often, this may result in racial microaggressions as people express their opinions about race, racism, and/or draw on stereotypes. In other societal settings, such as the grocery store, racial microaggressions may take place, but you can easily leave that setting and/or your time there is limited. It is much more difficult and burdensome to transfer to another institution of higher education. Post-secondary institutions are unique in society, but they do have characteristics that differentiate them from other settings.

Question 2: Components of the Racial Battle Fatigue Model

To understand the relationship of racial battle fatigue with campus racial climate and coping, the observed variables needed to be tested to see if and to what degree they were associated with each theoretical construct. First, to test the association of the observed variables, exploratory factor analyses were conducted in which the variables were free to associate with any factor. After subsequent exploratory factor analyses were conducted, observed variables were eliminated that did not associate with any factor. When it was clear that a set of observed variables loaded on the theorized constructs, confirmatory factor analyses were conducted in which the observed variables were assigned to the factors or theoretical constructs. Observed variables that were initially in the analysis and that were present after the exploratory factor analyses were narrowed down to a few variables for each construct. Exploratory and confirmatory factor analyses were informed by the theoretical relationship of racial battle fatigue, campus climate, and coping. Theory also informed the grouping of variables. Statistical tests assessed to what degree items were related to each other based on the responses of the participants.

The number of items for each latent variable was reduced dramatically, but does not necessarily represent all of the items that make up each latent construct for every person. Individuals vary in how they respond to racism and therefore, it is likely the case for each latent variable might look very different if individual people or smaller groups were investigated. This dissertation investigates how the larger racial/ethnic groups are similar and different. It also may be the case that questions that were not asked on the questionnaire may contribute to each latent factor. This is one of the reasons that the variance accounted for is not 100%. The observed variables that made up each latent

variable after confirmatory factor analyses were included in the final analysis. The racial microaggressions latent variable included five items, campus climate had four items, psychological had six items, physiological had four items, behavioral had three items, and coping included four items. Most of the latent variables when investigated separately demonstrated a high Cronbach's alpha which means they were highly internally consistent or that the items related well to each other. The Cronbach's alpha was not so high that it would be suggested to eliminate additional items, but the high Cronbach's alpha is not surprising as correlations among the individual items were investigated and they demonstrated high correlations.

To assess the confirmatory factor analyses, the RMSEA, CFI, and SRMR were reported for each of the latent variables to ensure an adequate measurement model or how well the observed items fit the latent variable. The six latent constructs demonstrated adequate to strong fit indices. Additionally, the correlations of the factors were investigated to assess the relationship among the factors. Many of the factors were strongly correlated indicating some relationship. The correlation among any of the factors was not so strong though that they could be considered single factors. The strong correlation is an indicator that the factors are related to each other and this is an important finding for higher education scholars that study racial microaggressions, racial battle fatigue, and coping among students. Racial microaggressions were highly correlated with perceptions of campus racial climate, which is expected since it can be concluded that the climate will depend on how well someone is treated. Additionally, the three stress responses were highly correlated with each other indicating that they have some relationship with each other. Interestingly, coping was strongly correlated to all of the

latent factors except physiological stress responses. Additionally, physiological stress responses were not highly correlated with racial microaggressions and campus racial climate. These low correlations may indicate that students may not have the coping strategies to deal with physiological stressors on campus that related to racism. Literature demonstrates that racism does impact the physiological health of historically underrepresented people, but students might not recognize physiological stress responses because often they can only be assessed with clinical tests. It is possible that we need better measures of physiological stress as they relate to race-related stress and racial microaggressions.

There are other methods of getting at physiological stress that were beyond the scope of this dissertation. Particularly in health-related areas, physicians and researchers are utilizing item response theory (IRT) and computer adaptive testing (CAT) to better understand and pinpoint physiological outcomes. These are often in the form of tests on a tablet or computer taken while in the waiting room. CAT is also utilized in education setting specifically in computerized standardized tests. CAT draws questions from a group of questions that is most appropriate for a given responder and does this in multiple iterations. Therefore, each test is individualized to a persons physiological stress response or item being tested.

Question 3: Racial Microaggressions

The sample in this dissertation expressed that the campus racial climate was somewhat hostile and the perceived campus climate varied from different groups. Individuals varied in how they experience the campus racial climate and this finding is

supported by prior research (Rankin & Reason, 2005). When visually inspecting the means and standard deviations of campus racial climate and racial microaggressions variables, there was small difference between the two groups. To investigate if there was a statistically significant difference, an Independent Samples *t*-test was conducted to understand the difference between African American and Mexican American students. The *t*-test assists in comparing whether two different groups have difference average values on a given questions. The independent samples *t*-test is important because research has recognized that student groups may have similar experience with racial microaggressions, but this is not always the case. Furthermore, students experience racial microaggressions differently. Therefore, a microaggression attacking a person's language will likely be relevant to a Mexican American or Latino student to a greater degree than to an African American student because of the antibilingual bias against Latinas/os. The antibilingual bias is more closely connected with Mexican American, Latinos, and fellow bilingual groups.

The independent samples *t*-test on the five racial microaggressions variables found that two of the variables were statistically different for African Americans and Mexican American students. The variables included receiving poorer service and having experiences that are racially discriminatory in nature on their respective campuses. The mean scores for African Americans were greater for each question and two of the variables were statistically different. The mean difference suggests that African Americans are impacted to a greater degree by receiving poorer service and having experiences that are racially discriminatory in nature in this sample. This suggests that racial microaggressions can impact students differently. The three other racial

microaggression variables were not statistically different from each other for both groups suggesting that racial microaggressions can also impact students similarly.

This finding is important as racial microaggressions are becoming more prominent in discussions of racism on university campuses. It is promising that universities are at least having some discussions about racial microaggressions, but a single solution to address racial microaggressions is not realistic or even optimal. Racial and ethnic groups have been labeled with stereotypes and tropes that attack and demean people and groups, but the stereotypes are not all the same. Therefore, racial microaggressions against African Americans may not have the same impact on Indigenous populations or Asian populations, but they still are meant to hurt an individual or group. Campus practitioners and researchers need to be mindful of these differences when assessing microaggressions and the campus climate as there is not a one all approach to measure such occurrences. Different strategies, possible programs, and educational interventions need to be created to address the different racial microaggressions based on stereotypes.

Additional research has been conducted to investigate the gendered microaggressions and microaggressions against LGBTQ students that may have the similar effects, but be carried out differently from racial microaggressions (Nadal, 2013; Solórzano et al., 2000; Sue, 2010). University administrators and researchers should be mindful that microaggressions could be used to attack the multiple identities of people and not just race. Therefore, a single program or approach is not appropriate to address racial, gender, LGBTQ, and other types of microaggressions.

Finally, racial microaggressions and macroaggressions are often confounded and

discussed, as if they are the same. While they have similar impacts on the psychology and health of individuals, microaggressions are much more difficult to prepare for and cope with, as there is often guess work done to assess whether a racial microaggression has occurred. As a result, since microaggressions can be thought of as unconscious slights, they may have a greater impact on stress responses for People of Color.

Question 4: SEM Racial Battle Fatigue Model

To assess the differences in racial battle fatigue between African American and Mexican American students, a SEM model was proposed that accounts for perceptions of campus racial climate, racial battle fatigue, and the coping mechanisms that students employ. Results demonstrate that the data fit the proposed model with adequate to good fit indices. Reflective of the literature, findings demonstrated that there is a strong correlation between perceptions of campus racial climate and racial microaggressions (Allen & Solórzano, 2001; Harper & Hurtado, 2007; Museus & Jayakumar, 2012; Solórzano, Allen, & Carroll, 2002). This result is expected as racial microaggressions create perceptions of hostile campus climates for those that are on the receiving end of racial microaggressions. Prior research shows that Students of Color that report hostile campus racial climate report more racial microaggressions than individuals that do not report hostile campus racial climates (Hurtado, 1992). The correlation between the two in this study and prior studies demonstrates that campuses need to seriously address racial microaggressions if they value having a welcoming campus racial climate. Furthermore, this finding has implications for recruitment, retention, and graduation because students express that the campus climate impacts their retention and attachment to a university

(Locks, Hurtado, Bowman, & Oseguera, 2008; Museus & Jayakumar, 2012; Yosso, Smith, Ceja, & Solórzano, 2009).

Additionally, the SEM model established that there is a relationship between racial microaggressions and the stress responses of the racial battle fatigue framework. For African American students, racial microaggressions contributed to psychological and behavioral stress responses, but the relationship was not significant for physiological stress. The significant relationship between racial microaggressions and psychological and behavioral stress responses is well supported in the literature (Carter, 2007; Clark et al., 1999; Contrada et al., 2000). Other literature has demonstrated that there is a significant relationship between racial microaggressions and physiological stress responses (Clark et al., 1999; Kreiger, 1990; Kreiger & Sidney, 1996; Williams & Neighbors, 2001; Utsey et al., 2002), but this sample did not exhibit similar characteristics. It is possible that the measure of physiological stress was not precise enough to capture physiological stress or it may be the case that participants were not able to remember or notice how they reacted physiologically. The results do indicate that racial microaggressions do take a toll on African American participants psychologically and alter their behavior on college campuses. Prior research has not demonstrated these findings with college students utilizing the racial battle fatigue framework.

