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Racial Microaggressions, College Self-Efficacy, And The Persistence Of Students Of Color In Predominantly White, 4 Year Institutions Of Higher Education

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RACIAL MICROAGGRESSIONS, COLLEGE SELF-EFFICACY, AND THE PERSISTENCE OF STUDENTS OF COLOR IN PREDOMINANTLY WHITE, 4 YEAR INSTITUTIONS OF HIGHER EDUCATION

by

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This dissertation, submitted by John McCullagh in partial fulfillment of the requirements for the Degree of Doctor of Philosophy from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done and is hereby approved.

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April 15, 2016
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John McCullagh
April 5, 2016

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ABSTRACT

College students of Color face unique challenges and barriers in college settings (Allen, 1992; Harper & Hurtado, 2007) and many of these students are not able to effectively integrate into the academic and social realms of college life. This leads many students of Color to ultimately drop out of college (Fischer, 2007).The present study utilized a sample of 228 Freshman college students of Color to examine the influence of college self-efficacy and experiences of racial micro-aggressions on factors related to the persistence in college of racial and ethnic minority students. Structural equation modeling was utilized to test the direct and indirect relationships between racial microaggression experiences, college self-efficacy, college social integration, college academic integration, and persistence attitudes. Three measures were utilized to assess the variables in this study: the Racial and Ethnic Microaggressions Scale (REMS), Persistence / Voluntary Dropout Scale (P/VDDS), and the College Self-Efficacy Inventory (CSEI). College self-efficacy directly influenced academic and social integration, and indirectly influenced persistence attitudes through academic integration. Social integration influenced college persistence indirectly through academic integration, and academic integration directly influenced social integration and persistence attitudes. Racial microaggressions were not found to influence any of the variables in the study. Next steps in future research, clinical implications, and study limitations are discussed.

CHAPTER I

INTRODUCTION

Higher education is often seen as the key towards greater power, financial independence, and social status (Baum & Ma, 2007; Sewell, 1971). In a progressively more competitive and increasingly global society, the need for increased education is especially paramount. However, even with the significant increases in rates of college attendance over the last 20 years (NCES, 2012), many students still continue to struggle to adapt to campus life and are unable to effectively meet the academic and social challenges of the college environment. Almost half of the students who attend 4-year schools do not graduate within 6 years of their initial enrollment (Knapp, Kelly-Reid, & Ginder, 2010). The low college persistence rates of racial and ethnic minority students in college are especially alarming. In the United States (U.S.), African Americans, Latina / Latinos, and Native Americans have graduation rates of 38, 40, and 49 percent within a 6 year period respectively; this is compared to a 60 percent graduation rate for White college students (Knapp et al., 2010). The low graduation rates of students of Color are a consequence of the many obstacles these students uniquely face. Acculturative stress, experiences of discrimination, perception of a negative campus racial climate, lower levels of academic self-confidence, and decreased social involvement have all been found to be especially detrimental to the academic success and persistence of college students of Color (Allen, 1992; Harper & Hurtado, 2007; Mayo & Christenfeld, 1999, Nora &

Cabrera, 1996). The racial disparities in college graduation rates highlight the importance of understanding what factors contribute to the lower college persistence rates of racial and ethnic minority college students. Clearly additional research is necessary in order to more effectively combat these inequalities.

As first year traditional aged students enter into the college environment, they are quickly faced with a variety of both social and academic challenges. For many students, being able to take on the numerous tasks associated with successful college integration can be exceedingly difficult. Students are expected to be able to meet and make friends, choose a major, solve roommate conflicts, and get good grades among many other tasks associated with the college experience. The ability of students to navigate these multiple responsibilities contribute to the effective social and academic integration of students into the college environment, and it is these social and academic experiences that are key to the success of students in college (Tinto, 1975, 1993). Being able to effectively meet the social and academic expectations of college life enhances one's commitment to both the institution to which the student is enrolled, as well as personal academic and career goals the student may have for his or herself. Ultimately, those students who have positive academic and social experiences are much more likely to persist in college when compared to students who feel alienated from their peers and are performing poorly academically.

There are many personal and situational factors that influence the persistence and academic success of college students of Color. One area that has received a substantial amount of attention is the role of self-efficacy on college student achievement and success. Self-efficacy can be defined as a person's perception of their ability to

successfully complete an objective or task (Bandura, 1997), and an extensive body of work has examined the relationship between self-efficacy and college outcomes (e.g., Coffman & Gilligan, 2002; Gore, 2012; Multon, 1991; Zajacova, Lynch, & Espenshade, 2005). These studies strongly support self-efficacy as an important construct in the understanding of student success in college. To students with low levels of self-efficacy, the many expectations and responsibilities associated with successful college functioning- i.e. forming relationships, writing papers, navigating interpersonal conflicts with peers, etc., can appear extremely daunting. On the other hand, those students with higher levels of self-efficacy are more likely to view these tasks as challenges to be faced and eventually overcome.

Increased clarity on the role of self-efficacy beliefs with racial and ethnic minority college students is especially important given the barriers that racial minority students face at predominantly White colleges and universities. Of particular concern is that many students of Color already have low expectations of themselves in terms of their perceived ability to meet the academic challenges present in the college environment (Mayo & Christenfeld, 1999). Additionally, many students of Color also have a lower level of confidence in their ability to cope with the stress of college life (Luzzo &McWirter, 2001). This context of multiple barriers compounded by low self-confidence highlights the necessity for additional research examining the role of self-efficacy on the persistence of racial and ethnic minority students in college.

Experiences of racism and discrimination on college campuses have also emerged as another factor that may account for the decreased persistence of college students of Color (Loo, & Rolison, 1986; Reynolds, Sneva, & Baker, 2010; Smedley, Myers, &

Harrell, 1993). Racism has historically been ingrained into the very fabric of American society and this remains the case despite the major increase and acceptance of cultural norms and values that emphasize egalitarian ideals and equal opportunity (Bobo & Smith, 1998). The institutions of higher education within the United States have not been immune to the large-scale systemic forces that serve to marginalize racial minority groups. Historically, institutions of higher education in the United States (U.S.) have been environments where students of Color have been subjected to racism and discrimination, and this continues to hold true today (Goodman & West-Olatunji, 2010; Prelow, Mosher, & Bowman, 2006). Many students of Color report experiences with race-related hostility, pressure to conform to stereotypes, and unequal treatment from college faculty and staff (Ancis et al., 2000). The experiences of discrimination and the attending perceptions of a negative college campus racial climate have been hypothesized to account for the greater attrition rates seen among students of Color by obstructing the effective integration into the college environment (Hurtado, 1992; Nettles, Thoeny, & Gosman, 1986). Students are ultimately left disengaged and uninvolved with their campus community-which in turn increases the likelihood of the student choosing to withdraw from school (Kuh, 1995).

One significant aspect of contemporary racism that complicates the understanding of racial oppression on college campuses is the often invisible nature of the prejudice and discrimination faced by students of Color within these environments. White students are often unaware of the discrimination experienced by their racial minority peers and White students are more likely to report increased equitability and lower levels of racial tension on college campuses when compared to students of Color (Ancis, Sedlacek, & Mohr,

2000). This “blindness” may be reflective of the nature of contemporary racism in the U.S. in that many individuals equate racism, prejudice, and discrimination with strictly overt expressions of bigotry. These forms of oppression certainly still do occur; however, there is a general consensus that traditional overt discrimination has largely given way to more subtle and covert acts of prejudice and discriminatory behavior (Sue, 2003). It is within this context that the concept of *racial microaggression* has gained increasing prominence in the area of racism and social justice research. According to Derald Wing Sue (2010), racial microaggressions are constant and daily reminders of the inferiority or subordination of a particular people based on their racial and ethnic group membership. Racial microaggressions may be explicit or overt but are more often characterized by their subtlety and covert nature. A racial microaggression may be so subtle that it can make the victim of the microaggression question whether a racially motivated attack even occurred. Despite the subtlety of these experiences, the ever-present and cumulative effects of these contemporary forms of oppression are believed to be just as damaging as traditional forms of prejudice and discrimination (Sue, 2003; Sue et al., 2007). Though the term ‘racial microaggression’ was coined by Pierce in 1970, the research on racial Microaggressions is still in its infancy with much of the research specifically on microaggressions having been done within the last decade. There are a number of studies that indicate that racism and discrimination negatively affect students of Color within higher education settings (e.g., Loo & Rolison, 1986; Smedley et al., 1993). However, there is a dearth of literature examining the impact of racial microaggressions on students of Color in terms of how racial microaggressions specifically impact college integration and persistence.

Purpose of the Study and Summary of Methodology

It is important that we as a society work towards increasing educational access and opportunity to all individuals. It is equally important that we also work towards building educational environments that are inclusive to individuals of all racial and ethnic groups. In order to more effectively promote the success of the students within our institutions of higher education, a greater understanding of the factors that promote and detract from student success warrants increased attention by both researchers and policy makers. With this presupposition in mind, the purpose of the present study is to examine experiences of racial micro-aggressions and college self-efficacy in terms of how these two variables interact within a theoretical model of student withdrawal. Specifically, the direct and indirect influences of racial microaggression experiences and college self-efficacy on college social integration, academic integration, and persistence attitudes were examined through structural equation modeling. A visual representation of the model to be tested is presented in figure 1.

The combination of racial microaggression experiences, college self-efficacy, social integration, and academic integration were expected to contribute to the persistence attitudes of college students of Color. The direct effects of social and academic integration on persistence attitudes were tested. The direct effects of college efficacy and experiences of racial microaggression on academic and social integration were tested, and the indirect effects of college self-efficacy and experiences of racial microaggressions on persistence attitudes were tested within the proposed model. Additionally, the direct effect of academic integration on social integration was tested within this model.

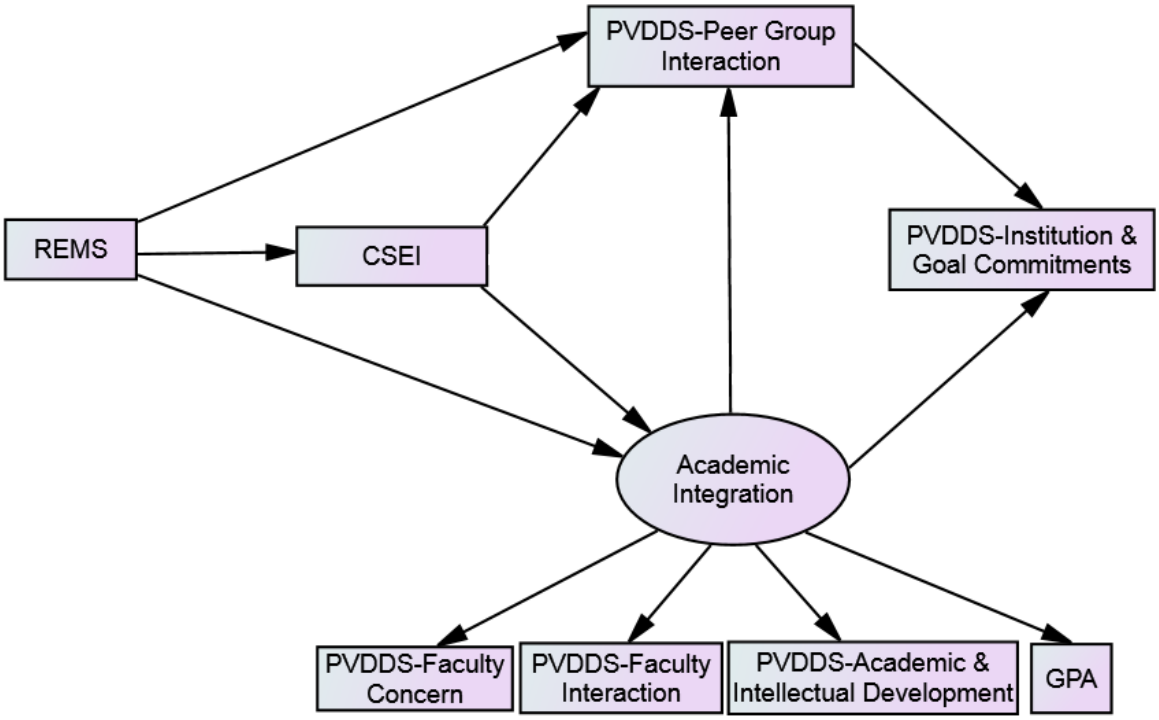

Figure 1. Proposed model for studying the impact of racial microaggressions, college self-efficacy, and social and academic integration on college persistence attitudes.

The first major pathways within the proposed model posit that college self-efficacy and experiences of racial microaggressions have an indirect effect on persistence attitudes. Previous research has indicated that perceptions of prejudice may not have a direct effect on persistence, but may indirectly impact persistence through other variables (i.e. academic and social integration) (Nora & Cabrera, 1996). Nora and Cabrera did not find a significant direct relationship between perceptions of prejudice and persistence, but did find that perceptions of prejudice directly impacted both the social integration and academic integration of racial minority college students.

In the proposed model, college self-efficacy is believed to contribute to increased social and academic integration. Previous research has linked academic self-efficacy

beliefs to the ability of students to integrate into the social environment of college life (Torres & Solberg, 2001). Using a sample of Latina and Latino college students, Torres and Solberg found that college self-efficacy had a significant impact on the social integration of college students. Self-efficacy is also believed to impact the academic integration of college students and a fairly extensive body of research has strongly supported the link between academic self-efficacy and academic performance and persistence (see Multon, Brown, & Lent, 1991 for a meta-analysis). It is believed that higher levels of self-efficacy contribute to decreased stress and improves the ability of college students to complete academic tasks and responsibilities associated with college (Solberg & Viliarreal, 1997; Torres & Solberg, 2001).

The results of this study are expected to provide an increased understanding of how discriminatory experiences and self-efficacy impact college students of Color in terms of their academic and social integration into college life. This study will also provide an increased understanding of how these factors ultimately impact the persistence attitudes of college students of Color. It is believe that the results of this study will better inform interested individuals-such as educators, educational policy makers, career and academic counselors, as well as others who are interested in college student development and persistence, about some of the obstacles and challenges in college that are uniquely faced by racial and ethnic minority students.