In the model for Latino/a students, the relationship between racial microaggressions and the three stress responses was significant. Psychological and behavioral stress responses were impacted to a greater degree than physiological stress responses. The relationship between subtle racism and psychological stress is supported for Latinos and Mexican American students. Furthermore, research demonstrates that the

behaviors of Latinos and Mexican American students can be impacted by experiences of racism. Saldaña (1995) established that Latina/o students reported greater psychological stress associated with their marginalized status as an ethnic minority. Moradi and Risco (2006) found that perceived discrimination is linked to increased psychological distress for Latinas/os, and other research has linked discrimination to depressive symptoms for Latinos (Greene, Way, & Pahl, 2006). Hurtado and Carter (1997) demonstrated that experiences with perceived racism impacted the psychological well-being for Latino students and as a result their sense of belonging to an institution. Prior research has also established how Latina/o students report feeling less comfortable than White peers on college campuses (Gloria & Pope-Davis, 1997; Hurtado & Carter, 1997). Reynolds, Sneva, and Beehler (2010) showed how race-based stress negatively impacted the academic motivation of Latina/o and African American students who were members of student organizations like MEChA and the Black Student Union. It is argued that students in racial/ethnic organizations provide social support against negative aspects of campus life that is not provided to other African American and Latinos students who are not members of such organizations. Reynolds and fellow authors (2010) demonstrated that these organizations only provide a limited buffer. If these students are struggling with the effects of racial microaggressions, it could be argued that it may be even worse for nonmembers of racial/ethnic organizations. Reynolds et al. (2010) appear to support the findings of this dissertation that race based stress negatively impacts Students of Color. The direct effect of racial microaggressions predicting physiological stress was less than the other direct effects, but research demonstrates that the physiology of a person can be impacted by racism (Brondolo, Gallo, & Myers, 2009; Ryan et al., 2006).

Question 5: Coping with Racial Battle Fatigue

Coping with stress is important for alleviating the negative results of stressors on the mind and body (Lazarus & Folkman, 1984). After accounting for adaptive coping strategies, the findings of this dissertation demonstrate that some coping mechanisms can alleviate some of the negative impacts of racial microaggressions in the racial battle fatigue framework. Specifically, the coping strategies used in the final model were receiving emotional support, getting comfort from others, getting help about what to do, and and seeking advice. For African American students, coping resulted in a reduction of the effect of racial microaggressions on psychological and behavioral stressors. Before accounting for coping, the relationship between racial microaggressions and physiological stress was not significant. After accounting for coping, physiological stress was significant. The nonsignificant path prior to accounting for coping suggests that there is not a relationship between racial microaggressions and physiological stress, but we know from previous research that an association exists (Clark et al., 1999). Experiences with overt and subtle racism can cause physiological reactions or participants (Kreiger, 1990; Kreiger & Sidney, 1996; Williams & Neighbors, 2001). It may be the case that participants did not recognize possible physiological stressors in the questionnaire. Sometimes, younger people do not pay attention to their health as much as older individuals who typically have more negative health experiences as they age. Additionally, older individuals typically see physicians more often as they can afford health insurance and they require health checkups. Therefore, the participants in this study may not even be aware of possible health conditions or physiological stress responses or physical conditions that are not even considered a problem. It might also be

the case that participants did not experience any of the physiological stressors on the questionnaire. Finally, measuring physiological stress can be very difficult and identify and therefore, that might be why a relationship was not present prior to accounting for racial microaggressions.

For Mexican American and Latina/o students, racial microaggressions had a significant relationship to psychological, physiological, and behavioral stress responses prior to accounting for coping mechanisms. After accounting for coping, psychological and behavioral stress was still significant, but the effect on psychological stress was substantially lower indicating partial mediation. The direct effect of behavioral stress after accounting for coping was only slightly lower indicating that coping partially mediated the impact of racial microaggressions. The difference though was not that large when comparing the before and after impact on behavioral stressors. When investigating the impact of racial microaggressions on physiological stress prior to coping, a large direct effect is present indicating that there is a toll on a person's body as a result of racial microaggressions. After accounting for coping, physiological stress is not significant indicating that coping fully mediated the relationship between racial microaggressions and physiological stressors. While this seems very promising, it should also be taken with caution because there might be physiological responses not on the questionnaire or included in the factor that are impacted by racial microaggressions.

The differences between coping for African American and Mexican American students raises multiple issues that are discussed in the literature. First, coping helped alleviate physiological stress for Mexican American students, but it did not for African American students. This raises the question as to why these groups are different. First, it

may be a result of the sample size. The Mexican American group had a smaller sample size that may contribute to different results. Second, the Mexican American/other Latino group is a very heterogeneous group. It is comprised of Mexican American students and other Latino students who likely have very different racialized and ethnic experiences on campuses due to phenotype, language, ethnic origin, and other characteristics that stereotypes are based upon (Bonilla-Silva, 2004). Historically, Mexican Americans and Latinos have been categorized as White. African Americans on the other hand may have a more homogeneous experience (Bonilla-Silva, 2004). This study did not look at generational status of participants. This adds to the complexity and heterogeneous status of the Mexican American samples. Coping strategies differ based on generation status of Mexican Americans (Cervantes & Castro, 1985). Finally, some research demonstrates that Latinos do not report as many racial microaggressions as African Americans and this may be a reason that coping helps mediate physiological responses because there are fewer microaggressions to address (Solórzano, 2000).

These finding are interesting because they suggest that racial microaggressions impact Students of Color differently. This finding is similar to previous research that different groups experience some common racial microaggressions and other microaggressions that are specific to a certain group such as gendered microaggressions or microaggressions attacking a person's language.

Additionally, the results are interesting because coping differs for African American and Mexican American students when experiencing racial microaggressions. Coping helps alleviate the negative impact of racial microaggressions. All of the coping mechanisms used in the model were adaptive rather than maladaptive which is consistent

with prior research. The coping mechanisms that were part of the model could also be aligned with social support and a strong social network. Prior research has demonstrated that social support is important to the success and persistence for People of Color in higher education setting (Villalpando, 2000). The overall findings regarding coping speak to the need for universities to consider the needs of all of their student populations. Universities can provide workshops and services that recognize that coping matters. Additionally, universities and colleges need to recognize that Students of Color may not always interact with White peers because they need social support that reflects their background and experiences. Though it may be easier and/or cheaper, there is not a one size fits all policy or program.

Implications for the Health of Students and Campus Constituents

This dissertation investigated the relationship of racism and health within the postsecondary context with African American and Mexican American/Latino students who are living in the so-called "postracial" era. The findings of this study are supportive of previous literature that found experiences with discrimination and racism can negatively impact the physical and mental well-being of People of Color. This study makes a contribution to the higher education literature that has examined health and racism at the campus level to a limited degree. Specifically this dissertation demonstrated that the psychological, physiological, and behavioral well-being of students is impacted by racial microaggressions for African American and Mexican American/Latino students. The findings of this study have implications for the health of students on college campuses today.

The health of students on campuses can be impacted in numerous ways. Scholarship discusses health of students in terms of physical and mental health. Often the health of students can be impacted by the choices of the individuals and environmental factors. While health is generally conceived of as relating to what individuals eat and how active a person is, environmental factors can contribute to the health of students. Environmental factors in higher education settings are often located within the campus ecology literature. While there are limitations to the campus ecology literature (Cabrera, Watson, & Franklin, in press; Renn, 2003), it is useful when thinking about health of students can be negatively impacted by hostile campus racial climates. Furthermore, Bronfenbrenner's (1994) ecological systems theory is useful when conceptualizing how an individual act or group of racist activities can have a ripple effect across campus negatively impacting perception of the campus racial climate. This dissertation highlighted that African American and Mexican American/Latino students described their campus climates as less than welcoming. When investigating how racial microaggressions impact the psychological, physiological, and behavioral stress responses, a relationship exists. Specifically, more experiences with racial microaggressions predict more experiences with stressors that include physiological, physiological, and behavioral stress responses. The relationship varies for African American and Mexican American/Latino students, especially with physiological variables, but the relationship still exists for psychological and behavioral stressors (see Tables 4 and 9). The entirety of the model encompasses and accounts for the racial battle fatigue framework that was informed by research in health psychology and social psychology.

Within the racial battle fatigue framework, racial microaggressions theoretically impact three types of stressors. This study found that there is an association among racial battle fatigue components that were only previously theorized. Additionally, this dissertation demonstrates that coping mechanisms may contribute to alleviating the impact of racial battle fatigue.

Implications for health of Students of Color and fellow campus constituents are numerous if universities do not proactively address racial microaggressions. While this dissertation did find a relationship in the racial battle fatigue model, coping mechanisms did not fully meditate the impacts of racial battle fatigue. Therefore, it is the case that Students of Color will still be impacted to some degree by racial microaggressions. This calls for students to be better equipped with coping mechanisms and strategies to combat racial microaggressions, as racism is not going away anytime soon (Alexander, 2012; Doane & Bonilla-Silva, 2013; Feagin, 2012; Wingfield & Feagin, 2013).

Implications for Higher Education

The findings of this dissertation suggest that racial battle fatigue and racial microaggressions should be taken seriously and addressed by higher education practitioners and incorporated into future analyses of researchers. In addition, the findings demonstrate that African American and Mexican American students likely have a very different postsecondary experience than their White peers. The findings of this study coupled with previous literature on academic outcomes and health outcomes as a result of racial microaggressions in postsecondary settings seriously challenge the dominant narrative about postracialism and equal opportunity in higher education

settings. These disturbances in their educational journey have the potential to lead to negative academic outcomes (Harper, 2012; Johnson et al., 2014). Despite hostile campus racial climates and constant racism, African American and Mexican American/Latino students persist and graduate from colleges and universities, but their pathway is consistently interrupted and barriers are constructed (Harper, 2012). Too often, African American and Latino students are blamed for poor academic outcomes while universities receive little to no blame. Instead, universities need to be held accountable for their hostile and unhealthy environments that are rife with racial microaggressions. Since administrators are admitting students and asking them to spend valuable resources at the institutions, those same administrators and universities need to provide healthy living and learning environments for all students. There is not enough critical inspection of institutional values and the culture of universities that largely ignore racial microaggressions. The problems analyzed and found in this dissertation is with the culture of higher education that enables racial microaggressions and resulting racial battle fatigue to persist and go unchallenged (Museus & Jayakumar, 2012). Healthy and qualified historically underrepresented Students of Color are being admitted to colleges and universities across the country and they are being placed in racially toxic environments. Universities are not meeting their own self-proclaimed standards of providing a safe and welcoming environment (see any university mission statement). The health of students as a result of racism on campus and feelings of exclusions often go unaddressed by campus leaders that may have the ability and resources to address the climate and culture of their institutions.

Before students set foot on campus, the application process that occurs may

contribute to campus racial climate and racial microaggressions. Carbado (2013) describes the intraracial diversity decisions that admissions officers can make when accepting and declining admissions of students. Carbado (2013) argues that admissions officers essentially have free rein to construct an incoming class and make decisions about what types of racial/ethnic characteristics they are looking for in students. Using personal statements and other demographic information, "admissions officers have significant leeway to make intraracial choices among students with the same group to decide which ones are likely to perform the diversity benefits the school seeks to promote" (p.1156). Therefore, an admissions office may admit students who adopt White ideologies or a diverse student body that can challenge racial and ethnic stereotypes. Carbado (2013) concludes that more needs to be known about how intraracial admissions are made and the impact of their decisions because they are "largely free to construct race and the racial body of a class" (p. 1182).

Intraracial diversity admissions decisions have numerous implications, but there are some that are specific to this dissertation. First, intraracial diversity admissions decisions could be used to either keep the status quo regarding campus racial climate or to challenge hostile postsecondary climates. Admitting students with strong racial identities that also challenge stereotypes may serve to change the culture and climate of an institution. Secondly, admissions officers may admit students who can adequately cope with racial microaggressions or they may look for students who will likely not be aware of microaggressions. If an admissions committee is interested in combating racial microaggressions, they may select Students of Color with strong racial/ethnic identities that also do not conform to racial/ethnic stereotypes. Such Students of Color would

likely be able to cope with racial microaggressions, challenge the assumptions of racial/ethnic groups, and challenge students who commit racial microaggressions. This may address White students and faculty who consistently commit racial microaggressions based on stereotypes. An admissions committee that is not interested in challenging the status quo of campus racial climates may admit students who are not aware of racial microaggressions and have essentially adopted a White racial ideology. Such a student body may do little to change the culture of an institution and challenge racial microaggressions. To address racial microaggressions admissions officers may seek to admit students who have a strong racial identity, but also recognize that race is only one factor of their identity. Additionally, admissions officers may seek students that also have a lot of cross-racial interactions. Carbado (2013) raises important considerations about the role of admissions in the constructing the campus racial climate and culture. If institutions leave admissions to individualized review, there is little they can do to shape the climate and culture of an institution because it is likely that admissions officers will act on their own to define diversity. Higher education institutions can do more via the admissions process to help address institutional climate while still adhering to affirmative action decisions of the Supreme Court.

Prior research has demonstrated that stress negatively impacts the academic outcomes for all students, regardless of race, ethnicity, class, and other factors (Johnson et al., 2014). African American and Latino students and fellow students from historically underrepresented groups face additional hurdles within postsecondary settings that can impede their academic progress and success. This is not to say that all African Americans and Latinos have the same experience on postsecondary campuses, but too

often they encounter barriers that their White peers do not face and universities do not recognize especially when implementing policies and programs meant for the larger campus and/or more targeted programs for Students of Color (Harper, Patton, & Wooden, 2009; Rankin & Reason, 2005; Milem et al., 1998). There are two main approaches that higher education institutions can take to address hostile climates. First, they can create opportunities to disrupt Whiteness. That way White students, faculty, and staff are more aware of their privilege. Second, universities need to address the immediate needs of Students of Color as the universities try to address hostile climates.

Disrupting Whiteness

Programs are often created with the dominant student population in mind with little regard for the experiences of Students of Color (Harper et al., 2009; Museus & Jayakumar, 2012). A color-blind approach to campus programming and policies is harmful and unrewarding for Students of Color because they have dissimilar academic and social experiences on campuses that are often rooted in racism and discrimination (Leonardo & Porter, 2010; Swim et al., 2003). Higher education practitioners can utilize the findings of this study along with other campus racial climate research to create race conscious programs for Students of Color, but also programs for White students that help address and dispel prevailing negative stereotypes of Students of Color that lead to racial microaggressions and resulting racial battle fatigue. University policy makers can also create opportunities for Whiteness to be disrupted. Universities should encourage and develop more moments in which White students can participate in race conscious programming. The same can be created for faculty. Therefore, this might look like

disrupted White physical spaces, intergroup dialogues in which there is open dialogue free from racism, but periods of frustration due to unlearning racism. Additionally, professors can make sure that their classrooms are not overtaken by White voices (Applebaum, 2008). Research demonstrates that White students exhibit growth when being involved in such programs (Nagai, 2011). Nagai (2011) found that White students who engaged in cross-racial programming developed friendships and gained exposure to different perceptions and cultures. Cabrera (2012) found that White students in a multicultural residence that discussed social justice regularly enabled participants to critique and explore their own racial privileges. Authors have found that racially conscious programming disrupts White space on campus (Harper & Hurtado, 2007; Gusa, 2010). Therefore, research has demonstrated that social discomfort and pushback against perceived White spaces might be needed to disrupt racial privilege.

Educating Whites about racism often comes at the expense of People of Color via cross-cultural dialogues that often turn into nonsafe spaces for People of Color (Cabrera, Watson, & Franklin, in press; Leonardo & Porter, 2010). Universities can utilize best practices to help Whites grapple with and learn about their privilege. Therefore, universities should provide opportunities in class and outside of class that encourage White students to learn about White privilege and how subtle racist actions may negatively impact the climate of the institution and their fellow students. Furthermore, universities can institute cross-cultural dialogues that are actually safe spaces for People of Color. Instead of creating policies and programs that are absent of discussions of race and considerations of racism, universities should recognize that students have varying experiences on their campuses.

Addressing Racial Microaggressions

For institutions of higher education, the findings in this dissertation may help when administrators implement programs and policies that help address racial microaggressions and the race-related health of Students of Color. Prior institutional policy interventions on campuses have generally not considered the racial health of students. Instead, policies directed toward People of Color have focused on access. Universities have been interested on getting Students of Color on campus, but they have not provided as much focus on making sure Students of Color stay and feel welcomed. Institutional policies and programs that address the health of students due to racism would not only be something that may attract students, but they may improve the academic outcomes of Students of Color and perhaps their overall experience (Johnson et al., 2014). In the short term, such policies and programs may improve the everyday experiences of all students and in the long term such programs may assist in addressing the perceived hostile culture of higher education institutions toward historically underrepresented students. A single program or institutional policy by itself will not address the climate and culture of higher education institutions, but a number of targeted policies that actually improve the postsecondary experience for Students of Color would be welcomed and is needed. The racialized experiences of People of Color on campuses are multifaceted and health is only a single component of possible outcomes in college, but it is an important outcome that can impact a person for the rest of their life.

It is apparent that racism on campus is not disappearing anytime in the near future and college campuses should actively address the needs of all students. While universities need to address White racism, they also need to confront everyday racism

and its impact. Therefore, universities should have counselors trained to assist and help students, faculty, and staff who have been impacted by racism on campus. Race-conscious counselors and programs should address racial battle fatigue and racial microaggressions and provide constituents suggestions about coping strategies and other strategies to resolve the situation with administrators at the university. Counselors should be trained to identify situations in which racial stress may be amplified and how to proactively address such situations. In addition, faculty and staff should be trained similarly so that they can recognize when students may be impacted by racism on campus. In this fashion, it removes the responsibility from the student and places the responsibly in the hands of the institution. Institutions are taking steps to educate students about racial microaggressions. The University of Utah has counselors who focus on racial microaggressions and racial battle fatigue and Emory University has published information on racial microaggressions from their Office of Health Promotion (Zesiger, 2013). In addition, information should be available that dispels the stigma associated with counseling. These suggestions require a shift in the university culture that will not be easy, but is needed if universities actually care about the students they are enrolling and hope to graduate.