CHAPTER II

LITERATURE REVIEW

This chapter provides a review of the variables that make up a hypothesized model of ethnic and racial minority college student persistence grounded in Tinto's theory of college student integration. This chapter begins with an overview of Tinto's theoretical model of college persistence and how college students of Color are uniquely faced with barriers and challenges that impact persistence. Further, the role of college self-efficacy and experiences of racial microaggressions on the college persistence of students of Color will also be elucidated in the upcoming sections.

Persistence in College

College persistence refers to students' decision to remain or withdraw from the college or university to which they are attending. The retention of students in college represents a major issue in the field of higher education within the U.S. The high drop-out rates among many U.S. colleges and universities exacts a substantial financial toll on these higher education institutions. In an examination of graduation rates of 1,699 4-year colleges and universities in the U.S., Raisman (2013) determined that U.S. colleges and universities collectively lose approximately 16.5 billion dollars in lost revenue annually.

For students, college attendance is associated with a number of both short and long-term benefits. Students who are enrolled in college benefit from increased social interaction, the participation in extracurricular activities, as well as enjoyment and

fulfillment through learning experiences. Long-term benefits of college attendance include increased future earning potential, improved health, greater job stability, and increased career satisfaction (Baum & Ma, 2007; Bowen, 1997). While students who drop out may have received some degree of benefit through their college attendance, the decision to withdraw from college still represents a significant loss in that a significant amount of time, energy, and money has been invested without the ultimate attainment of a college degree.

The centrality of issues related to college persistence and attrition in the U.S. have given rise to a substantial amount of scholarly examination in the field of higher education. Multiple theories and models have arisen to explain the phenomena of student withdrawal (e.g., Astin, 1984; Bean, 1980; Milem & Berger, 1997; Tinto, 1975). One of the most comprehensive and studied models of college student persistence is Vincent Tinto's (1975, 1993) model of student integration and it is primarily through the lens of Tinto's theory that college student integration and persistence was examined in this study.

Tinto's Student Integration Theory

Vincent Tinto's Theory of Student Integration (1975, 1993) is the most widely utilized model for examining college student persistence and has received substantial empirical examination (Carter, 2006). Tinto stated that students enter college with different goals, levels of commitment to these goals, and background characteristics (eg. sex, gender, socio-economic status, and academic preparedness). These student characteristics and goal commitments influence student ability to integrate into college both academically and socially (Tinto, 1975, 1987, 1993).

According to Tinto, students' decision to drop out of college results from a longitudinal process of interaction between the individual, and the academic and social systems that are part of the university. These institutional social and academic experiences and the college students' interactions within these systems are what lie at the center of Tinto's model. Operating from Van Gennep's anthropological *Rite of Passage* framework (see Van Gennep, 1960) Tinto stated that students have to be able to separate themselves from their previous associations in order to effectively integrate into a new membership (college) system. For a student to successfully transition into college life, not only must the student be able to separate themselves from their former group, they also must be able to adopt the norms, values, and behaviors of the new group. Accordingly, those students who do not persist in college are those who are unable to effectively distance themselves from their previous group and adopt the norms, values, and behaviors of a college environment. Tinto (1975) indicated that students' transition and integration into college settings occurs through the every-day interactions with peers, faculty, and staff within the college environment. Conceptually, Tinto's model is ultimately a model of person-environment fit. The positive academic and social experiences in college serve to further integrate students into the college environment. This integration serves to increase students' commitments to their academic and future-career related goals, as well as students' commitment to the institution to which they are enrolled. Conversely, negative academic and social experiences create barriers towards integration and increase the likelihood of dropping out of the institution by negatively impacting students' commitment to the university and their level of commitment towards their educational and career-related goals. These commitments are of extreme importance

in that, according to Tinto (1993), they are the direct determinants of persistence and dropout. Essentially, the decision to stay or leave college is a function of the daily interactions within the college environment and the resulting effect these interactions have on goal and institutional commitment. The visual representation of Tinto's model in Figure 2 highlights the interactional and longitudinal nature of Tinto's model.

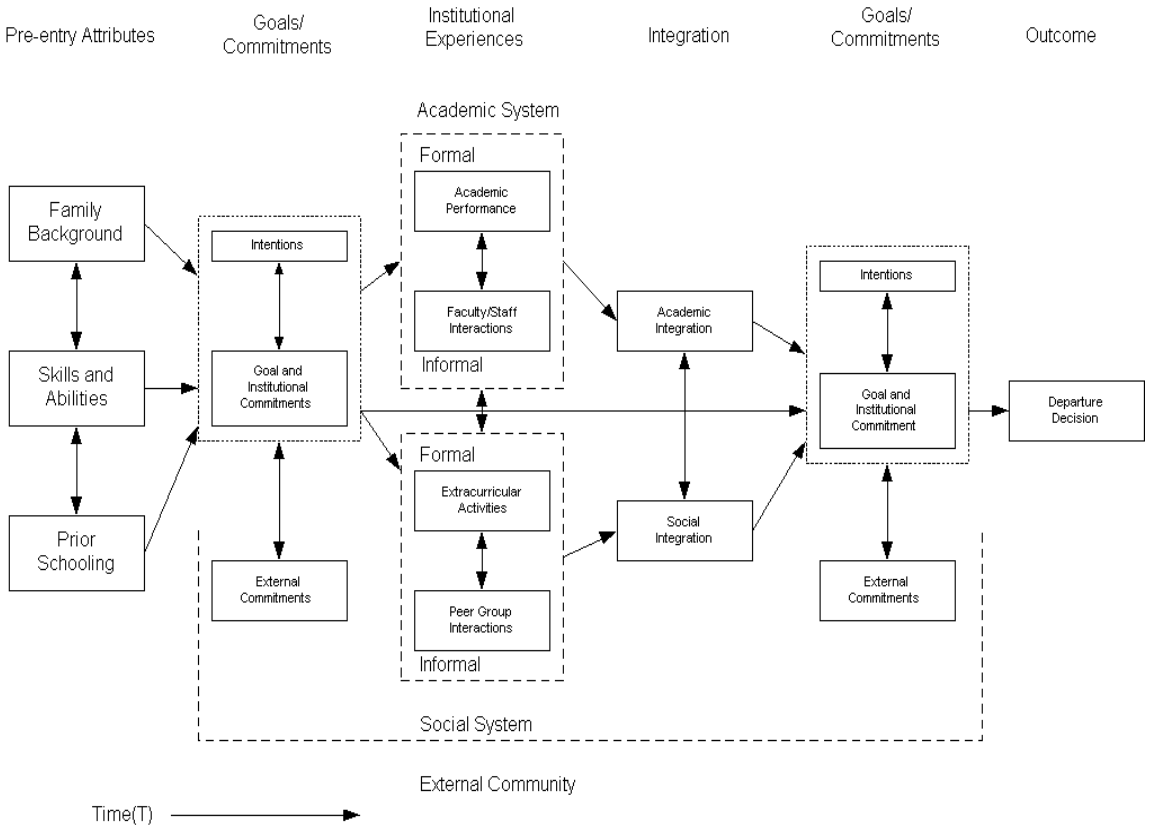

Figure 2. Tinto's Longitudinal Model of Institutional Departure.

Note. From Tinto's Longitudinal model of institutional departure, 1993

Empirical Support of Tinto's Model

The predictive validity of Tinto's model has generally been supported by empirical studies (Cabrera et al., 1992; Pascarella & Terenzini, 1983,1980). Pascarella and Terenzini (1980) drew on Tinto's model of student departure in order to create an instrument that could reliability discriminate between persisting students and non-persisting students. Pascarella and Terenzini examined to what extent institutional and goal commitments as well as academic and social integration could predict college persistence. The Persistence / Voluntary Dropout Scale (P/VDDS; Pascarella & Terenzini, 1980) that was created through this study is composed of 5 different subscales that assess peer group interaction, student interaction with faculty, student perception of faculty concern and commitment towards students, academic and intellectual development, and institutional and goal commitment. In two different samples the 5 subscales of the P/VDDS were able to correctly identify 79.5 and 78.5 percent of those students who would choose to drop out of college. The predictive validity of the instrument created in this study has provided substantial evidence towards the overall validity of Tinto's model.

A longitudinal study of retention by Gerdes and Mallinckrodt (1994) also lends support to Tinto's model and illustrates the importance of both social and academic factors when it comes to college student persistence. The researchers' goal was to examine the Student Adaption to College Questionnaire (SACQ; Baker & Siryk, 1989) and the Anticipated Student Adaption to College Questionnaire (ASACQ; Baker & Schultz, 1995) in order to identify items that were particularly useful in determining college persistence. The researchers distributed the surveys to 389 college students who were enrolled at a large northwestern public university. Six years following the initial

distribution of the ASACQ and SACQ, the researchers went back and examined participant college transcripts in order to determine which students were able to persist in school and which students dropped out. The researchers found that questions pertaining to the academic and social aspects of college were significant predictors of student persistence. Additionally, when identifying items that were significant predictors of persistence; the researchers found that of the 25 items identified, 13 items were concerned with personal / emotional and social adjustment issues. These results support the belief that the social integration is at least as important as the academic adjustment of college students when it comes to college student persistence.

Structural equation modeling of Tinto's theoretical model of student integration have produced varied results (Cabrera, Nora, & Castaneda, 1993) but also generally support the major components of Tinto's model. For example, Cabrera, Castandeda, Nora, and Hengstler (1992) performed a structural equation model using a subject pool of 2,453 freshman college students from a southwestern urban university. Cabrera and his colleagues found that of the 13 structural relations hypothesized by Tinto's student integration model that were tested in the study, 9 were found to be significant. This represented approximately 70 percent of the hypotheses proposed by Tinto's model and explained 38 percent of the variance observed. Importantly, the crux of Tinto's theory, that academic and social integration impact persistence intentions through institutional and goal commitments, was supported by the results of Cabrera and his colleagues' study.

In his theory, Tinto stated that voluntary withdrawal behavior is a complex phenomenon and he cautioned against categorizing all students who leave school into a singular "dropout" group. Rather, students' decisions to withdraw from college are

diverse and complex. A study by Mallette and Cabrera (1991) on the determinants of persistence with a sample of freshman at a large public university illustrates the diversity of withdrawal behavior and how different types of withdrawal behavior can have very different determinants. Specifically, Mallette and Cabrera compared the persistence determinants of students who chose to transfer schools versus those who chose to leave college. The researchers found that finance beliefs, institutional commitment, and academic integration were able to predict students' decisions to leave college in general; while only final institutional and goal commitments were able to discriminate between students who persisted and those who transferred to another school. Those who persisted were generally more committed to the institution to which they belonged as well as their academic and career goals compared to those who transferred. Mallette and Cabrera's study supports Tinto's proposition that voluntary dropout behavior is multidimensional and a function of different determinants.

Limitations and Criticisms of Tinto's Model

Though Tinto's model has been subjected to numerous studies that generally lend support the validity of the model (Cabrera et al.,1993), the model has received significant criticism in regards to its applicability to students of Color (Yeh, 2004). Tierney (1992, 2000) rejected the notion that students go through a rite of passage in which they must distance themselves from or even reject their previous group in order to successfully integrate into the college environment. A number of studies support the notion that stronger racial and ethnic group identification may contribute to successful college adjustment (see Sellers & Shelton, 2003; Pope, 2000; Sellers, Chavous, & Cooke, 1998). Additionally, Tinto's model places little emphasis on parental and family support-factors

that have been shown to be of significant importance in the persistence of many college students of Color (Nora & Cabrera, 1996; Arellano & Padilla, 1996). One additional criticism levied against Tinto's model is his minimization of finances as a major factor of college student persistence. In the original (1975) model, Tinto indicated that he believed that finances were not an important indicator of long-term persistence. Since his original conception of student drop-out, Tinto has acknowledged finances as playing an important, though indirect role in college student persistence (Tinto, 1993). Research by Cabrera, Nora, and Castaneda (1992) indicated that financial considerations play a major role in student social and academic integration, as well as student commitment towards staying in school. In a review of literature regarding persistence of students of Color in college, Carter (2006) stated that for many students of Color financial considerations not only affect their choice of college, but also students' experience of college itself- which in turn affects decisions to persist or to drop out.

Though Tinto's theory is well regarded for its level of comprehensiveness, there is a significant gap in Tinto's theory in regards to the role of what Tinto calls *external factors* (Cabrera et al., 1992). These external factors are made up of the previous experiences, traits, personal characteristics, and other influences outside the school environment that students bring to college with them (Tinto, 1987, 1993). Academic preparation, self-efficacy, ethnicity, gender, family support, etc., are all external factors that can play a key role not just on initial goal commitment and institutional commitments of college students as Tinto theorized, but can also have a direct impact on the academic and social integration and ultimate departure decisions of college students (Cabrera et al., 1992)

College Persistence and Students of Color

Understanding academic persistence among college students of Color is especially important given the high drop-out rates for several different minority groups. African American, Latino/ Latina, and Native American students are all more likely to drop out of college when compared to their White counterparts (Knapp et al., 2010). The same can be said of certain Asian minority groups such as Filipinos and Pacific Islanders- groups who are particularly at risk in terms of withdrawing from college (Gloria & Ho, 2003).

Experiences of racism, discrimination, and the perception of a negative racial climate have emerged as a potential reason behind much of the attrition experienced by college students of Color (Nora & Cabrera, 1996). Racial and ethnic minority students' experiences of college are often very different compared to the college experiences of their White peers. Studies have indicated that most students of Color experience racism on college campuses, and that for many of these students, these experiences are common occurrences (Harper & Hurtado, 2007; Prelow, Mosher, & Bowman, 2006). In their study on the prediction of college student retention, Zea, Reisen, Beil, and Camlan (1998) found that students of Color were more likely to report instances of racially motivated "disrespect" compared to their White peers. Furthermore, the more instances of disrespect that students experienced, the more likely they were to indicate that they would leave the university.