Finally, the student, faculty, and administrative body of universities is still predominantly White. Structural diversity can play an important role in how students perceive the campus climate and their experiences with racism (Ancis et al., 2000). To address hostile campus racial climates and resulting racial battle fatigue it would be helpful for universities to focus on hiring and enrolling students, faculty, staff, and administrators from historically underrepresented groups. Universities can do a great

deal to address racial microaggressions and racial battle fatigue experienced by African American and Mexican American students. Universities can implement race conscious policies and programs, educate White students and faculty about racial microaggressions and racism, and finally hire and enroll more individuals from historically underrepresented groups.

Limitations

There are several limitations to this study. First, the data utilized in the study are limited to measures and items collect in the RBFS database. For example, measures of interracial student interactions and specific measures of blood pressure are not available. This limitation restricts the ability to measure certain aspects of the campus experience that might give context or better explain the campus interactions of participants.

The RBF model that this dissertation assesses represents a hypothesized model of the interaction of perceptions of campus climate, racial microaggressions, psychological, physiological, and behavioral stress responses and relies on the available observed variables in the dataset. Variables that might contribute to racial battle fatigue may be left out of the analysis due to misspecification of the model. As a result, factors or observed variables may be ignored that are important to the already theorized racial battle fatigue model or there may be an overestimation of the importance of variables that have a negligible relationship to racial battle fatigue (Stage, 1990). Additionally, there are likely aspects of racial battle fatigue that cannot be measured quantitatively and are therefore not captured by this dataset.

The data for this dissertation were collected at a single point in time. The nature of this cross-sectional data does not allow for longitudinal analyses. As a result, this dissertation will not be able to discuss how racial battle fatigue likely changes across time with different institutional and personal contexts. This limitation speaks to another limitation that some of the participants were not currently undergraduates when they took the questionnaire. Participants might not recall how they felt as an undergraduate student when they experienced racism and discrimination on campus. Some of their interpretations of the questions and their answers might be influenced by time, greater life experiences with racism, and/or may just be different if asked when they were on campus as an undergraduate.

This study relies on self-reported data from students. Although there is debate about the accuracy of self-reported data, a great deal of research on racism and health relies on this method (e.g., Clark, 2003; Wei et al., 2011). Additionally, there are methods to clinically test physiological responses to racism and discrimination other than relying on an individual's memory. Future studies should couple clinical test and self-report methods. Another limitation is that questions were asked about stress responses to racist and discriminatory events, but this may exclude responses that participants might not link to racists events, but believe are related to other factors. For example, not having more Latino faculty members or not having a larger percentage of Latino students in their courses may not be viewed as being connected to the overall campus climate. However, for many other Latino students, the lack of Latino students as allies for support of their experiences may lead to negative psychological and behavioral stress responses. Students who attended minority-serving institutions were included in this analysis. While

these institutions are likely to be more conducive to nonracist learning and living environments, these institutions are not necessarily void of racism or protect against racist encounters at levels of a student's collegiate experience.

A larger sample size would provide the opportunity to make comparisons race by gender. Racism and discrimination impacts more than just African American and Mexican American/Latino students. Therefore, the racial battle fatigue model and this study should be extended to other historically underrepresented populations of color. Research has demonstrated that racism is also gendered and therefore, future research should examine how racial battle fatigue manifests itself differently across gender.

Future Research

There is still a large amount of research needed to understand the full impact of racial microaggressions and racial battle fatigue. While it is important to understand the impact of racial microaggressions, it is also important to know the impacts that are often psychological, physiological, and behavioral and result in negative cognitive and non-cognitive outcomes. There are a number of considerations for future research.

First, a similar study should be conducted with a larger sample that includes more racial and ethnic groups. Additionally, the sample should be large enough in order to examine race by gender comparisons. Race by gender comparisons would assist in better understanding how racial microaggressions impact specific groups, for example, African American women and Asian American men. It may be the case that this study needs to be replicated to understand if the findings are applicable for a different sample of African American and Mexican American/Latino college students. Future research should

include qualitative methods to illuminate and expand upon quantitative findings. To better understand the physiological stress responses, future research should design a study that allows for collection of physiological responses like blood pressure, levels of cortisol, and other clinical measures that are related to stress. It may be the case that a study needs to be designed to immediately understand how a person reacts to experiences with racial microaggressions by using technology and health related devices that are readily available. Yip (2005) distributed Palm Pilots that prompted Chinese American college students randomly six times a day to describe the racial composition of their environment, feelings of ethnic identity, and mental health status. Yip (20055) found that the ethnic identity and mental health status varied depending on the racial composition of the environment the students were in at any given time. Similar methods could be utilized to measure racism college students experience in microcontext at any given time. Regarding coping, coping does not adequately represent all of the types of coping that people use to respond to racial microaggressions and technology can assist in participants documenting their coping strategies at the time of an incident.

More research needs to be conducted with White students and faculty on the underlying reasons of the racial microaggressions they commit. The majority of actions by Whites are likely not intentional and have more to do with Whites growing up, living, and working in largely all White environments where they are not exposed to diverse groups. As a result of largely White environments and friendship groups, Whites do not learn how to appropriately participate in diverse environments (Feagin, 2012). In tandem, many more university programs and policies need to address racial microaggressions and racism on campus. The root of the problem are students, faculty

staff, and administrators who deliver racial microaggressions without any understanding or regard for the negative impact that their words or actions can have on people. Therefore, universities need to tackle racial microaggressions and racial battle fatigue by addressing the aggressors and providing support for campus constituents that are on the receiving end of racial microaggressions.

Conclusion

The findings in this dissertation provide an important examination of racial battle fatigue from a quantitative perspective. The analysis incorporates and accounts for more than just racial microaggressions. This dissertation makes the connection of racial microaggressions to self-perceived stress responses by utilizing the racial battle fatigue framework. The stressors that comprise racial battle fatigue have very real health consequences for African American and Mexican American students on college campuses. Racial battle fatigue is a framework that incorporates diverse research literatures of human behavior, social conditions, and health, which is not often done by postsecondary scholars. African American and Mexican American students experience the everyday stressors that are associated with being a university student, but their everyday experience is compounded by endless racism and discrimination that occurs far too often on college campuses (Harper & Hurtado, 2007). The growing body of literature on racial microaggressions and racial battle fatigue for Students of Color provides a significant perspective for practitioners, researchers, administrators, and students.

The racial battle fatigue framework is an important and promising model to empirically study stress for People of Color in higher education and in society at large.

This study provides a foundation for future research to assess racial battle fatigue for students, faculty, staff, administrators, and people in a variety of settings, as well as comparing results within and across groups. The opportunity to attend postsecondary institutions is not enough to guarantee the success of Students of Color. Higher education administrators and practitioners need to create welcoming environments campus environments free of racial microaggressions. It can be helpful for individuals who experience racial microaggressions and resulting racial battle fatigue to understand, assess, and name their experiences with racism and discrimination. While it is also important to understand consequences of racism such as racial battle fatigue, it is also crucial to adopt adaptive coping strategies to combat the pervasiveness of racism. Understanding the possible stress responses for African American students who live and work in racist environments, stressful postsecondary environments can be used to not only improve coping strategies, but also to understand the "postracial" structural racism that permeates higher education institutions.

APPENDIX A

RAICAL BATTLE FATIGUE INSTRUMENT

Development and Validation of the Racial Battle Fatigue Scale.

Consent

Development and Validation of the Racial Battle Fatigue Scale

The purpose of this research study is to develop a racial battle fatigue scale from the real life experiences of university and college students (current and graduates). We are doing this study because we want to develop a better questionnaire to determine race-related stress for college students.

We would like to ask you some questions in order to assess the validity of a scale we are developing about experiences with racism and discrimination as it relates to a person's health and stress. A faculty member and/or a research assistant administer the survey. Once you have completed the survey, we will ask you if you want to participate in a follow-up interview or survey. We will ask for an email address to later contact you.

The risks of your participation in this study are minimal. You may feel upset thinking about or talking about personal information related to how you experience racism related to stress. These risks are similar to those you experience when discussing personal information with others. If you feel upset from this experience, you can tell the researcher, and she or he will tell you about resources available to help. If you choose to be contacted in the future, the email address you give will not be associated with the survey you complete, as the individual administering the survey will detach that page of the survey.

Your information will be kept confidential. The data will be stored at the secured, password protected website and available only to those designated for analysis. No personal identifying data will be collected, other than age, gender, race/ethnicity, marital status, country of citizenship and educational level.

If you have any questions complaints or if you feel you have been harmed by this research please contact William A. Smith, PhD, Associate Professor, Department of Education, Culture, & Society, University of Utah at (801) 587-7814.

Contact the Institutional Review Board (IRB) if you have questions regarding your rights as a research participant. Also, contact the IRB if you have questions, complaints or concerns which you do not feel you can discuss with the investigator. The University of Utah IRB may be reached by phone at (801) 581-3655 or by e-mail at irb@hsc.utah.edu.

It should take about 30 minutes to complete the interview. Participation in this study is voluntary. You can choose not to take part.

By submitting this questionnaire, you are giving your consent to participate.

We greatly appreciate your participation in this important research study and thank you for your time.

Development and Validation of the Racial Battle Fatigue Scale.

Demographics

***1. Please select one statement below that best describes you.**

- ◯ I am an Undergraduate student
- ◯ I am a Graduate student
- ◯ I am no longer in school, but I attended college/university
- ◯ I never attended college

2. As of July 2012, what level of college will you have completed (Mark one answer)?

- ◯ Freshman
- ◯ Sophomore
- ◯ Junior
- ◯ Senior
- ◯ Bachelor's
- ◯ Masters
- ◯ PhD
- ◯ Professional Degree
- ◯ None

3. What year were you born?

4. What is/was your undergraduate major (Please write a primary major and a secondary/minor)?

Primary major

Secondary major/minor

Development and Validation of the Racial Battle Fatigue Scale.

5. What is/was your approximate undergraduate GPA (on a 4.0 scale) (Mark one answer)?

- ◯ A or A+
- ◯ A-
- ◯ B+
- ◯ B
- ◯ B-
- ◯ C+
- ◯ C
- ◯ D

Development and Validation of the Racial Battle Fatigue Scale.

6. What is your current occupation? (If you are currently in school, please answer student)

- ◯ Accountant or actuary
- ◯ Actor
- ◯ Airline Pilot, Flight Eng., etc.
- ◯ Animal Care
- ◯ Architect or urban planner
- ◯ Artists
- ◯ Athlete
- ◯ Business (clerical)
- ◯ Business executive or management
- ◯ Business owner
- ◯ Carpenter
- ◯ Child Caretaker
- ◯ Clergy
- ◯ Clinical psychologist
- ◯ Coach
- ◯ College administrator
- ◯ College professor (non-tenure track)
- ◯ College professor (tenure track)
- ◯ Computer programmer
- ◯ Conservationists
- ◯ Cooks, Bartenders, or Food Service Worker
- ◯ Corporate Sales Representatives
- ◯ Dentist
- ◯ Dietician
- ◯ Engineer
- ◯ Farmer or rancher
- ◯ Fire Fighter
- ◯ Foreign service worker
- ◯ Government official
- ◯ Hairstylists or Personal Care
- ◯ Homemaker
- ◯ Hotel & Travel Industry
- ◯ Insurance Agent
- ◯ Interior decorator
- ◯ Journalist
- ◯ Lab technician
- ◯ Law enforcement officer
- ◯ Lawyer or judges
- ◯ Legal Support Worker
- ◯ Military service (career)
- ◯ Musician
- ◯ Nurse
- ◯ Office Manager
- ◯ Optometrist
- ◯ Pharmacist
- ◯ Physician
- ◯ Policymaker
- ◯ Retail/Wholesale Salespersons
- ◯ School counselor
- ◯ School principal/administration
- ◯ Scientific researcher
- ◯ Social worker
- ◯ Student
- ◯ Therapist (physical, occupational, speech)
- ◯ Teacher or administrator (elementary)
- ◯ Teacher or administrator (secondary)
- ◯ Technician
- ◯ Veterinarian
- ◯ Writer
- ◯ Skilled trade

Other (please specify)

Development and Validation of the Racial Battle Fatigue Scale.

Demographics

7. What is your sex?

- ◯ Female
- ◯ Male

8. Do you identify as transgender?

- ◯ No
- ◯ Yes

9. What is your sexual orientation (Mark one answer)?

- ◯ Heterosexual
- ◯ Gay
- ◯ Lesbian
- ◯ Bisexual
- ◯ Transgender
- ◯ Queer

10. Do you self-identify as multiracial?

- ◯ No
- ◯ Yes

11. Are you Latina/o or Hispanic (Mark one answer)?

- ◯ No
- ◯ Yes, Mexican American/Chicano
- ◯ Yes, Puerto Rican
- ◯ Yes, Central American
- ◯ Yes, other Latino or Hispanic

Development and Validation of the Racial Battle Fatigue Scale.

12. How do you racially/ethnically self-identify? (Select one or more)

- [ ] African
- [ ] African American/Black
- [ ] Alaskan Native
- [ ] American Indian
- [ ] Asian American
- [ ] Caribbean
- [ ] East Asian (e.g. Chinese, Japanese, Korean, Taiwanese)
- [ ] European American
- [ ] Middle Eastern
- [ ] Native Hawaiian
- [ ] Other Asian
- [ ] Other Black
- [ ] Other White
- [ ] Pacific Islander
- [ ] South Asian (e.g. Indian, Pakistani, Nepalese, Sri Lankan)
- [ ] Southeast Asian (e.g. Cambodian, Vietnamese, Hmong, Filipino)

Development and Validation of the Racial Battle Fatigue Scale.

13. How do others racially/ethnically identify you? (Select one)

- ◯ African
- ◯ African American/Black
- ◯ Alaskan Native
- ◯ American Indian
- ◯ Asian American
- ◯ Caribbean
- ◯ East Asian (e.g. Chinese, Japanese, Korean, Taiwanese)
- ◯ European American
- ◯ Middle Eastern
- ◯ Native Hawaiian
- ◯ Other Asian
- ◯ Other Black
- ◯ Other White
- ◯ Pacific Islander
- ◯ South Asian (e.g. Indian, Pakistani, Nepalese, Sri Lankan)
- ◯ Southeast Asian (e.g. Cambodian, Vietnamese, Hmong, Filipino)

14. On a 10-point scale, how would you describe your political orientation (0 being very conservative – 10 very progressive) (Mark one answer)?

	Very Conservative					Moderate					Very progressive
-	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯

15. Please describe the community where you grew up. (Mark one answer)

- ◯ A major city (over 500,000)
- ◯ Large suburb of a major city (100,001 – 500,000)
- ◯ Large city (100,001-500,000)
- ◯ Midsized suburb (10,001-100,000)
- ◯ Midsize city (10,001-100,000)
- ◯ Small city or town (1,000-10,000)
- ◯ Small suburb (1,000-10,000)
- ◯ Rural area (under, 1,000)

Development and Validation of the Racial Battle Fatigue Scale.

16. Were the people in the community you grew up in all White, mostly White, about half and half, mostly minorities (People of Color), or all minorities? (Mark one answer)

- ◯ All white
- ◯ Mostly White
- ◯ About half and Half
- ◯ Mostly minorities
- ◯ All minorities

17. Please describe the high school you attended (Mark one answer)

- ◯ Large, public (Over 2,000)
- ◯ Midsize, public (500-2,000)
- ◯ Small, public (Under 500)
- ◯ Large, private (Over 2,000)
- ◯ Midsize, private (500-2,000)
- ◯ Small, private (Under 500)

18. Were the friends that you grew up with all White, mostly White, about half and half, mostly minorities (People of Color), or all minorities? (Mark one answer)

- ◯ All White
- ◯ Mostly White
- ◯ About half and half
- ◯ Mostly minorities
- ◯ All minorities

19. Were the people that you went to elementary school with all White, mostly White, about half and half, mostly minorities (People of Color), or minorities? (Mark one answer)

- ◯ All White
- ◯ Mostly White
- ◯ About half and half
- ◯ Mostly minorities
- ◯ All minorities

Development and Validation of the Racial Battle Fatigue Scale.

20. Were the people that you went to high school with all White, mostly White, about half and half, mostly minorities (People of Color), or all minorities? (Mark one answer)

- ◯ All White
- ◯ Mostly White
- ◯ About half and half
- ◯ Mostly minorities
- ◯ All minorities

21. Are the people who you work with now all White, mostly White, about half and half, mostly minorities (People of Color), or all minorities? (Mark one answer)

- ◯ All White
- ◯ Mostly White
- ◯ About half and half
- ◯ Mostly minorities
- ◯ All minorities
- ◯ Does not apply

Development and Validation of the Racial Battle Fatigue Scale.

22. What is your religious identification? (Mark one answer)

- ◯ Baptist
- ◯ Buddhist
- ◯ Church of Christ
- ◯ Eastern Orthodox
- ◯ Episcopalian
- ◯ Hindu
- ◯ Jewish
- ◯ LDS (Mormon)
- ◯ Lutheran
- ◯ Methodist
- ◯ Muslim
- ◯ Presbyterian
- ◯ Quaker
- ◯ Roman Catholic
- ◯ Seventh Day Adventist
- ◯ United Church of Christ/Congregational Other Christian
- ◯ Other Religion
- ◯ None

23. What was your approximate combined household income before taxes last year? Include taxable and nontaxable income from all sources. (Mark one answer)

- ◯ Less than $20,000
- ◯ $20,000 to $29,999
- ◯ $30,000 to $39,999
- ◯ $40,000 to $59,999
- ◯ $60,000 to $79,999
- ◯ $80,000 to $99,999
- ◯ $100,000 to $199,999
- ◯ More than $200,000

Development and Validation of the Racial Battle Fatigue Scale.