The academic integration into college is believed to play a significant role in the persistence of college students (Tinto, 1993; Bean 1985), and the college experiences of racism and discrimination that many students of Color face may present significant

barriers against effective academic integration. Research indicates that for students of Color, academic integration may play an even greater role in persistence compared to White students (Eimers & Pike, 1997; Zea et al., 1997). Zea and her colleagues (1997) conducted a study examining intentions to remain in college among Latino / Latina, African American, Asian American, and White students. It was found that while social integration was of significant importance to both White students and students of Color in terms of students' commitment to college, the relationship between academic achievement and institutional commitment was only strong for students of Color and was not significant for White students. This study highlights how success in academics may play an especially important role in the persistence of college students of Color. The authors of this study speculated that for minority students, academic integration and achievement may be just as important as social integration. This is particularly concerning because many students of Color report that experiences of racism and prejudice do not occur solely from other students, but also from university instructors (Ancis et al., 2000). In this regard, the racial discrimination and prejudice directed towards students of Color by university faculty can be extremely damaging in that these experiences may be especially detrimental towards academic integration.

The importance of social integration is also of great importance to the institutional commitment of students of Color. Zea and her colleagues' (1997) study on college student' intentions to remain in college indicated that social integration is an equally strong predictor of college commitment and success for both White and non-White students. In regards to college social integration, it is important to understand the unique social challenges that students of Color may face at predominantly White universities.

For many students of Color, college campuses are environments that serve to minimize their own racial and cultural background which may lead students to feel unsupported and socially isolated (Allen, 1992). White students are more apt to enter college with friends from high school, and are also more likely to be more familiar with college norms and culture (Azmitia, Syed, & Radmacher, 2008). Because of these factors, White students are at an advantage when it comes to developing peer supports and becoming more socially integrated on most college campuses. Azmitia, Syed, and Radmacher (2011) utilized a mixed methods approach in examining college student social integration and found that peer support was especially important to successful adjustment. In this study it was found that students who had higher emotional support from friends and family were also more likely to have less depressive symptoms, as well as higher overall self-esteem. The implications of these findings indicate that racial and ethnic minority students, due to their lack of peer support, are particularly at risk in predominantly White college settings.

Barriers to social integration are a function of more than just students' interactions with particular individuals on campus, but also include students' perceptions of the college as a whole. Many students of Color perceive a negative campus racial climate towards minority students and this perception may also serve to increase social isolation among students of Color (Hurtado, 1992). In a study examining how differences in perception of campus racial climate, Ancis (2000) and her colleagues found that White students consistently reported less racial tension compared to students of Color. Additionally, White students reported the highest levels of satisfaction and were also more likely to report perceiving the college environment as equitable and open to diversity. The "invisibility" of racial issues and racial tension among White students

underscores the discrepancy between White and minority students in terms of how both groups feel they may fit within the college environment.

The aforementioned studies indicate that college students of Color are faced with additional challenges and barriers compared to their White peers. The college experiences of students of Color are, in some respects, fundamentally different from that of their White counterparts in that students of Color face discrimination and marginalization based on their ethnic and racial identification as well as their non-European American cultural background. The following sections provide a more in-depth examination of the types of racial oppression that people of Color experience at colleges and universities in the U.S. and how these experiences serve as significant barriers towards the successful adjustment and integration of students of Color to the college environment.

Racial Microaggressions

Microaggressions are the "everyday verbal, nonverbal, and environmental slights, that communicate hostile, derogatory, or negative messages to target persons based solely upon their marginalized group membership" (Sue, 2010, p.3). Racial microaggressions are often, though not always, categorized by their subtle and covert nature. These racial microaggressions can have a damaging impact on the mental/psychological health (Pieterse et al., 2012), as well as physical health (Harris et al., 2006) of those who experience this form of racial oppression. Racial microaggressions also play a role in the marginalization of individuals of Color within institutions of higher education and may also have a negative impact on the campus racial climate for students of Color. This perception of hostility and the attending feelings of alienation can lead students to change

majors, drop classes, and even leave the institution in response to these negative experiences (Solorzano et al., 2000; Yosso et al., 2009).

Racial microaggressions can be broken down into three distinct categories: microassaults, microinsults, and microinvalidations. Additionally, racial microaggressions are not limited strictly to direct person to person interactions, but may also be environmental in nature. An example of an environmental microaggression may be a student of Color entering into a predominantly White university and finding out that classes are taught with only White perspectives. The first primary category of racial microaggressions, racial microassaults, are most often associated with more traditional forms of racism. Microassaults are characterized by their overt and intentional nature. Calling a person of Color a racial slur is an example of a microassault. While racially motivated microassaults still occur often in our society, it has been argued that because overt expressions of racism and prejudice have lost acceptance among the mainstream public, more subtle and coverts expressions of White superiority have generally supplanted these more flagrant expressions of prejudice (Sue, 2003; Sue et al., 2007).

A racial microinsult is the second type of racial microaggression identified by Sue (2007) and is typified by its more subtle, covert, and often unconscious nature. Despite the subtlety of this form of microaggression, it still sends a negative, and often insulting, message to the person of Color and can still be a source of great harm and distress for the person who experiences it. Unconsciously holding tighter to one's wallet or handbag as a person of Color walks past is a microinsult in that even though this action is both subtle and possibly even unconsciously perpetrated, it still sends a message of assumed criminality towards people of Color (Sue et al., 2007).

The last major category of racial microaggressions is that of microinvalidations. A microinvalidation is any behavior or verbalization that minimizes or invalidates the thoughts, feelings, or experiences of a marginalized person (Sue et al., 2007). Telling a person of Color *"I treat everyone fairly because I don't see race"* is just such an example in that this statement neglects and invalidates the unique experiences of the individual as a racial and cultural being.

The subtle and covert expressions of racial prejudice have been described as potentially the most harmful forms of racial oppression (Sue, 2003). Sue stated that even though overt acts of racial bigotry may cause great harm to innocent people, these forms of overt hatred and aggression by purposeful racists represent a minimal threat to the well-being of most racial and ethnic minority individuals. While overt racist actions may be dealt with more openly and directly, covert racism may be more difficult to address because of its subtle and often unintentional nature. Often times these subtle invalidations are never addressed in the moment by the person who experiences them (Sue et al., 2007). It is because the invisibility of these expressions of prejudice that the cycle of oppression that serves to maintain inequality in our society is maintained and perpetuated. Whites remain blind to the privilege that they receive based simply on their majority group status and because of this blindness continue to oppress racial minority individuals (Sue, 2010). Individual acts of oppression become cultural and institutional acts of oppression which serve to marginalize racial groups that fall outside of the White majority.

Taxonomy of Racial Microaggressions

In 2007, Sue et al. put forth a taxonomy for the types of racial microaggressions that people of Color experience. This taxonomy represents a synthesis of the forms of

racial microaggressions that people of Color experience. The taxonomy that Sue created is of incredible importance to the field of microaggression research in that it directly influenced subsequent studies which utilized either Sue's specific taxonomy, or variations of it, to look at how different populations experience micro-aggressions. Not only were different racial groups studied in terms of how these groups uniquely experienced microaggressions, but also gender, level of ability, sexual orientation, and religious minority status have been studied through the framework of Sue's taxonomy (Nadal, 2011). Most, if not all racial microaggression research within the last five years has been influenced to some degree by the taxonomy that Sue created.

Within his taxonomy Sue identified several categories that microaggressions typically fall under. One theme is *Alien in own land*. Microaggressions within this category tend to send messages that the individual is not a "true American." Saying that a person of color speaks good English is one such example. *Ascription of intelligence* is another theme that Sue identifies. Telling a Black male that he is a 'credit to his race' sends messages that Black people are generally intellectually inferior and that this particular individual is simply an exception. *Color Blindness* is yet another theme that Sue identifies. Any statement that denies race, for example: "I don't see Color," falls within this category and denies the racial reality of the world we live in and the unique experiences of those who belong to particular racial and cultural backgrounds. *Assumption of criminal status* is a theme where a person of Color is presumed to be deviant or even potentially dangerous simply based on the person's race. *Denial of individual racism* occurs when Whites deny their own racial prejudices and biases. *Pathologizing of cultural values* is a theme where persons of Color are made to feel that

their own cultural values, or even styles of communication, are inferior to that of the dominant White majority. Persons of Color may also experience *environmental microaggressions* which may be apparent at larger institutional or systemic levels. An example could be watching television and seeing predominately White male lead protagonists. The theme of the *myth of meritocracy* is a theme where people of Color are given messages that race plays little to no role in one's success. A message such as "All you need to do is work harder to succeed in society" denies the reality that people receive certain advantages and disadvantages because of their race. The last theme that Sue described is that of *second class citizen*. This occurs when "a White person is given preferential treatment as a consumer over a person of Color" (Sue, 2007, p.276). For example, when two people go to have lunch together and the waiter only pays attention to the White individual, the person of Color receives messages that they are devalued and unrecognized.

The taxonomy of racial microaggressions that Sue outlined is important in that, by providing a framework through which to assess microaggressions, it sets the stage for subsequent studies focusing on the micro-aggressions experienced by different marginalized groups. Though microaggression research is still limited and has only truly begun to be explored in recent years, extant research clearly indicates that different marginalized groups experience racial microaggressions, and that these microaggressions appear to have a deleterious impact on individuals of Color. Many racial groups appear to have certain similarities in the themes of the microaggressions that they experience; however, there also appear to be some important differences across the different racial groups in terms of their experiences of microaggressions. The research on

microaggressions is largely descriptive in orientation and makes little attempt as to explain why different marginalized groups experience distinct subsets of microaggressive behaviors directed towards them.

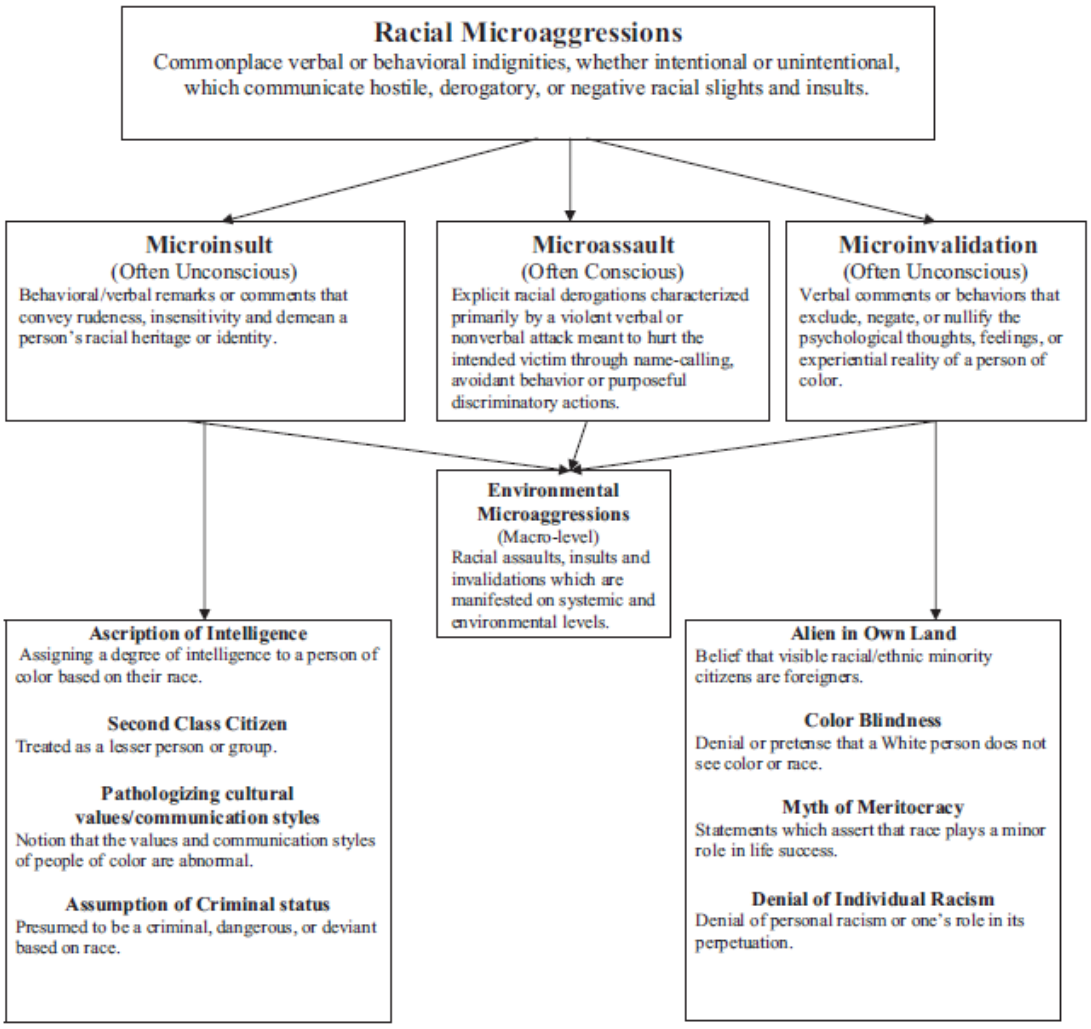

Figure 3. Categories of, and Relationships among, Racial Microaggressions.

Racism and Racial Microaggressions in Higher Education

Within university settings, racism and discrimination are perpetrated by faculty, as well as fellow students (Ancis et al., 2000; D'Augelli & Hershberger, 1997), and these incidents of racism and discrimination have a damaging impact on the students of Color

who experience them (Hwang & Goto, 2009, Fischer, 2007, Prelow et al., 2006). Feelings of alienation, the perception of campus as having hostile atmosphere towards minorities, and a perceived lack of social support all play a role in how students of Color experience and navigate the college environment (Loo & Rolison, 1986). The hostile and negative campus racial climate often perceived by students of Color has a negative impact on academic satisfaction, and increases the likelihood of the student choosing to leave the school (Fischer, 2007). Prelow et al. (2006) found that students who had increased experiences of racial discrimination were more likely to have depressive symptoms and decreased overall life satisfaction. Additionally, it was found that students' perceptions of social support decreased as they experienced increased racial discrimination (Prelow et al., 2006). In addition to depression, experiences of racism and discrimination have also been associated with increases in anxiety and suicidal ideation among students of Color (Hwang & Goto, 2009). Experiences of racial oppression negatively affect academic self-concept, the belief in one's ability to succeed in college, as well as one's motivation towards academics (Reynolds et al, 2010). Specifically, Reynolds et al. found that institutional racism-related stress was associated with a decrease in extrinsic motivation for students of Color. The research conducted by Reynolds et al. also highlighted how a negative campus environment may contribute to feelings of amotivation (lack of motivation) and disenfranchisement among students of Color.