22. What is your religious identification? (Mark one answer)

- ◯ Baptist
- ◯ Buddhist
- ◯ Church of Christ
- ◯ Eastern Orthodox
- ◯ Episcopalian
- ◯ Hindu
- ◯ Jewish
- ◯ LDS (Mormon)
- ◯ Lutheran
- ◯ Methodist
- ◯ Muslim
- ◯ Presbyterian
- ◯ Quaker
- ◯ Roman Catholic
- ◯ Seventh Day Adventist
- ◯ United Church of Christ/Congregational Other Christian
- ◯ Other Religion
- ◯ None

23. What was your approximate combined household income before taxes last year? Include taxable and nontaxable income from all sources. (Mark one answer)

- ◯ Less than $20,000
- ◯ $20,000 to $29,999
- ◯ $30,000 to $39,999
- ◯ $40,000 to $59,999
- ◯ $60,000 to $79,999
- ◯ $80,000 to $99,999
- ◯ $100,000 to $199,999
- ◯ More than $200,000

Development and Validation of the Racial Battle Fatigue Scale.

24. Who were your main guardians growing up? (Please write one per parent/guardian) (e.g. mother, father, grandmother, brother, aunt, etc)

Parent/Guardian 1

Parent/Guardian 2

25. Please indicate the highest level of education completed by your parent/guardian 1 and parent/guardian 2.

	High school diploma or less	Some college or postsecondary education	Associate degree	Bachelor degree	Some graduate or professional training	Graduate or professional degree (e.g., MA, PhD, MD, JD)
Parent/guardian 1	◯	◯	◯	◯	◯	◯
Parent/guardian 2	◯	◯	◯	◯	◯	◯

Development and Validation of the Racial Battle Fatigue Scale.

Demographics

26. What type of higher education institution are/did you attend? (Mark one answer)

- ◯ Public, 2-year institution (community college)
- ◯ Public, 4-year institution
- ◯ Private (non-profit), 4-year institution (e.g. Harvard, Stanford, Notre Dame)
- ◯ Private (for profit), 4-year institution (e.g. University of Phoenix, Strayer)

27. Is/was it a minority serving insitution? (e.g. Historically Black College or University, Hispanic Serving Institution, etc.)

- ◯ No
- ◯ Yes

28. Are or were you a member of a fraternity or sorority?

- ◯ No
- ◯ Yes

29. Do or did you belong to any student groups on campus, other than a sorority or fraternity? (e.g. Asian Student Union, College Democrats/Republicans, M.E.Ch.A, Black Student Union, etc.)

- ◯ No
- ◯ Yes

30. How are or did you pay for college? (Mark all that apply)

- ☐ Family contribution
- ☐ Personal contribution/job
- ☐ Need-based institutional grant
- ☐ Pell grant
- ☐ Academic scholarship
- ☐ Athletics scholarship
- ☐ Loans

Development and Validation of the Racial Battle Fatigue Scale.

31. On average, how many hours per week do or did you spend at a job for pay (including work-study) while attending college? (Mark one answer)

- ◯ 0 hours
- ◯ 1-5 hours
- ◯ 6-10 hours
- ◯ 11-15 hours
- ◯ 16-20 hours
- ◯ More than 20 hours

32. Please indicate the highest level of education you intend to complete or already completed. (Mark one answer)

- ◯ Some college or postsecondary education
- ◯ Bachelor degree
- ◯ Some graduate or professional training
- ◯ Graduate or professional degree (e.g., MA, PhD, MD, JD)

33. In general, how close do you feel to the following racial/ethnic groups? (0 being not at all, 5 being moderately close, and 10 being very close)? (Mark one answer per row)

	Not close at all					Moderately close					Very Close
African Americans/Blacks	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
American Indian/Native American	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
Asian Americans	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
European Americans/Whites	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
Latinas/os	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
Pacific Islanders	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯

34. Would you say your own health, in general, is excellent, good, fair, or poor? (Mark one answer)

- ◯ Excellent
- ◯ Good
- ◯ Fair
- ◯ Poor

Development and Validation of the Racial Battle Fatigue Scale.

35. Please rate your overall level of stress (0 being not stressed at all, 5 being average stress, 10 being very stressed) (Mark one answer)

	Not stressed at all					Average stress					Very stressed
-	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯

36. Please rate your overall level of race-realted stress (racism, discrimination, prejudice) (0 being not stressed at all, 5 being average stress, 10 being very stressed) (Mark one answer)

	Not stressed at all					Average stress					Very stressed
-	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯

37. How often did what you deem as racist events occur on campus in the following settings? (Mark one answer per row)

	Never	Almost never	Sometimes	Fairly Often	Very often
Campus Police	◯	◯	◯	◯	◯
Classroom	◯	◯	◯	◯	◯
Residence halls/Dorms	◯	◯	◯	◯	◯
Recreation facilities	◯	◯	◯	◯	◯
University Union	◯	◯	◯	◯	◯
Faculty offices	◯	◯	◯	◯	◯
Student services offices (e.g. Financial Aid Office, Testing Office, Registrar, etc.)	◯	◯	◯	◯	◯
Library	◯	◯	◯	◯	◯
Walking across campus	◯	◯	◯	◯	◯
Cafeteria	◯	◯	◯	◯	◯
Student–run organizations (e.g. Greek affairs, Intramural sports)	◯	◯	◯	◯	◯
Student government	◯	◯	◯	◯	◯
Off campus residence/home	◯	◯	◯	◯	◯
Off campus stores	◯	◯	◯	◯	◯
Off campus in shopping areas	◯	◯	◯	◯	◯
Off campus with police	◯	◯	◯	◯	◯
Off campus in general	◯	◯	◯	◯	◯

Development and Validation of the Racial Battle Fatigue Scale.

Racial Microaggressions

The following questions will ask you to reflect up to and including your last semester/quarter as an undergraduate college/university student. For freshmen, please answer regarding your current educational experiences.

38. Because of your Racial/Ethnic background...

(Mark one answer per row)

	Never	Almost never	Sometimes	Fairly often	Very often
You are treated with less respect than other people	○	○	○	○	○
You receive poorer service than other people at restaurants or stores	○	○	○	○	○
People act as if they think you are not smart	○	○	○	○	○
People act as if they are afraid of you	○	○	○	○	○
People act as if they think you are dishonest	○	○	○	○	○
You have experiences you think are racially discriminatory in nature	○	○	○	○	○

39. Because of your Racial/Ethnic background:

(Mark one answer per row)

	Never	Almost never	Sometimes	Fairly often	Very Often
You feel White faculty mistreat you	○	○	○	○	○
You feel minority faculty, not of your own race/ethnicity, mistreat you	○	○	○	○	○
You feel faculty, of your own race/ethnicity, mistreat you	○	○	○	○	○
You feel White students mistreat you?	○	○	○	○	○
You feel Students of Color, not of your own race/ethnicity, mistreat you	○	○	○	○	○
You feel students, of your own race/ethnicity, mistreat you	○	○	○	○	○
You feel White staff mistreat you	○	○	○	○	○
You feel Staff of Color, not of your own race/ethnicity, mistreat you	○	○	○	○	○
You feel staff, of your own race/ethnicity, mistreat you	○	○	○	○	○
You feel campus police have mistreated you	○	○	○	○	○

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40. Do you feel you have experienced any racial/ethnic discrimination or racial insensitivity toward your racial/ethnic group in your college curriculum? (Mark one answer)

- ◯ Never
- ◯ Almost never
- ◯ Sometimes
- ◯ Fairly Often
- ◯ Very often

41. Do you feel you have faced any mistreatment because of your racial/ethnic identity in extracurricular activities in college? (Mark one answer)

- ◯ Never
- ◯ Almost never
- ◯ Sometimes
- ◯ Fairly Often
- ◯ Very often

42. Do you believe that minority student organizations on your campus are valued and supported fairly? (Mark one answer)

- ◯ Never
- ◯ Almost never
- ◯ Sometimes
- ◯ Fairly Often
- ◯ Very often

43. Please indicate how often you heard racially insensitive or disparaging remarks from the following people directed toward you.

(Mark one answer per row)

	Never	Almost never	Sometimes	Fairly Often	Very often
Students	◯	◯	◯	◯	◯
Faculty	◯	◯	◯	◯	◯
University Staff	◯	◯	◯	◯	◯
Campus Police	◯	◯	◯	◯	◯
Community/General Police	◯	◯	◯	◯	◯

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44. Please indicate how often you were mistaken to be a different racial/ethnic group. (Mark one answer)

- ◯ Never
- ◯ Almost never
- ◯ Sometimes
- ◯ Fairly Often
- ◯ Very often

45. Please indicate how often you witnessed racial epithets (e.g. writings on the wall, on a desk, in books, emails, text messages) and visual images that you would deem to be racially insensitive. (Mark one answer)

- ◯ Never
- ◯ Almost never
- ◯ Sometimes
- ◯ Fairly Often
- ◯ Very often

46. Please indicate how often you feel you have been excluded from events or gatherings because of your racial or ethnic makeup. (Mark one answer)

- ◯ Never
- ◯ Almost never
- ◯ Sometimes
- ◯ Fairly Often
- ◯ Very often

47. Please indicate how often you have witnessed racial discrimination against a fellow student, faculty, and/or staff member. (Mark one answer)

- ◯ Never
- ◯ Almost never
- ◯ Sometimes
- ◯ Fairly Often
- ◯ Very often

Development and Validation of the Racial Battle Fatigue Scale.