Smith, Hung, and Franklin (2011) stated that historically White institutions of higher education in the U.S. are characterized by racial climates that are typified by prejudice, discrimination, and oft-occurring race-related stresses for the students of Color

who attend these institutions. Smith, et al. described these experiences of prejudice and discrimination as Mundane Extreme Environmental Stress (MEES). These stressors are mundane in that it is a constant and ever-present part of the experience of a person of Color, extreme because these incidents severely impact the physical, emotional, and psychological well-being of the person experiencing these forms of oppression, and environmental in that these racial stressors represent aspects of the dominant institutionalized ideology that serves to marginalize those who are considered part of the out-group. A major dilemma lies in the fact that as individuals of Color advance in their educational attainment, they are often increasingly exposed to White ideologies that may serve to marginalize and devalue their own racial and cultural background. Smith, et al. (2011) described the stress from interacting within these predominantly White institutions as "racial battle fatigue." In order to more effectively address systemic racial oppression in the U.S., greater understanding of the effects of racism and discrimination experienced by students of Color in U.S. college campuses is required.

There is a substantial body of work in the realm of racism and prejudice and how it pertains to academic achievement; however microaggression studies on how students of Color both experience and are impacted by microaggressions are severely lacking (Watkins, 2010). The research that looks specifically at how particular racial groups experience racial microaggressions on college campuses are confined to a relatively small number of studies. Additionally, researchers' understanding of microaggressions is complicated by the fact that different racial minority groups experience different forms of microaggressions. Despite increasing research on the experiences of microaggressions by individuals of Color, the continued lack of understanding on how certain groups

experience and cope with microaggressions highlights the need for continued attention and research in this field. While all non-White racial groups share at least some commonalities in terms of the types of microaggressions that are directed towards them, the research indicates that different racial groups experience their own unique types of microaggressions. It is important to focus on how specific categories of people experience microaggressions-as opposed to combining "people of Color" into a singular category.

Microaggressions Experienced by Black College Students

Solorzano and Yosso (2000) investigated experiences of Black college students from a critical race theory (CRT) framework. This investigation showed that African American college students experience racial microaggressions, and that these microaggressions contribute to a campus climate that is seen as oppressive, and devaluing of students of Color. Through a qualitative focus group analysis, and using grounded theory to analyze the results, Solorzano and Yosso found that the racial microaggressions that students in higher education settings were subjected to what the students perceived as a racial climate that was unsupportive, and did not take into account the challenges that many Black students have to face in predominately white institutions. This negative racial climate had a number of different effects on the Black students who participated in the study. Having to be hyper-vigilant in regard to stereotyping, decreased in academic performance, dropping classes or changing majors, and choosing to leave the university were all effects of negative racial climate reported by the student participants (Solorzano & Yosso, 2000).

In a study by Watkins, Labarrie, and Appio (2010), a CQR methodology was used in order to investigate the experiences that Black undergraduate students experience in U.S. colleges and universities. Participants indicated that they were often subjected to racism and stereotyping and that these prejudices usually occurred in covert and subtle forms-often making it very difficult for the individual to identify the nature of the offense. The participants in the study stated that they received messages that indicated they were less intelligent and low-class or "ghetto." Participants also felt like they were often characterized as angry, violent, and potentially criminal (Watkins, Labarrie, & Appio, 2010). Additionally, Watkins and her colleagues found that when Black participants did not conform to these stereotypes, they felt like they were treated as the exception to the rule. It was perceived by these Black students that in the eyes of the White majority, because these students did not conform to traditional Black stereotypes, they were exceptions and did not truly represent "typical" Black Americans. This "tokening" experience was common among many of the participants of the study. Another typical response of participants when they were perceived not to conform to Black stereotypes was being identified as "acting white."

Participants in the study also indicated that they often felt tension, subtle racism, or discomfort with faculty and students within the classroom setting (Watkins et. al, 2010). Some participants also indicated that they felt like they were treated differently by some faculty when compared to their White peers, and that this differential treatment sent messages that Black students were inferior or in some way were less-than their White peers. One participant stated that with White professors, discussion on race was non-existent or was "superficial" and "politically correct." For the Black students in this study,

the classroom environment served to devalue them by sending the message that non-White communication styles and classroom discussions on race were irrelevant or unimportant to the classroom experience.

Watkins, Larabbie, and Appio (2010) also documented the peer dynamics of Black undergraduate students in the context of how they perceive and experience microaggressions. The participants in the study reported a diverse range of experiences in regards to their interactions with peers. Participants typically indicated that even within the context of their peer group interactions they felt like they were subjected to racism and stereotyping. Some participants indicated that they were able to bring up issues pertaining to race with their White friends; other students felt that their relationships with White students were for the most part superficial when compared to the relationships with their peers of Color- and thus were more likely to refrain from having discussions regarding race with White students.

This study by Watkins and her colleagues lends additional support to the notion that Black Americans experience subtle racism in higher education settings, from peers, staff, and faculty members in the university setting. The "tokenization" of many Black students, in addition to the messages sent to Black individuals that they are intellectually inferior, potentially violent, and "low class" serve to undermine the experience of Black college students and sends the message that they do not truly belong in university and college settings (Watkins, Larabbie, & Appio, 2010).

Racial Microaggressions Experienced by Latina and Latino College Students

In assessing the racial microaggressions experienced by Latina and Latino undergraduate students, Yosso and her colleagues (2009) identified three categories of

microaggressions that contributed to a perceived negative racial climate in the university setting. The first identified category are interpersonal racial microaggressions which refer to the "verbal and non-verbal racial affronts" directed from fellow students as well as university staff and faculty (Yosso et al.,2009, p.667). These microaggressions contribute to making Latina/o students feel like they do not belong. The second category identified was racial jokes as microaggressions. These jokes identified Latinas and Latinos as different and were intentional in nature. Regardless of the intention of the microaggressor the joke-telling appeared to creating significant stressors for the minority students who bore the brunt of the jokes. The last category of microaggressions, that of institutional microaggressions, alludes to the academic institution as a whole and how it serves to create and perpetuate racial microaggressions. The overwhelming predominance of White faculty, lack of ethnic and racial studies curricula, and the replication of White middle class lifestyle all serve to negatively affect the experiences of Latina and Latino students, and further contribute to the negative racial climate perceived by minority students (Yosso et al., 2009).

Solorzano (1998) examined the types of racial microaggressions experienced by Chicana and Chicano scholars. These were individuals who were in the process of completing their doctoral studies or were currently in a post-doctoral program and had been awarded the Ford Foundation doctoral fellowships due to their academic excellence. Despite having achieved significant successes in terms of their academics, these individuals all reported that they had had to overcome certain barriers and challenges because of their racial identification. Using a qualitative approach to investigating the experiences of these students, Solorzano found that the Chicana and Chicano students in

the study often felt alienated and out of place, and believed that they were subjected to lower expectations in comparison to their White peers. These students indicated that they experienced both covert and overt forms of racism. Many of the participants in the study indicated that these experiences of racism and prejudice were common occurrences and contributed to the perception that they were viewed as inferior and unwelcome. This study highlights how racial microaggressions are an ever present part of the college experience for individuals of Color at both the graduate and undergraduate levels.

Racial Microaggressions Experienced by Asian American College Students

Research on how Asian American college students experience racial oppression in general, and racial microaggressions in particular, is particularly lacking (Kotori & Malaney, 2003). According to Lin (2010) Asian Americans have received significantly less attention in the literature than some other minority groups, and are often excluded in discussions on race. Racial microaggressions that Asian American students experience often center around themes of *invisibility* (being left out of discussions involving race) and *denial of racial reality* (not recognizing the unique experiences of racism that Asian Americans struggle with) (Sue, Bucceri, Lin, Nadal, & Torino 2007). This supports the research that indicates that Asian Americans are often overlooked when it comes to discussions of race.

Though research pertaining specifically to racial microaggressions experienced by Asian American college students is extremely limited, studies on Asian American college students indicate that Asian American students experience microaggressions, and that these experiences are common occurrences (Alvarez, Juang, Liang, 2006; Lee, 2003). In their study on the role of racial socialization, racial identity, and experiences of

discrimination with Chinese and Filipino American college students, Alvarez and his colleagues (2006) found that the overwhelming majority (98%) of students indicated that they had had at least one experience of racial microaggression in the past year. Lee (2003) reported that for Asian American college students, racial discrimination was associated with increased distress and decreased feelings of well-being. Contrary to the "model minority myth," Asian American college students experience racial discrimination and are negatively affected by these experiences (Lin, 2010).

Microaggressions Experienced by Native American College Students

Similar to the racial microaggression research on Asian American college students, there is a lack of research focusing specifically on racial microaggressions experienced by Native American college students (Huffman, 1991). Understanding the impact of racism and racial microaggressions directed towards Native American college students is especially important in that Native Americans are one of the most under-represented groups in higher education. (Pavel, 1992). Pavel (1992) states that Native Americans have the lowest levels of enrollment in 4 year institutions of higher education in the U.S. Additionally, Native Americans as a group have an extremely high attrition rate and are the most likely to drop out of college compared to other minority groups. Native American students have traditionally been so underserved that they often pose the highest risk for low achievement in their academic programs and for dropping out of school in general (Robinson-Zanartu, 1996).

In a study on the academic persistence of Native American college students, Jackson, Smith and Hill (2003) found that Native Americans college students perceived that they received differential treatment compared to their White peers. Racism, both

subtle and more overt forms, was a ubiquitous part of the experience of Native Americans attending predominantly White universities. Similar to some other minority groups, the Native American participants in this study indicated that they often felt tokenized and/or having to be "the voice" for their entire race and culture. These experiences led to feelings of isolation and social pressure among the Native American students (Jackson et al., 2003).

A study by Lin, LaCounte, and Eder (1998) examining the effects of college environment on academic performance lends further support to the idea that racism (both covert and overt forms) contribute to feelings of isolation among Native American students at predominantly White colleges. In addition to increased feelings of isolation by Native American students, when compared to their White counterparts Native American college students were also much more likely to perceive the college campus as being hostile towards Native American students (Lin et al., 1998). This study highlighted how the overt and covert messages that Native Americans receive from White faculty, staff, and students serve to transmit the idea that Native American students are unwelcome. These negative messages lead to feelings of isolation, alienation, and disenfranchisement which in turn leads to poor academic performance, and many ultimately choosing to drop out of college. As Huffman (1991) points out: "encounters with campus racism only reinforces the student with the feeling that the decision to go to college was a poor one and the only real alternative is to return home" (p. 29).

Limitations of Microaggression Research

The studies that pertain to racial microaggressions and racial climate in higher education settings provide an important window into how people of Color experience

racial microaggressions in academic institutions. The majority of contemporary racial microaggression research is qualitative and have provided a rich body of work that serves to increase our understanding of how people of Color perceive and experience racial microaggressions. According to Lau and Williams, the specific qualitative methodologies that have been used in microaggresison research have been Consensual Qualitative Research (CQR; Hill et al., 1997) and Interpretative Phenomenological Analysis (IPA; Smith & Osborn, 2003). These qualitative methodologies to data collection and analysis have been particularly fitting for microaggression research in that these qualitative approaches have been able to give "voice" to the personal experiences of racism and discrimination experienced by individuals of Color (Lau and Williams, 2010).

Though the qualitative approaches to examining microaggressions have yielded a great deal of information on how marginalized individuals experience and cope with microaggressions and has contributed to our understanding of contemporary forms of prejudice and discrimination, the microaggression studies that have employed these qualitative methods of data collection and analysis do have certain limitations that warrant attention. In their analysis of current qualitative microaggression research, Lau and Williams (2010) point out that there are certain limitations that are inherent to these studies: small sample sizes, selective recruitment of participants, the increased potential for interpretive bias, and other aspects related to the questions being asked as well as the skills of the interviewer- are all factors that impact the data being collected and examined.

In the context of some of the limitations that have been identified, it is important to produce quantitative research studies in order to empirically explore and support the findings of the qualitative studies that are dominant in the microaggression research field.

Based on the theoretical microaggression framework and on studies of racial climate, it can be said that many individuals of Color do experience racial microaggressions and that these experiences appear to be associated with negative experiences in the university setting. However, because of the inherent limitations regarding generalizability and subjectivity in qualitative research, it becomes difficult to assess exactly how damaging these experiences of microaggressions are, or how truly widespread they may be. The dominance of qualitative studies in the area of microaggression research highlight the need for quantitative methods to investigate microaggressions, as well as the influence that experiencing these microaggressions have on various aspects of mental health, physical well-being, and other factors such as motivation and academic success (Nadal, 2011).

Self-efficacy

Self-efficacy refers to the self-evaluation of one's ability to successfully complete a goal or accomplish a particular task (Bandura, 1997). Accordingly, those individuals who have a high degree of self-efficacy are more likely to view challenges as barriers to be overcome, and are more likely to persist in the face of setbacks. On the other hand, individuals with low self-efficacy are more likely to view challenges as threats and are more apt to lose confidence when faced with failure or disappointment.

Self-efficacy beliefs are theorized to be independent from the one’s level of ability regarding a particular skill. For example, two similar students may enter college with similar levels of academic ability, and these students are likely to face some of the same academic and social challenges that are inherent to the college environment. The student with a higher level of self-efficacy is more likely to have positive beliefs about

his or her academic ability, is more likely to be motivated towards classes, and is also more likely to persist in the face of a setback-such as receiving a failing grade on an examination. This, in turn, may lead to improved academic performance, which ultimately would increase that person's self-efficacy further. When faced with similar setbacks and obstacles, the student with lower self-efficacy may become demotivated towards school. This loss of agency can affect future academic performance and contribute to even lower level of self-efficacy for the student.