Psychological Responses

The following questions will ask you to reflect on your experiences as a college student. As you answer the following questions, please consider how often the following things occurred.

48. After you experienced racialized incidents on campus,

(Please mark one answer per row.)

	Never	Almost never	Sometimes	Fairly often	Very often
How often were you frustrated?	◯	◯	◯	◯	◯
How often did you feel defenseless?	◯	◯	◯	◯	◯
How often did you feel apathetic?	◯	◯	◯	◯	◯
How often did that incident make you more aware of racism?	◯	◯	◯	◯	◯
How often did you become irritable?	◯	◯	◯	◯	◯
How often did your mood dramatically change?	◯	◯	◯	◯	◯
How often did you feel in shock?	◯	◯	◯	◯	◯
How often did you feel disappointed?	◯	◯	◯	◯	◯
How often were you agitated?	◯	◯	◯	◯	◯
How often did you experience constant worrying?	◯	◯	◯	◯	◯
How often did the experience make you feel forgetful?	◯	◯	◯	◯	◯
How often did you feel helpless?	◯	◯	◯	◯	◯
How often did it effect your concentration?	◯	◯	◯	◯	◯
How often did you feel hopeless?	◯	◯	◯	◯	◯
How often did you feel threatened?	◯	◯	◯	◯	◯
How often did you experience disbelief?	◯	◯	◯	◯	◯
How often did you feel on guard?	◯	◯	◯	◯	◯

Development and Validation of the Racial Battle Fatigue Scale.

Behavioral Responses

The following questions will ask you to reflect on your experiences as a college student. We want to better understand the impact of racialized incidents on campus toward students. As you answer the following questions, please consider how often the following things occurred.

49. After you experienced racialized incidents on campus, how often did you:

(Please mark one answer per row.)

	Never	Almost never	Sometimes	Fairly often	Very often
Try to cope, but continue to experience stress?	○	○	○	○	○
Feel that because of your race, people believed that you had less ability.	○	○	○	○	○
Turn to your spirituality and/or religious organizations?	○	○	○	○	○
Experience a loss of appetite?	○	○	○	○	○
Become impatient?	○	○	○	○	○
Argue with someone?	○	○	○	○	○
Ate more or less?	○	○	○	○	○
Slept too much or too little?	○	○	○	○	○
Procrastinate?	○	○	○	○	○
Use drugs to relax?	○	○	○	○	○
Use prescription drugs to relax?	○	○	○	○	○
Use non-prescription drugs to relax?	○	○	○	○	○
Use alcohol to relax?	○	○	○	○	○
Use cigarettes to relax?	○	○	○	○	○
Isolate yourself from others?	○	○	○	○	○
Feel that you performed better than you thought you would on assignments?	○	○	○	○	○
Exhibited nervous habits (e.g. nail biting, pacing, excessive sweating)?	○	○	○	○	○
Neglect your responsibilities?	○	○	○	○	○
Feel that because of your race, faculty expected you to do poorly?	○	○	○	○	○
Allow your school performance to be negatively impacted?	○	○	○	○	○
Allow your job performance to be negatively impacted?	○	○	○	○	○
Allow your family relationships to be negatively impacted?	○	○	○	○	○
Feel that you did not perform as well as	○	○	○	○	○

you could have on tests or assignments?

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Physiological Responses

The following questions will ask you to reflect on your experiences as a college student. We are interested in understanding some of the physiological behaviors of college students. We would like you to think about how often the following things occurred.

50. Please tell us how often you experienced the following items as a college student.

(Please mark one answer per row.)

	Never	Almost never	Sometimes	Fairly often	Very often
Headaches?	○	○	○	○	○
Grinding your teeth?	○	○	○	○	○
Chest pains?	○	○	○	○	○
Clench your jaws?	○	○	○	○	○
Shortness of breath?	○	○	○	○	○
Racing heart?	○	○	○	○	○
Frequent colds?	○	○	○	○	○
Muscle aches?	○	○	○	○	○
Indigestion?	○	○	○	○	○
Gas?	○	○	○	○	○
Frequently ill?	○	○	○	○	○
Constipation or diarrhea?	○	○	○	○	○
Back pains?	○	○	○	○	○
Increased perspiration?	○	○	○	○	○
Sleep disturbances?	○	○	○	○	○
Pains in joints?	○	○	○	○	○
Intestinal problems?	○	○	○	○	○
Hives or rashes?	○	○	○	○	○
Feel fatigued?	○	○	○	○	○
Insomnia?	○	○	○	○	○
Other sicknesses?	○	○	○	○	○

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Coping

Now take a few moments to think about several of the most stressful race-related events that happened to you in college. By "race-related" we mean an event that you feel happened to you because of your race and by "stressful" we mean a situation that was difficult or troubling to you.

51. Please answer the following questions while reflecting on the race-related incidents.

(Please mark one answer per row.)

	Never	Almost never	Sometimes	Fairly often	Very often
I turned to work or other activities to take my mind off things.	○	○	○	○	○
I concentrated my efforts on doing something about the situation I was in.	○	○	○	○	○
I prayed or meditated.	○	○	○	○	○
I made fun of the situation.	○	○	○	○	○
I received emotional support from others.	○	○	○	○	○
I took action to try to make the situation better.	○	○	○	○	○
I tried to see it in a different light, to make it seem more positive.	○	○	○	○	○
I tried to come up with a strategy about what to do.	○	○	○	○	○
I received comfort and understanding from someone.	○	○	○	○	○
I looked for something good in what happened.	○	○	○	○	○
I made jokes about it.	○	○	○	○	○
I did something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping.	○	○	○	○	○
I accepted the reality of the fact that it happened.	○	○	○	○	○
I tried to find comfort in my religion or spiritual beliefs.	○	○	○	○	○
I tried getting advice or help from other people about what to do.	○	○	○	○	○
I questioned or second-guessed myself on whether I caused the event to happen.	○	○	○	○	○
I learned to live with it.	○	○	○	○	○
I said to myself "this isn't real."	○	○	○	○	○
I used alcohol or other drugs to make myself feel better.	○	○	○	○	○
I gave up trying to deal with it.	○	○	○	○	○
I refused to believe that it happened.	○	○	○	○	○
I said things to let my unpleasant feelings escape.	○	○	○	○	○
I sought help and advice from other people.	○	○	○	○	○
I used alcohol or other drugs to help me get through it.	○	○	○	○	○

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I criticized myself.	○	○	○	○	○
I gave up the attempt to cope.	○	○	○	○	○
I expressed my negative feelings.	○	○	○	○	○
I thought hard about what steps to take.	○	○	○	○	○
I blamed myself for the things that happened.	○	○	○	○	○

Racial Battle Fatigue Follow-Up Information

Thank you for your participation in the Development and Validation of the Racial Battle Fatigue Stress Scale study. Your participation in this study is greatly appreciated.

If you want to participate in an interview or focus group at a later date, please leave your email and mailing address below. If you choose to be contacted in the future, the email and mailing address you give will not be associated with the survey you completed as the administer of the survey will detach this sheet and put it in a separate envelope from the survey.

If you do not want to participate in the follow-up interview you do not have to fill out the information below. Thank you for your time.

Address: _____

Address2: _____

City/Town: _____

State: _____

Zip Code: _____

Email address: _____

Phone number: _____

APPENDIX B

PURPOSE OF THE STUDY

Background and Purpose of Development and Validation of the Racial Battle Fatigue Scale

Purpose

This study will examine, on an item-by-item basis, the responses to a racial battle fatigue scale developed by a research team at the University of Utah under the direction of Dr. William A. Smith. There are three significant study objectives: 1) to investigate the dimensionality spanned by the items of the scale in the full study population; 2) to validate the scale with existing scales; and 3) to evaluate the stability of the scale. The long-term aim of this study is to develop a comprehensive racial battle fatigue scale that researchers, counselors, student affairs administrators, and post-secondary education policy makers can utilize to better prepare for the changing racial/ethnic demographics on their campuses. Understanding the lived experiences of current and former students will help to better serve and plan for the future students who represent the projected increased diversity of the country.

IRB Approval

This study received the Institutional Review Board Approval (IRB) from University of Utah to conduct the "Development and Validation of the Racial Battle Fatigue Scale" (IRB_00050140) by PI: Dr. William A. Smith. The IRB reviewed and approved this study as a minimal risk study on 7/19/2011.

Sampling

This is a prospective study of undergraduates, graduate students, and prior graduates/students in various regions of the country. We will solicit participants from all racial-gender groups and educational levels. This will allow us to check the performance of the scale on various groups of people by region and by race and gender. A comprehensive assessment of participants' self-reported race-related stress levels will be performed. Participants under the age of 18 are excluded from the study sample.

Survey Administration (See attached directions)

Once institutions are identified, an email will be sent to the survey administrator at each institution. The email asks for the survey administrator's cooperation in conducting the survey. Detailed instructions for administration of the survey are provided in the research package sent to each institution. These instructions, and the instructions that are printed on the questionnaire, make it clear to the participants that their cooperation in this study is completely voluntarily and that all responses will be anonymous. Students/Participants have the option to be involved in a follow-up qualitative portion of the study in which they will need to provide an email address on the last page of the instrument that will be detached by the survey participant and given separately to the person administering the survey. The survey administrator is instructed to give the questionnaire to their students on the same occasion in a classroom type setting. The administrator is provided with a pre-addressed, pre-paid envelope in which student/participants are to deposit their questionnaire and the "request to participate" in the follow-up interview portion of the survey upon completion.

Confidentiality and Anonymity

Student will not be required to provide any identifying information and all information provided on the questionnaire will remain confidential. In the event of any publication or presentation resulting from the research, no personally identifiable information will be shared. Groups will be combined to eliminate any potential for identifiable demographic information. Participants do not have to answer any question that makes them feel uncomfortable. At the end of the survey, a separate page will ask will ask participants if they would like to participate in a future individual/focus group interview or follow-up survey. If they choose to participate in an individual/focus group interview or follow-up survey, participants will be asked for an email address so that we can contact them in the future. Once the participant turns in the completed questionnaire, the administrator of the survey will make sure that the last page is detached if the participant wants to be interviewed. This is the page that contains an email address and current address. Therefore, when the surveys are sent back, we will have a group of surveys and a group of email and mailing addresses.

Discomforts and Risks

There are minimal risks in participating in this research beyond those experienced in everyday life, but some of the questions are personal and might cause discomfort. In the event that any questions asked are disturbing to the participant, he or she may stop responding to the survey at any time. Participants who experience discomfort are encouraged to contact a local service. The project administrators will work with the local survey administrators to provide a list of experts who would be willing to debrief with participants. The survey administrator will be instructed to provide this list of local resources at the beginning of the survey administration.

Questionnaire

In all, there are six sections to the questionnaire. First, demographic questions are asked. The demographic section is followed by section II that asks about general racial microaggressions experienced as a student. The third section asks questions regarding the student's psychological reactions to race-related stress. The fourth section asks questions regarding behavioral reactions to race-related stress. The fifth section covers physiological responses to race-related stress. The last section covers coping strategies.

In sum, the six sections ask questions regarding the following issues:

1. Information about demographics.
2. Information about racial microaggressions.
3. Information related to psychological responses.
4. Information related to behavioral responses.
5. Information about physiological responses.
6. Information about coping strategies.

Analysis

Once the questionnaires are returned to the University of Utah, the data will be entered into a database. Standard descriptive summaries, including means, standard deviations, and frequency tables to assess floor and ceiling effects will be obtained for each of the racial battle fatigue related questions. Item analysis will be performed to evaluate item-scale correlations to summarize the association among the full set of stress related items and to evaluate scale-to-scale correlations to summarize the association between the stress items and the related items. Paired samples tests will also be conducted to examine test-retest reliabilities of the scale. Exploratory factor analyses will be conducted to determine if the items form a one-factor structure, or a multifactor structure. The presence of one eigenvalue that is greater than one would indicate a one-factor structure, while the presence of two or more eigenvalues that are greater than one would suggest a multifactor structure. In the event that a multifactor structure is found, we will employ confirmatory factor analyses to determine whether items pertaining to the stress scale can be characterized by distinct unidimensional factor structures. Factor loadings will also be examined to cross check with the fit indices.

APPENDIX C

DIRECTIONS TO ADMINSTER THE QUESTIONNAIRE

DIRECTIONS FOR ADMINISTRATION OF RACIAL BATTLE FATIGUE SURVEY INSTRUMENT

1. The administer of the Racial Battle Fatigue Survey at schools participating in this study will receive the following materials:

    - Directions for administration of the survey instrument with a scripted statement (this paper).
    - Background and purpose of the study
    - Copies of the survey instrument.
    - 1 envelope for completed surveys
    - 1 envelope for follow-up portion of the survey (last page)
    - Pre-printed package for shipment of surveys back to University of Utah.

2. This study has been reviewed and approved for human subject considerations by the University of Utah institutional review board (IRB).

    The local administrator of the survey will make arrangements to schedule a session to survey students who agree to participate in the study. This will be likely a course of the faculty or teaching assistant.

    A faculty member or graduate research/teaching assistant in a classroom should administer the survey. The time, date and location of the survey administration session should be made known to all students prior to the actually survey being administered. Students should be able to complete the survey within approximately 25 minutes.

    ALL SURVEYS SHOULD BE ADMINISTERED AND RETURNED TO UNIVERSITY OF UTAH BY THE END OF THE FALL SEMESTER OR THE BEGINNING OF THE SPRING SEMESTER. WE WOULD LIKE THEM BACK AT YOUR EARLIST CONVENIENCE.

3. Sufficient copies of the surveys should be included in each packet. If additional copies are needed, the survey administrator can photocopy additional surveys. Should you be interested in surveying a broader sample of students at your institutions, please contact Jeremy D. Franklin.

    The administrator of the survey will place the two marked envelopes (one for completed surveys and one for follow-up contact information) in a convenient location in the room where the testing is being done so that each student may place his/her completed survey and additional contact information for directly into the appropriate envelope. Once complete, the administrator can put both envelopes in the pre-printed, pre-paid return package supplied by the University of Utah

4. Before administering the surveys, the survey administrator should obtain a contact phone number for a campus or local counseling service that will offer free or low cost counseling to any student that may wish to speak with a mental health professional. This contact information should be clearly posted in the room in which the surveys are administered**.**

5. The administer should bring the #2 pencils supplied by the University of Utah researchers. The survey may be completed in pencil or ink.

6. The faculty member and/or any research/teaching assistants will administer the survey to the students. The administrator will read the attached scripted statement to the students detailing the purpose of the study and directions for the completion of the survey. Any students who are not yet 18 years of age will be asked not to participate in the study.

   The administrator will explain the survey instrument to the students, will explain the purpose of the national study and will note that responses will not be personally identifiable. The students must be informed that participation in the survey is entirely voluntary and that the students are free to turn in their survey at any time during the testing procedure. Students who wish not to complete the survey in its entirety may complete only those questions they wish to answer (if any) and return the survey to the appropriate.

   The administrator will inform the students that when they have completed the survey, they should place the survey directly into the survey envelope and the additional contact portion of the survey into the appropriate envelope that that will be mailed back to the University of Utah. Only the survey administrator and the researchers at the University of Utah will handle any student's survey.

7. All surveys that are handled by students (completed or not completed) should be returned directly to the return envelope. Extra surveys not administered to a student can be destroyed by the survey administrator.

8. The administrator will send the surveys and follow-up contact portion of the survey to University of Utah in the pre-printed, pre-paid return package supplied by the research grant. The return addressee should be the University of Utah, not the individual institution.

9. Questions regarding administration of the surveys should be referred to:

   Jeremy D. Franklin
   801.243.8694
   jeremy.franklin@utah.edu

   Dr. William A. Smith and the entire research team thank you for your assistance with this important research project.

SCRIPTED STATEMENT FOR SURVEY ADMINISTRATOR

Instruct the students not to begin the survey until you finish reading the following statement:

Thank you for your participation in the Development and Validation of the Racial Battle Fatigue Stress Scale study. Your participation in this study is greatly appreciated.

If there is anyone here who is less than 18 years of age, you are excused from any further participation in this study and should leave at this time. Thank you for your time.

The purpose of this research study is to develop a racial battle fatigue scale from the real life experiences of university and college students (current and graduates). We are doing this study because we want to develop a better questionnaire to determine race-related stress for college students. We would like to ask you some questions in order assess the validity of a scale we are developing about experiences with racism and discrimination as it relates to a person's health and stress.

Participation in this study is completely voluntary. You may choose not to answer any question, or to discontinue your participation at any time without penalty. Your voluntary completion of this study constitutes your informed consent to participate. This survey should take approximately 15-25 minutes to complete. The survey is double sided, so make sure to complete both sides of the page. When you have completed the survey, please place it in the appropriate return envelopes located in the room (*Show student where the envelopes are located.*).

The last page of the survey is for a follow-up interview portion of the study. If you want to participate in an interview at a later date, please leave your email address on the last page of the survey and I will detach that page before putting the completed survey in the envelope. If you choose to be contacted in the future, the email address you give will not be associated with the survey you complete, as that page will be detached.

For this study to have scientific merit, it is important that you answer the questions thoughtfully and honestly. **This information is being collected <u>anonymously</u>. We won't require you to identify yourself or your school.** Do not write your name anywhere on the survey form, except on the last page if you choose to contacted in the future for an additional portion of the study.

The surveys will be sent directly to the University of Utah research team. At no point will your university/college get <u>any</u> completed surveys.

Some of the questions in this survey may deal with some personal topics. You do not have to answer any question that you do not wish to answer. I have posted the contact number for a local counseling center in case you should feel the need to discuss any issues raised by this survey. Your responses will be used only for research purposes and will be strictly confidential. Thank you again for your participation in this very important study. Please take a few minutes now to complete the survey.

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