According to Bandura (1997) there are four primary sources of self-efficacy: enactive mastery experiences, vicarious experiences, verbal persuasion, and from physiological and affective states. Enactive mastery experiences refer to the personal experiences of accomplishment and results from the successful completion of tasks. Vicarious experiences occur when witnessing the successes and failures of others. The comparison and self-appraisal of oneself through these observations of others is another source of self-efficacy. Verbal persuasion refers to the verbal appraisal of the individual's ability by others-this may come in the form of encouragement or reassurance. Bandura indicated that self-efficacy beliefs are more likely to be strengthened when significant others express confidence in the person's ability to accomplish a task or goal. The final primary source of self-efficacy is from the physiological and affective states the individual experiences to a particular event-be it failure or success. Bandura stated that these physiological and/or emotional responses within the individual influence one's self-appraisal of their abilities. These different sources of self-efficacy highlight the cognitive, affective, and social sources of self-efficacy.

The construct of self-efficacy is multidimensional and varies in terms of level, generality, and strength (Bandura, 1997). Level refers to the level of task demands faced by the individual. People measure their sense of capability according to the level of difficulty of the task at hand. Self-efficacy may be very high when faced with a task that can be easily completed; alternatively, self-efficacy may be lower if the task is difficult or particularly demanding of the individual. Strength refers to the strength of one's self-efficacy beliefs. A person with strong efficacy beliefs may persist with a given task despite repeated obstacles. On the other hand, a person with weak self-efficacy beliefs may abandon the task after one or few setbacks. The final dimension of self-efficacy is that of generality. Generality refers to how specific or general certain self-efficacy beliefs may be. An individual may have high self-efficacy beliefs across a range of areas, or it may be specific to a particular domain. For example, a particularly efficacious athlete who specializes in running may feel like her or she would perform well in different sports that require a high level of endurance, another athlete on the other hand might only have a high level of confidence in that person's sport of choice.

The various sources and dimensions of the construct of self-efficacy illustrate that self-efficacy beliefs are not created and sustained in a vacuum. Rather, self-efficacy is developed and shaped by cognitive, affective, and social experiences through interactions between the individual and his or her environment. The large body of literature on self-efficacy shows how self-efficacy is complex, contextual, and domain specific.

Self-efficacy in College

College self-efficacy refers to the level of confidence in oneself regarding one's ability to perform tasks associated with success in college. Examples of these types of

tasks may include being able to talk with a professor, establish and maintain peer connections, and being able to write a term paper. College self-efficacy beliefs have been shown to be an important construct related to the success of students in college, and those students who report higher levels of self efficacy also tend to report more positive academic outcomes and decreased levels of stress (Torres & Solberg, 2001; Zajacova et al., 2005) as well as increased academic satisfaction (Ojeda, Flores, & Navarro, 2011). College students with a high level of self efficacy are also more likely to continue on in college; for example- in a study on Latino college student persistence, Torres and Solberg (2001) found that higher self efficacy was directly associated with increased persistence intentions. The large body of self-efficacy research illustrates that college students need to have more than just the ability to meet the social and academic challenges in college, it is just as important for these students to also have a strong belief that they can confront and navigate these challenges successfully.

Research on the self-efficacy of students in college has most often been examined in terms of academic self-efficacy. Though academic achievement is of great importance to the persistence of college students, a strict focus on the academic experiences fails to take into account tasks that have also been shown to be important to the success of college students which fall outside the academic realm. It is in this context that Solberg and his colleagues (1993) created the College Self-Efficacy Inventory (CSEI) which measures the academic as well as social self-efficacy of college students. This is important in that success in college is often a result of both the academic and social experiences in college (Tinto, 1975, 1993).

Self-efficacy Beliefs and College Academic Integration

College academic integration refers to the process through which students navigate and fit into the academic domains of the college experience (Tinto, 1975; 1993). An extensive body of research has supported the link between self-efficacy beliefs and success in the academic domains of college (e.g., Choi, 2005; Lent, Brown, & Larkin, 1984; Multon, Brown, & Lent, 1991).

A substantial number of studies have examined the role of self-efficacy and academic integration of students who are pursuing degrees in science and engineering fields (e.g., Hackett, Betz, Casas, & Rocha-Singh, 1992; Lent, Brown, & Larkin, 1984). In a study examining the relationship between self-efficacy beliefs and the academic success and persistence of students pursuing science and engineering majors, Lent, Brown, & Larkin (1984) examined the college students' grades and continued participation in their major one year after the students completed several measures of self-efficacy beliefs. Lent and his colleagues found that self-efficacy beliefs were strongly linked to the success of students. Those students who had higher levels of self-efficacy were significantly more likely to have stayed in their major, and were also more likely to have better grades compared to students will lower self-efficacy beliefs.

Self-efficacy has also been found to be associated with academic success of college students more generally. Gore (2006) examined the predictive role of self-efficacy on academic outcomes and using a sample of 621 college students, found that college self-efficacy beliefs accounted for approximately 10% of the variation in second semester grades after controlling for past performance on standardized test scores. The meta-analysis by Multon, Brown, and Lent (1991) also serves to highlight the importance

of self-efficacy on academic performance and persistence. Drawing from a total of 18 previous studies, Multon and her colleagues found that self-efficacy beliefs accounted for 14% of the variance of student academic performance and 12% of the variance of academic persistence.

Self-efficacy Beliefs and Social Integration

There is a substantial research base that supports the role of social integration as a significant predictor of college adjustment and persistence (Gerdes & Mallinckrodt, 1994; Wei, Russell, & Zakalik, 2005). College students who have difficulty socially integrating into the college environment often report feelings of homesickness, loneliness, and social isolation (Lokitz & Sprandel, 1971; Wei et al., 1994). The college experience is often a difficult one for many students and supportive relationships enable students to better cope with the various challenges and stressors that are a part of college living (Crockett et al., 2007). It is thus of prime importance to also examine the relationship between self-efficacy in college and the social integration of students into the college environment.

Wei, Russell, and Zakalik's (2005) study on the role of social-self-efficacy within a model that predicts loneliness and depression among college students highlights the importance of social self-efficacy among college students. Using a sample of 308 college freshman participants, Wei and her colleagues found that students with high levels of attachment anxiety, individuals who are more likely to fear rejection and / or abandonment, were more likely to experience feelings of loneliness and depression through decreased social self-efficacy. In the study, social self-efficacy thus served as a mediator between attachment anxiety and loneliness and depression.

As stated previously, Solberg and his colleagues (1993) extended the concept of college academic self-efficacy by creating the College Self-Efficacy Inventory (CSEI) and including a sub-scale that captures self-efficacy beliefs that are related to peer-interactions. Utilizing the CSEI, Torres and Solberg (2001) examined the relationships between self-efficacy, social integration and persistence intentions in a sample of 189 Latina and Latino college students. Torres and Solberg's results indicated that self-efficacy directly predicted persistence intentions and was also directly related to social integration. Students who had higher levels of self-efficacy indicated that they were more likely to remain in college and were more likely to have contacts with both peers and faculty in college.

Self-efficacy and College Students of Color

Self-efficacy research involving college students have typically focused on college students in general without paying a great deal of attention to particular racial and ethnic minority groups. However, the available research allows us to draw some conclusions about self-efficacy beliefs of students of Color who enter college. One conclusion that may be drawn is that racial minority students often have lower self-efficacy expectations for themselves when compared to their White peers (Hackett, Betz, Casas, & Rocha-Singh, 1992; Mayo & Christenfeld, 1999).

From a sample of 218 students enrolled in an engineering program at a midsized Western university Hackett (1992) and his colleagues investigated the potential differences between Euro-American students and Mexican-American students in terms of their respective levels of self-efficacy. Specifically, the levels of confidence in completing tasks associated with engineering occupations, as well as students' level of

confidence in being able to complete the educational requirements of their engineering program were examined. The researchers found that Euro-American participants were significantly more likely to have higher levels of both occupational and academic self-efficacy when compared to Mexican-American participants.

Racial minority individuals may not only have low self-efficacy expectations for themselves, but can also have low self-efficacy expectations towards the racial minority group to which they belong (Mayo & Christenfeld, 1999). In an investigation of how gender and race impact performance expectations of college students, Mayo and Christenfeld (1999) compared two categories of students- those who self-identified as either White or non-Filipino Asian, and those who self-identified as Filipino, Black, Hispanic, or Native American. These two categories of students were compared in terms of their level of confidence regarding the academic expectations they had of themselves and the racial group to which they belong. The researchers found that the group of students who were part of the Filipino / Black / Hispanic / Native American group were much more likely to believe that they would perform academically worse than the average undergraduate student. Furthermore, these students also felt like their racial group as a whole were academically substandard compared to the average student and lagged behind the average student in terms of general academic preparedness.

The coping self-efficacy of racial and ethnic minority is another important concept related to the self-efficacy of college students of Color, especially given the context of the challenges that students of Color uniquely face at predominantly White colleges and universities in the U.S. Coping self-efficacy can be defined as the level of confidence an individual has in terms of how that person sees him or herself coping with

difficult or stressful situations (Bandura, 1997). Research by Luzzo and McWirter (2001) highlight major differences in coping self-efficacy between White and racial minority students. From a sample of 286 freshman college students at a small Southern university, Luzzo and McWirter found that not only do minority students perceive more educational barriers than their White peers, the racial minority students were also more likely to have lower global levels of self-efficacy in regards to their perceived ability to cope with educational and occupational barriers.

The literature on the self-efficacy of college students of Color highlights some of the major dilemmas faced by racial and ethnic minority students. Many of these students have lower levels of confidence in their academic abilities as well as lower self-efficacy in regards to how they will cope with the stressors they will face in the college environment. It is reasonable to postulate that these factors, combined with the perception of significant academic and social barriers, ultimately lead many students of Color to choose to withdraw from college.

Summary and Goals

The purpose of this study is to fill a major gap in multicultural research investigating the role of college self-efficacy and experiences of racial microaggressions on factors related to the college persistence of students of Color. Research that examines the relationship between self-efficacy and persistence tends to focus more specifically on the academic self-efficacy of college students. This has certainly been shown to be of significant importance to the success of students in college (e.g., Multon, Brown, & Lent, 1991); however, college experiences do not occur solely in the classroom, but also in the dormitories, cafeterias, campus events, and many other areas associated with university

life. The peer-group social interactions are of great importance to the integration into college of many students and failing to address these social aspects misses out on an important facet of the college experience that is fundamentally related to students' decisions to stay in or withdraw from college. Additionally, while there have been a number of studies that have examined the role of self-efficacy as it applies to aspects of Tinto's model of college student persistence (e.g., Chemers, Hu, & Garcia, 2001; Robbins et al., 2004; Torres & Solberg, 2011), the majority of these studies have not focused specifically on students of Color. Those relatively few studies that have investigated the relationship between self-efficacy and persistence factors in racial and ethnic minority students have focused on these relationships using specific racial and ethnic populations (e.g., Torres & Solberg, 2001). The current study contributes to the literature of racial and ethnic minority college student persistence by examining the role of self-efficacy within Tinto's model of student integration using a pool of participants that belong to a number of different racial and minority groups, across multiple 4-year institutions of higher education in the U.S.

The second major way that this study contributes to the literature is through the examination of the role of racial microaggression experiences on factors related to college persistence through the theoretical framework established by Tinto (1987). As stated previously, studies that have tested Tinto's model have typically utilized largely homogenous samples composed of predominantly White, freshman college students. White students are not subjected to the level of racial and ethnic discrimination and prejudice that college students of Color experience (Ancis et al., 2000). Thus, experiences of prejudice and discrimination are not included (at least explicitly) within most

persistence models. There are very few studies that have specifically examined how experiences of discrimination fit into Tinto's student integration model (see Nora & Cabrera, 1996), and there are no studies that specifically look at how racial microaggressions may impact and fit in with the major variables that, according to Tinto's theory, impact college persistence.

Primary Research Questions and Proposed Hypotheses

Research Question 1: What role do experiences of racial microaggressions play on the college self-efficacy, social integration, and academic integration of college students of Color?

- Hypothesis 1A: Experiences of racial microaggressions are hypothesized to have a moderate negative effect on social integration
- Hypothesis1B: Experiences of racial microaggressions are hypothesized to have a moderate negative effect on academic integration.
- Hypothesis 1C: Experiences of racial microaggressions are hypothesized to have a moderate negative effect on college self-efficacy.

Research Question 2: What is the role of college-self efficacy on the social and academic integration of college students of Color?

- Hypothesis 2A: College self-efficacy is hypothesized to have a strong positive effect on social integration.
- Hypothesis 2B: College Self-efficacy is hypothesized to have a strong positive effect on the academic integration.

Research Question 3: What is the role of academic integration in predicting persistence attitudes of college students of Color within the proposed theoretical model?

- Hypothesis 3A: Academic integration is hypothesized to have a strong positive effect on persistence attitudes.
- Hypothesis 3B: Academic integration is hypothesized to mediate the relationship between experiences of racial microaggressions and persistence attitudes.
- Hypothesis 3C: Academic integration is hypothesized to mediate the relationship between college self-efficacy and persistence attitudes.

Research Question 4: What is the role of social integration in predicting persistence attitudes of college students of Color within the proposed theoretical model?

- Hypothesis 4A: Social integration is hypothesized to have a strong, positive effect on persistence attitudes.
- Hypothesis 4B: Social integration is hypothesized to mediate the relationship between experiences of racial microaggressions and persistence attitudes.
- Hypothesis 4C: Social integration is hypothesized to mediate the relationship between experiences of college self-efficacy and persistence attitudes.

Research Question 5: What is the relationship between social integration and academic integration?

- Hypothesis 5A: Academic integration is hypothesized to have a strong direct effect on the social integration.

CHAPTER III

METHODS

Participants

This study was conducted with first year college students of Color who were attending colleges and universities in the U.S. Participants were restricted to individuals who identified as undergraduate students who are citizens of the U.S between the ages of 18-24. A total of 306 participants completed the survey. After screening out for random responding and missing data, a total of 228 (N=228) participants constituted the final sample. White students were purposefully excluded from participating in this study due to the focus on racial microaggressions experienced uniquely by individuals of Color. Demographic characteristics of study participants are presented in table 1.

Table 1. Participant Demographics.

	N	%
Race		
Black / African American	78	34.2
Hispanic / Latino American	48	21.1
Asian American / Pacific Islander	56	24.6
American Indian	4	1.8
Middle Eastern	1	.4
Mixed Race / Biracial	36	15.8
Other	5	2.2
Gender		
Male	50	21.9
Female	176	77.2
Other	2	.9

Table 1. cont.

	N	%
Sexual Orientation		
Heterosexual	200	87.7
Lesbian	6	2.6
Gay	2	.9
Bisexual	12	5.3
Asexual	4	1.8
Other	4	1.8
Ages		
18	53	23.2
19	137	60.1
20	20	8.8
21	9	3.9
22	3	1.3
23	3	1.3
24	3	1.3
High School GPA		
A	108	47.4
B+	67	29.4
B	28	12.3
B-	15	6.6
C+	6	2.6
C	4	1.8
Family Income		
$10,000 or less	16	7.0
$11,000-$20,000	21	9.2
$20,000-$30,000	21	9.2
$30,000-$40,000	18	7.9
$40,000-$50,000	31	13.6
$50,000-$60,000	28	12.3
$60,000-$70,000	11	4.8
$70,000-$80,000	11	4.8
$80,000-$100,00 0	32	14.0
$100,000-$150,000	24	10.5
$150,000 or more	15	6.6

Table 1. cont.

	N	%
Size of University Attending		
Less than 3,000	17	7.5
3,000-10,000	88	38.6
10,000-20,000	71	31.1
20,000 or more	52	22.8

Procedure

Following approval of the study from the University of North Dakota Institutional Review Board, participants for the study were recruited through two primary data collection strategies. The first method of participant recruitment was through Amazon Mechanical Turk (www.MTurk.com). Amazon Mechanical Turk is an online labor market where individuals can complete particular tasks- such as taking a survey- usually for a particular amount of financial compensation. Amazon Mechanical Turk has gained increasing traction as a means to collect data for the purpose of social science research (Mason & Suri, 2011) and examinations of Amazon Turk as a data collection tool have provided evidence towards the reliability of the data collected through this means (Buhrmester, Kwang, & Gosling, 2011; Rand, 2012).

The second primary method of data collection was through the distribution of the survey via multicultural student centers and multicultural student organization listservs. The directors of university multicultural student centers and multicultural student organization leaders were contacted via e-mail and phone to request participation in this study. The multicultural student service directors and multicultural student organization leaders were requested to forward an e-mail to the students of Color at their respective universities and organizations. This e-mail explained the general purpose of the study, as

well as the expected time to complete the study. Additionally, the e-mail contained an online link connecting to this study's survey through Qualtrics.

The participants who chose to take the survey were initially provided with an informed consent document that elucidated the nature as well as the potential benefits gained from the study. Participants were explicitly made aware of the voluntary nature of participating in the study and that they would be able to easily discontinue at any time during the course of the study without any negative consequence. Participants were also provided information on potential compensation for participation. Participants who were recruited through university listservs had the option of entering their names in a drawing for a chance to win one of five $20 gift cards. The participants who are recruited through Amazon Mechanical Turk were compensated $1 for their participation.

After completing the informed consent document, participants were directed to the survey. In addition to a brief demographic questionnaire, items within the survey were comprised of questions from the Racial and Ethnic Microaggression Scale (REMS), the Persistence / Voluntary Dropout Decisions Scale (P/VDDS), and the College Self-Efficacy Inventory (CSEI). When finished with the survey, participants were presented with a printable handout thanking them for their participation in the study. Though risk is believed to be minimal and no major problems are believed to result from participation in this study, participants were nonetheless provided with contact information of the principal investigator of the study if the participant has any questions or concerns. Total estimated time to complete the surveys is approximately 15-20 minutes though students were provided with as much time as they need in order to complete the survey.

Measures and Outcome Variables

Demographic Questionnaire

Participants completed a demographics form requesting information about each participant's age, gender, race, family income, high school grade point average, and college grade point average.

Racial Microaggressions

Experiences of racial microaggressions was assessed using the Racial and Ethnic Microaggression Scale (REMS; Nadal 2011). The REMS is a 45 item checklist that measures participants' experiences of racial microaggressions using the taxonomy that Sue and colleagues (2007) established. The REMS is the first instrument that focuses specifically on racial microaggressions based off of Sue's taxonomy of racial microaggressions. The REMS was initially created from a pool of 661 participants. Participants consisted of college and internet recruited individuals who identified as African American, Latino / Latina, Asian American, and multiracial. Exploratory principle components analysis led to the creation of a 6 factor model. A second study by Nadal using confirmatory factor analysis further supported the 6 factor model of the first study (Cronbach's alpha of .89 for the whole model). The 45 items within the REMS were thusly categorized into 6 major subscales: (1) Assumptions of Inferiority, 2) Second-Class Citizen/ Assumption of Criminality, (3) Microinvalidations, (4) Exoticization/Assumptions of Similarity, (5) Environmental Microaggressions, and (6) Workplace and School Microaggressions. These subscales were all found to have an adequate level of reliability. Chronbach's alpha levels for the subscales are as follows: subscale 1: Assumptions of Inferiority (α =.86), subscale 2: Second Class Citizen /

Assumption of Criminality (α =.82), subscale 3: Microinvalidations (α =.79), subscale 4: Exoticiization / Assumption of Similarity (α =.71), subscale 5: Environmental Microaggressions (α=.76), and subscale 6: Workplace and School Microaggressions (α=.74). In the scale, participants will indicate the number of times a racial microaggression occurred within the last 6 months with *0 = I did not experience this event in the past six months, 1 = I experienced this event 1 time in the past six months, 2 = I experienced this event 2 times in the past six months, 3 = I experienced this event 3 times in the past six months, 4 = I experienced this event 4 times in the past six months, and 5 = I experienced this event 5 or more times in the past six months.*(Nadal, 2011). The REMS was significantly correlated with the Life Experiences Scale-Brief (RaLES-B) developed by Utsey in 1998, as well as the Daily Life Experiences Measure (DLE) which was created by Harrell in 2000. Both the RaLES-B and the DLE purport to measure racism and discrimination, and the REMS' correlation with both of these measures adds support to the validity of the REMS as a working measure of racial microaggressions experienced by people of Color. Additionally, participants indicated that they believed that the REMS was a measure of racial discrimination which adds additional support that the REMS measures what it contends to measure (Nadal, 2011).

Persistence Attitudes, Social Integration, and Academic Integration

Persistence Attitudes, Social Integration, and Academic Integration were measured using the Persistence / Voluntary Dropout Scale (P/VDDS; Pascarella & Terenzini, 1980) and self-reported grade point average (GPA).The P/VDDS assesses the academic persistence and non-persistence beliefs of college students. Pascarella and Terenzini (1980) found that the P/VDDS was able to significantly predict college student

persistence 78.9 percent of the time. The P/VDDS contains 30 items and uses a 5-point Likert-type scale that ranges from 1 (strongly disagree) to 5 (strongly agree). Lower scores indicate the greater presence of attitudes associated with an increased likelihood of choosing to remain in college, while higher scores indicate attitudes associated with a higher likelihood to drop out of college. Sample items include: "It is important for me to graduate from college" and "I am satisfied with my academic experience at this university." The P/VDDS can be broken down into 5 different sub-scales: peer-group interactions, interactions with faculty, faculty concern for student development and teaching, academic and intellectual development, and institutional and goal commitments. These subscales were all found to have an adequate level of reliability. Chronbach's alpha levels for the subscales are as follows: subscale 1: peer-group interactions (α =.84), subscale 2: interactions with faculty (α =.83), subscale 3: faculty concerns for student development and teaching (α =.82), subscale 4: academic and intellectual development (α =.74), and subscale 5: institutional and goal commitments (α=.71). The P/VDDS was created using a college population at a predominantly White, northeastern U.S. university. Studies using the P/VDDS with diverse populations have indicated that the P/VDDS is a reliable measure for use with college students of Color. The internal consistency of the P/VDDS with Latina and Latino (Gloria, Lopez, & Rosales., 2005), African American (Gloria, Robinson Kurpius, Hamilton, & Wilson, 1999), Native American (Gloria & Robinson Kurpius, 2001), and Asian American college students (Gloria & Ho, 2003) were .86, .86, .79, and .71 respectively.

The peer-group interactions subscale of the P/VDDS was used to measure social integration; this is consistent with previous research that has examined the social

integration of college students of Color (Nora & Cabrera, 1996). Academic integration was measured using the faculty concerns for student development and teaching subscale, the academic and intellectual development subscale, the interactions with faculty subscale, and self-reported GPA. These variables have been utilized as variables pertaining to academic integration in previous research (Chapman & Pascarella, 1983; Mallette & Cabrera, 1991). Persistence attitudes were measured through the items that make up the goal and institutional commitment scale from the P/VDDS. This was chosen because Tinto's theory posits that goal and institutional commitment directly influence the decision to leave college (Tinto, 1975, 1987). As it is not possible to examine institutional records to verify the persistence or dropout of students, the P/VDDS items that reflect goal and institutional commitments are the clearest and most direct indicators of persistence attitudes that are available for study.

College Self-efficacy

College self-efficacy was assessed using the College Self-Efficacy Inventory (CSEI; Solberg et al., 1993). The CSEI is a 19 item instrument that utilizes a 10-point scale and ranges from 0 *not at all confident* to 10 *extremely confident*. The CSEI was developed by Solberg and his colleagues to assess the level of confidence a student may have towards performing a broad range of college-related tasks. The CSEI is composed of three distinct subscales-*social*, *course efficacy*, and *roommate efficacy*. The *social efficacy* subscale refers to student efficacy in regards to being able to make friends and engage in social interactions. *Talk to university staff* is an example of an item within this subscale. The *course efficacy subscale* refers to students' confidence in their ability to successfully complete academic related college tasks. The ability to *take good class notes*

is one example of an item within this subscale. The third and final subscale is *roommate efficacy*. This subscale refers to the level of confidence students may have in their ability to successfully navigate having a roommate. *Divide space in your residence* is an example of a question within this subscale. Solberg and his colleagues created the scale initially using a sample of Hispanic college students. In their study Solberg and his colleagues reported a Chronbach's alpha of .93 for the total instrument and .88 for each of the individual subscales. In a more heterogeneous and racially diverse sample of college students, Gore et al. (2006) found that the CSEI subscales had good internal consistency with alphas from .83 to .88.

Proposed Primary Analysis

Structural equation modeling with latent and manifest variables using AMOS was used to examine the hypothesized proposed model of racial and ethnic minority college student persistence. These primary analyses techniques were selected because of the ability to test the strength of direct and indirect relationships among different variables within a theoretical model (Norman & Streiner, 2003).

CHAPTER IV

RESULTS

Descriptive Statistics and Zero-order Correlations

Means, standard deviations and zero-order correlations were calculated for each of the major variables in this study. Significant correlations ranged from .16 to .54. The correlation matrix is presented in table 2 (below) along with the mean and standard deviation of the major variables.

Reliability Analysis

Reliability analyses were conducted in order to assess the reliability of the REMS, CSEI, and different subscales of the PVDDS. With the exception of the Faculty Concern for Student subscale of the PVDDS which had a Cronbach's α of .61, the scales in this study had moderate to good levels of reliability with Cronbach's α ranging from .73 to .91. Because the Faculty Concern for Students scale had a poor reliability (α=.61) it was determined that this scale would not be included in subsequent analyses and model testing.

Table 2. Means, Standard Deviations, and Correlations between Measures.

	Mean	Standard Deviation	PVDDS-Peer Interaction	PVDDS-Faculty Interaction	PVDDS-Faculty Concern	PVDDS-Academic & Intellectual Development	PVDDS-Persistence Attitudes	REMS	CSEI	GPA
PVDDS-Peer Interaction	3.51	0.81	1							
PVDDS-Faculty Interaction	3.56	0.80	.443**	1						
PVDDS-Faculty Concern	3.39	0.70	.352**	.349**	1					
PVDDS-Academic & Intellectual Development	3.64	0.66	.478**	.514**	.434**	1				
PVDDS-Persistence Attitudes	4.24	0.68	.401**	.377**	.298**	.544**	1			
REMS	0.32	0.17	-.034	.182**	-..084	.002	-.009	1		
CSEI	6.60	1.25	.485**	.464**	.248**	.513**	.340**	-.012	1	
GPA	3.24	0.62	.106	.079	.162*	.293**	.061	-.022	.155*	1

*REMS=Racial and Ethnic Microaggression Scale, CSEI=College Self Efficacy Inventory, PVDDS= Persistence and Voluntary Dropout Decisions Scale, GPA=Freshman Grade Point Average**Correlation is significant at the .01 level, *Correlation is significant at the .05 level.*

Table 3. Reliability of Measures.

Subscales	Cronbach's Alpha
College Self Efficacy Scale	.91
Racial and Ethnic Microaggression Scale	.88
PVDDS-Peer Group Interaction Subscale	.85
PVDDS-Interactions with Faculty Subscale	.87
PVDDS Faculty Concern for Students Subscale	.61
PVDDS-Academic and Intellectual Development Subscale	.74
PVDDS-Institutional and Goal commitments Subscale	.73

Note. PVDDS=Persistence and Voluntary Dropout Decisions Scale

Examination of Differences between Groups

Several preliminary analyses were conducted in order to examine differences on the primary variables of interest in this study (experience of racial microaggressions, persistence attitudes, peer interaction, faculty concern, faculty interaction, self-efficacy, and Freshman GPA) due to gender, racial identification, family income, high school academic performance (as measured by GPA), sexual orientation, and whether English was or was not the first language of the participant. T-tests were conducted for all scales with gender and English as a second language. ANOVA was utilized to examine differences between racial groups, sexual orientation, family income, university size, and high school academic performance. Statistically significant differences were not found in relation to gender, age, sexual orientation, age, family income, and size of university attended on any of the variables in the study.

Significant differences were found between those who reported speak English as their first language and those who speak English as their second language on the faculty concern for students subscale $t(226) = 2.19$, $p = .04$. Students who speak English as their

first language had significantly higher mean scores (M=3.43, SD=.69) than students who spoke English as their second language (M=3.13, SD=.71). Additionally, students who speak English as their first language (M=6.67, SD=1.22) had higher CSEI scores compared to English as their second language speakers (M=6.17, SD=1.37), t (226)= 2.19, p = .04.

Significant differences due to race were only found for Freshman GPA. One-way ANOVA revealed that race was significantly related to Freshman GPA F(5,222)=3.38, p<.01. Post-hoc comparisons using the Tukey HSD test indicated that significant differences were found on GPA between Black / African American students (M=3.04, SD=.75) and Asian American / Pacific Islander students (M=3.46, SD=.52).

One-way ANOVA revealed that high school GPA only predicted Freshman GPA F(2, 225)=19.93, p<.001. High school GPA was categorized into an A, B, and C group (each representing their respective grade ranges). Those who indicated that they received A-grades during high school were more likely to have a significantly higher Freshman GPA (M=3.47, SD=.50) compared to students who received B-grades (M=3.06, SD=.62) and C-grades (M=2.74, SD=.69) during high school. There was no significant difference on Freshman GPA between those who received C and B grades in high school.

Comparisons on the different variables were conducted between those participants who were recruited through AMT, and those participants who were recruited through other means (multicultural student center list-servs, online solicitation, social media, etc.). The means and standard deviations comparing the groups on each variable are presented in table 4.

Table 4. Means and standard deviations between AMT and non-AMT recruited participants.

	Recruitment Method	Mean	(SD)
CSEI	Non-AMT	6.59	(1.22)
	AMT	6.67	(1.39)
REMS	Non-AMT	.32	(.17)
	AMT	.33	(.2)
GPA	Non-AMT	3.26	(.6)
	AMT	3.13	(.73)
PVDDS-Peer Interaction	Non-AMT	3.54	(.77)
	AMT	3.35	(.98)
PVDDS-Faculty Interaction	Non-AMT	3.59	(.78)
	AMT	3.42	(.89)
PVDDS-Academic &	Non-AMT	3.63	(.65)
Intellectual Development	AMT	3.67	(.73)
PVDDS- Institution & Goal	Non-AMT	4.26	(.65)
Commitments	AMT	4.19	(.82)

Note. N=189 for the Non-AMT recruited participants. N=39 for participants recruited through AMT.REMS=Racial and Ethnic Microaggression Scale, CSEI=College Self Efficacy Inventory, PVDDS= Persistence and Voluntary Dropout Decisions Scale, GPA=Freshman Grade Point Average

Independent samples t-tests between the non-AMT recruited participants and the AMT recruited participants revealed no statistically significant differences between these two groups. Due to the lack of significant differences on each of the major variables between the AMT and non-AMT recruited groups, it was determined that the data from the non-AMT and AMT recruited groups were largely equivalent and could thus be combined for analysis.

Assessment of Normality

Curve estimations for all the relationships in the model were conducted in order to determine whether all relationships within the proposed model were sufficiently linear to be tested using SEM, and it was found that all relationships are sufficiently linear.

Multicollinearity was assessed using linear regression on variables in the model. Linear regression analyses revealed that potential problems related to multicollinearity were minimal and thus insufficient to adversely impact the overall data analyses.

The kurtosis and skew of all variables were examined in order to explore whether there existed violations of normality assumption amongst variables. The kurtosis and skew of the Peer Interaction scale, Faculty Concern scale, Faculty Interaction scale, and CSEI indicated that these variables are approximately symmetrical (Skewness and kurtosis values were between .5 and -.5). The REMS, Academic and Intellectual Development scale, and the Institutional and Goal Commitments scale were shown to have moderate levels of skewness and kurtosis, but still fell within acceptable levels (skewness and kurtosis values remained between 1 and -1). The one variable that showed a high level of skewness and kurtosis was Freshman GPA which had a skewness value of -1.14 and kurtosis value of 1.64. In order to correct for non-normality, a natural log transformation was computed for Freshman GPA. Following this transformation, Freshman GPA had a skewness value of -.34 and kurtosis value of -.21. Multivariate normality was assessed using AMOS for the initial model and post-hoc second model. The first model had a multivariate kurtosis statistic of 6.65 and the second model had a multivariate kurtosis statistic of 6.68. According to Kline (2011) kurtosis normality values less than 10 are acceptable. The use of Maximum Likelihood Estimation, which is robust to smaller violations of normality, was thus utilized to test the different models.

Model Testing

Structural equation modeling with latent and manifest variables was conducted to test the proposed theoretical model. The fit of the structural model was tested using Maximum Likelihood Estimation. As mentioned previously the Faculty Concern scale, which was initially conceptualized as a manifest variable of academic integration, was removed from the model due to the poor reliability of the scale. The indices utilized to assess model fit included the chi-square test (χ^2), Tucker Lewis Index (TLI), Comparative Fit Index (CFI), Standardized Root Mean Square Residual (SRMR), and the Root Mean Square Error of Approximation (RMSEA). The results of the initial model test presented a mixed picture regarding the model's fit: χ^2 (10, N=228) =32.01, p<.001, CFI=.94, TLI=.87, SRMR=.05, RMSEA=.1. The chi-square statistic was significant and the RMSEA fit statistic was greater than .06. Additionally, the CFI and TLI both fell in the unacceptable range. Only the SRMR fell within acceptable level. These results indicate that overall the data was not an acceptable fit to the proposed model. As can be seen, several of the parameters of the proposed model were not found to be significant (See figure 4).

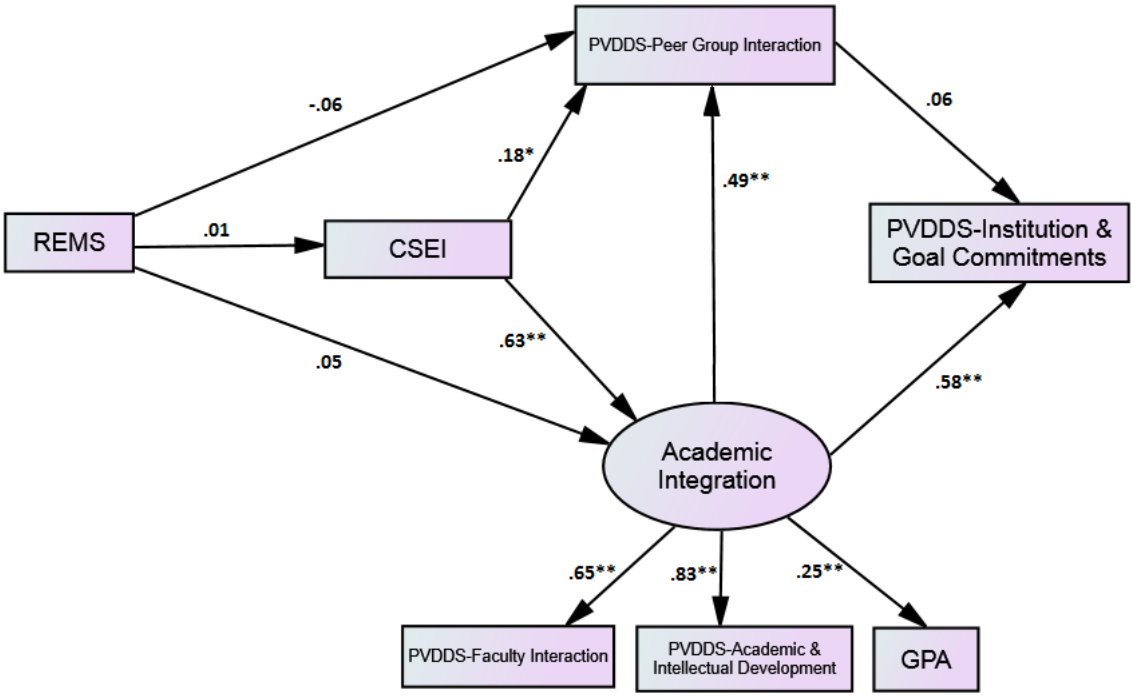

Figure 4. Model 1-Hypothesized Structural Model
**p<.05, **p<.01*

Because several of the initial model's parameters were non-significant, and because several of the fit indices indicated an unacceptable fit of the initial proposed model, an alternative model was created post-hoc and tested with Maximum-Likelihood Estimation. As experiences of racial microaggressions did not directly predict college self-efficacy, academic integration, or peer-group interaction, these parameters were removed. Similarly, because peer- group interaction did not directly predict persistence attitudes within the model, this parameter was also removed. Finally, GPA was found to exhibit covariation with academic / intellectual development and this covariation was included in the second model. The second model is shown in figure 5.

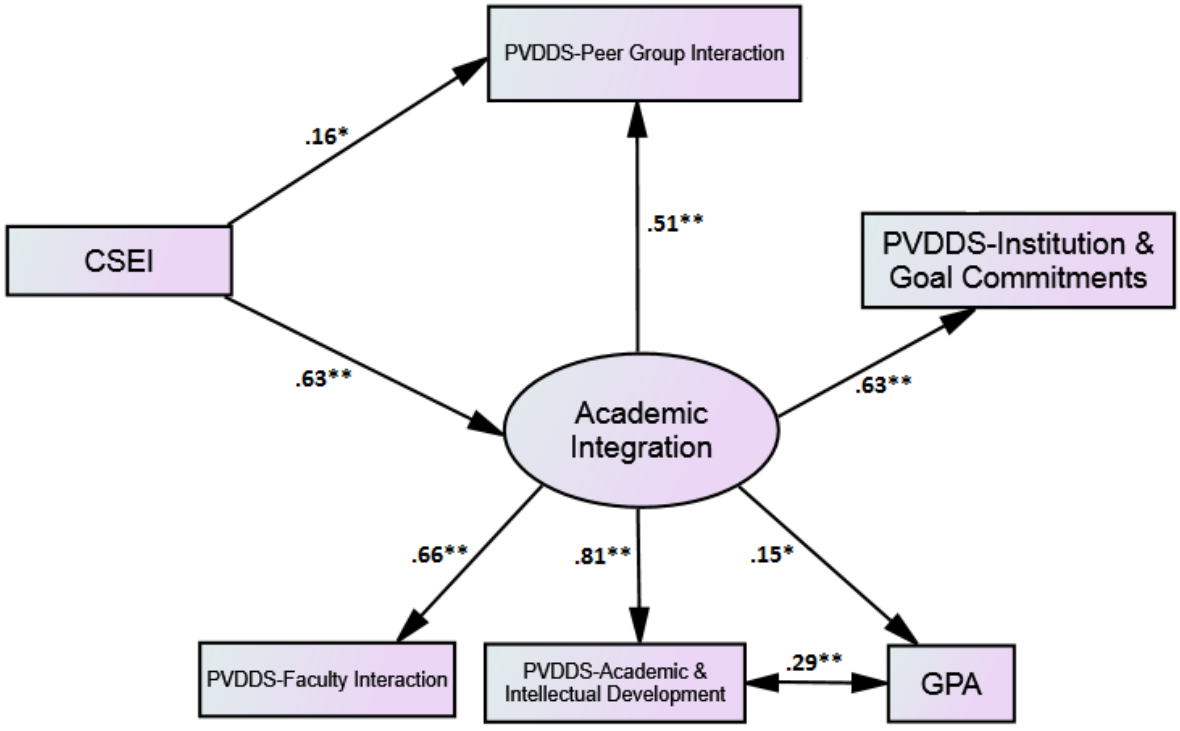

Figure 5. Model 2-Proposed Alternative Model.
**p<.05, **p<.01*

Results of the second model test indicated an excellent fit, and the fit of the second model was superior to the initial proposed model: χ^2 (12, N=228) = 10.11, *p*=.18, CFI=.99, TLI=.98, SRMR=.03, RMSEA=.04. Unlike the initial proposed model, the chi-square statistic in the second model was not significant and the RMSEA, CFI, and TLI fell within the acceptable range. The Akaike Information Criterion (AIC) statistic, which is a comparative measure of fit when examining at least two different models, was shown to be lower in the second model compared to the initial model. This is further indication that the second model is a significantly better fit to the data. Overall, the results indicate that there is great similarity between the hypothesized model's covariance matrix and the

observed covariance matrix. Fit indices comparisons of model 1 and 2 are displayed in table 5.

Table 5. Fit Indices for Model 1 and Model 2.

Model	χ^2	Df	CFI	TLI	SRMR	RMSEA (90% CI)	AIC
Model 1	32.01	10	.94	.87	.05	.10 (.06-.14)	82.01
Model 2	10.11	7	.99	.98	.03	.04 (.00-.10)	50.11
Recommended cutoff scores (Hu & Bentler, 1999)			$\geq$.95	$\geq$.95	$\leq$.08	$\leq$.06	

Note. N=228. Df=degrees of freedom, CFI=Comparitive Fit Index, TLI=Tucker-Lewis Index, SRMR=Standardized root mean-square residual, RMSEA= Root Mean Square Error of Approximation, CI= Confidence Interval, AIC=Akaike Information Criterion. **p*<.05, ***p*<.01

Analysis of Mediating Paths

Bootstrapping was utilized to test the indirect effects of college self-efficacy on persistence attitudes and peer-interaction on persistence attitudes. Because racial microaggressions did not have a direct effect on peer-interaction, academic integration, and persistence attitudes; mediation analyses examining the link between racial microaggressions and persistence attitudes were not conducted. The initial step in mediation analysis is examining the direct effect of the predictor variable on the dependent variable, thus regression analyses were conducted examining the direct effect of college self-efficacy on persistence attitudes and the direct effect of social integration on persistence attitudes. College self-efficacy significantly predicted persistence attitudes, $\beta = .34$, $t(227) = 5.43$, $p < .001$, and explained a significant proportion of variance in persistence attitudes, $R^2 = .18$, $F(1, 226) = 29.48$, $p < .001$. Social integration was also found to significantly predict persistence attitudes, $\beta = .4$, $t(227) = 6.59$, $p <$

.001, and also explained a significant proportion of variance in persistence attitudes, R^2 = .16, $F(1, 226) = 43.41$, $p < .001$. Because both social integration and college self-efficacy were found to have direct effects on persistence attitudes before the addition of potential mediators, it was deemed appropriate to conduct mediation analyses using the bootstrapping procedure.

The bootstrapping procedure, which is a resampling method, first entails collecting 1000 random samples (with replacement) from the original dataset (N=228). AMOS then runs the structural model 1,000 times which yields 1,000 estimates for each path coefficients in the structural model. Using AMOS, the bootstrapping procedure is able to examine the indirect effects that a variable may have on another, and produces values of standardized indirect effects as well as confidence intervals in order to determine statistical significance of these effects. The indirect effects are statistically significant at the .05 level if the range of the confidence interval does not include zero. Bootstrapped confidence intervals are regarded as the optimal method for statistical significance testing for indirect effects (Warner, 2008).

Using the bootstrapping procedure, the indirect effect that college self-efficacy has on persistence attitudes through the mediator of academic integration (i.e., College Self-Efficacy → Academic Integration → Persistence Attitudes) was examined. The indirect effect of peer interaction on persistence attitudes through the mediator of academic integration (i.e., Peer Interaction → Academic Integration → Persistence Attitudes) was also assessed.

The results of the bootstrap procedure showed that the effect of college-self efficacy on persistence attitudes is fully mediated by academic integration. Additionally,

the effect of peer interaction on persistence attitudes is also fully mediated by academic integration. Because zero did not fall in the ranges of each of the 95% confidence intervals, the indirect effects were all statistically significant at the .05 level (see table 6).

Table 6. Bootstrap Analysis of Indirect Effects (N = 228).

Independent Variable	Mediator Variables	Dependent Variable	β Standardized Indirect Effect	95% CI Mean Indirect Effect (Lower, Upper)[a]
College Self-Efficacy →	Academic Integration →	Institution & Goal Commitments.	(.66) × (.76) = .5	.35, .72
Peer Interaction →	Academic Integration →	Institution & Goal Commitments	(.62) × (.66) = .41	.28, .59

Note. [a] These values were based on unstandardized path coefficients, N=228. Bias-corrected confidence intervals (CIs) are reported. Reported effects are averages from 1000 bootstrap samples using bias-corrected percentile method.

CHAPTER V

DISCUSSION

The purpose of the present study was to investigate the relationships between racial microaggressions, college self-efficacy, social integration, academic integration, and college persistence attitudes. The initial hypotheses regarding the role of racial microaggressions on academic integration, social integration, and college self-efficacy (hypotheses 1A, 1 B, and 1C) were not supported by the results of the current study. Racial microaggressions did not significantly influence either the social and academic integration or the college self-efficacy of students. College self-efficacy was found to have a positive effect on both the social and academic integration of college students, thus supporting hypotheses 2A and 2B. Academic integration, which was found to be a strong positive predictor of persistence attitudes, also mediated the relationship between college self-efficacy and persistence attitudes. This supports the initial hypotheses 3A and 3B. Because there was no direct relationship between racial microaggressions and academic integration, hypothesis 3C- which stated that academic integration mediated the relationship between racial microaggressions and persistence attitudes, was not supported. Hypothesis 4A which predicted that social integration directly influences persistence attitudes was not supported. Hypothesis 4B was also not supported and social integration did not mediate the relationship between racial microaggressions and persistence attitudes. Hypothesis 4 C was not supported and social integration did not mediate the relationship

between college self-efficacy and persistence attitudes. Finally, research question 5A was supported by the results of the current study, academic integration was found to be a strong positive predictor of social integration.

In the remaining discussion section the specifics of the results is elaborated upon within the context of both theory as well as past research. Limitations of the current study and future research directions is discussed, as are the clinical implications for mental health practitioners, higher education administrators, and others who influence higher education policies that impact minority student retention.

Impact of Racial Microaggressions on College Students of Color

Research on the impact of prejudice and discrimination on college students have been extremely varied and have focused on such outcomes as mental health, self-esteem, adjustment, academic performance, and physical health (Major, McCoy, Kaiser, & Quinton, 2011; Nora & Cabrera, 1996, Pascoe & Richman, 2009). Lacking in this broad array of studies are empirical studies examining the link between experiences of racism and self-efficacy in college. This link was examined in the present study and results did not support the premise that experiences of racial microaggressions significantly impact the college self-efficacy of students. Similarly, racial microaggressions did not appear to significantly impact social integration, academic integration, or persistence attitudes of students of Color.

These results were surprising given the findings of past research linking experiences of discrimination to such outcomes as poorer mental health, decreased academic functioning, and lower social integration among college students (Major et al., 2011; Nora & Cabrera, 1996; Solorzano and Yosso, 2000). There are several potential

reasons for the results found in the present study. One explanation is that the self-efficacy, social integration, academic integration, and ultimately the attitudes students have towards staying or leaving their university, are minimally affected by experiences of racial microaggressions. It may be possible that racial microaggressions occur infrequently enough and are often so subtle and nuanced that these experiences do not have the power to significantly impact college self-efficacy or the other variables that impact college persistence. It is possible that the participants in the sample may have had a high degree of resiliency and were thus able to navigate the experiences of discrimination they face on college campuses while being successful students. The participants in the current study were from predominantly White universities and may have already had the skills and abilities to handle experiences of discrimination without these experiences significantly impacting their academic functioning, their ability to make friends, and their desire to continue with their education.

Another potential explanation of the lack of significant findings regarding the impact of racial microaggressions on variables related to college persistence may have to do with the self-selected nature of the sample. This self-selection among participant is a significant limitation of the current study. Though it is not possible to know with any degree of certainty how this may have impacted the findings, it is possible that self-selection led to an underrepresentation of students who were struggling integrating into the college environment. It makes sense that those students who were performing poorly in their classes, and who felt as if they were a poor fit in their college environment, may not have had the motivation to complete the surveys in this study. On a similar note, the students who had already dropped out of school, potentially due to experiences of

discrimination, would not have been able to participate in this study. Though highly speculative, it is possible that those student who had experienced minimal discrimination and were successfully integrating into college may have had a higher level of motivation towards participation in the current study.

A final potential explanation for the lack of significant findings regarding the link between racial microaggressions and other variables related to college persistence may have to do with the scale used to assess racial microaggression experiences-the REMS. The REMS is a broad checklist that examines experiences of microaggressions across multiple domains. The REMS contains questions about different forms of microaggressions as well as microaggressions experienced across multiple contexts (e.g. school, media, work, on the street, on a bus, etc.). It is possible that for the purposes of the current study the REMS was too broad a measure for the population of interest, and was thus unable to fully capture the types of microaggressions that college student of Color experience while at university. It is important to note that of the 6 scales of the REMS, only one scale asks about school and work-place related microaggressions. This represents a major limitation of the study in that many of the types of microaggressions that are uniquely experienced by college students of Color were likely not assessed by the REMS. Another limitation of the REMS as it relates to the present study is in regards to understanding the magnitude of microaggression experiences faced by students of Color. The REMS asks whether or not a particular microaggression occurred within the last 6 months (and not how often or how impactful was the experience). This makes it impossible to fully understand the nature or the depth of how these microaggressions

were experienced by participants in the current sample, how often these experiences occurred, or who perpetrated these microaggressions against the student.

College Self-efficacy and College Integration

As expected, the results of the present study showed that college self-efficacy predicted both the social and academic integration of college students of Color. Students who had higher levels of college self-efficacy reported greater and more positive interactions with both faculty and peers. Those students with greater college self-efficacy also reported greater levels of academic and intellectual development through their university experiences. These results were unsurprising as multiple studies have shown self-efficacy to be a particularly strong predictor of academic and social engagement in college (e.g. Gore, 2006; Hackett et al., 1992; Multon et al., 2001; Torres & Solberg, 2001; Wei et al., 2005). The current study strongly indicates that those students with high levels of self-efficacy are the students who are most likely to succeed in meeting the social and academic challenges of college life.

The Impact of Academic and Social Integration on Persistence Decisions

The results of the current study lend significant support to Tinto's conceptualization of the relationships between academic integration, social integration, and college persistence. In the present study, GPA was conceptualized as an aspect of academic integration and was found to covary with academic and intellectual development. Though this was not part of the initial hypotheses, the covariation between these two variables makes theoretical sense. Those students who feel that they are experiencing greater levels of academic and intellectual development from their university are going to have higher academic achievement, and vice-versa. The

relationship between GPA and the academic /intellectual development of students has been strongly supported by previous literature (Clark, Middleton, Nguyen, & Zwick, 2014; Eimers & Pike, 1997; Nora & Cabrera, 1996).

In the current study it was found that the strongest predictor of college persistence was the academic integration of students. Model testing with both the first and second proposed models showed that when academic integration and social integration were covaried, social integration did not influence persistence intentions, while academic integration directly predicted persistence attitudes. Mediation analysis using the bootstrap procedure further indicated that academic integration fully mediated the relationship between social integration and persistence attitudes. The results of the current study does appear to indicate that social integration plays a role in the persistence of college students of Color; however, the effects of social integration on college persistence is an indirect effect, and ultimately influences persistence through the academic integration of students.

The lack of a direct significant relationship between social integration and persistence attitudes, when accounting for other variables such as academic integration, requires further explanation as this was the one major aspect of Tinto's model that was not fully supported by the results of the present study. This finding contradicts some previous research, with predominantly White students, which showed that academic and social integration were both important in *directly* predicting persistence (e.g. Beal, Reisen, Zea, & Cecilia, 1999; Terenzini & Pascarella, 1977). Though social integration was not found to directly predict persistence attitudes, the results of this study do not necessarily refute this major tenant of Tinto's model. Empirical examinations of minority college persistence have indicated that for college students of Color, social integration may play a

secondary role to academic functioning (Eimers & Pike, 1997; Fox, 1986; Zea et al., 1997). Zea et al. (1997) found that academic achievement, as measured by GPA, was a strong predictor of students' commitment to remain in college for minority students while for White students, their institutional commitment remained the same regardless of their GPA. In an examination of White / racial minority student differences on college persistence factors, Eimers and Pike (1997) found that one of the key differences between White students and students of Color was the influence of perceptions of educational quality on persistence intentions. For students of Color, it was their perceptions regarding the quality of their education that directly influenced their persistence intentions. On the other hand, for White students, the perception of their educational quality did not influence persistence. Qualitative study by Terenzini et al. (1994) also lends support to the prospect of minority students having greater emphasis on academics. Using focus group analysis, Terenzini and his colleagues found that students of Color were more likely to express greater concern regarding their academic performance and most students in their study appeared to express strong convictions that social and peer interaction took a back seat to being able to meet the their educational requirements.

Because of the previous research highlighting the preeminence of academic integration over social integration it was hypothesized that academic integration would directly predict social integration within the structural models put forward in this study. As predicted by Tinto's model, academic and social integration were found to be highly related with one-another, and there was a strong positive relationship between academic and social integration. Though these two variables are conceptually distinct, academic and social integration are inherently related. Having strong positive relationships outside

of the classroom leads to greater school functioning, concurrently, greater academic development and achievement promotes increased social involvement. This basic premise of Tinto's model has received extensive support (Tinto, 2012) and was further supported in the present study.

Tinto himself stated that social and academic integration are often unequal in their relative contributions to college student persistence, and that there are many factors that influence the relative importance of these two variables. According to Tinto (2012), it is ultimately the characteristics of both the student (characteristics such as gender, race, pre-college academic ability, family support, etc.) and the characteristics of the university (such as university size, prestige, level of racial diversity, etc.) that interact to influence the relative importance of social and academic integration to students. These two variables, in turn, then function to directly and/or indirectly influence college students' decisions to remain or withdraw from the institution in which they are enrolled.

Recommendations for Future Research

One of the key findings of this study was that racial microaggressions did not impact college self-efficacy, academic integration, social integration, or persistence attitudes. This was a surprising finding and appeared to contradict previous research that showed that experiences of racism negatively impact these variables (e.g. Nora & Cabrera, 1996). Though there are several potential reasons for these results, it is believed that one of the largest factors may be related to the inability of the REMS to capture the unique microaggressions that college of students of Color experience in the college environment. Given that this is the first time that the REMS has been utilized to examine variables related to college persistence, the current study highlights a potential limitation

of the REMS as it relates to its use with college students. It is thus highly recommended that additional research focus on developing a scale that is able to assess the unique types of racial microaggressions that college students of Color experience and how often they experience these events. Such a scale would allow researchers to better understand how racial microaggressions that are experienced as part of college living impact students of Color.

Because of the relatively small sample sizes when broken down by racial group it was not possible to test different persistence models between the different racial groups represented in the study. The research on racial microaggressions tells us that different racial and ethnic groups experience different forms of microaggressions (Sue, 2010). Though it is unknown whether certain microaggressions have a more negative impact than others, it is well documented that the impact of racism and discrimination is moderated by multiple psychological, socio-demographic, and socio-cultural variables that are influenced by one's race (Brondolo, Rieppi, Kelly, & Gerin, 2003; Fischer & Shaw, 1999; Noh & Kaspar, 2003). Thus, it is of great importance to examine how specific racial and ethnic groups experience microaggressions and factors such as college self-efficacy, social integration, and academic integration are influenced by experiences of microaggressions.

Experiences of racism and discrimination are believed to, at least in part, affect mental health due to increased physiological stress responses. A number of studies have directly examined the physiological effects of racism on mental health through a combination of physiological response technology and self-report (see Harell, Hall, & Taliaferro, 2003, for a review). Future research may examine the relationship between the

physiological responses to experiences of racial microaggressions on college outcomes such as GPA, persistence, academic integration, and social integration.

Finally, this study focused specifically on students of Color attending 4-year colleges and universities. Because of the focus on this specific type of students, it would be inappropriate to generalize the results of the study to students of Color attending community colleges, technical schools, and purely online degree programs. Examinations of Tinto's model of college persistence in community college settings shows that the factors that impact college persistence may interact somewhat differently compared to traditional 4 year institutions of higher education (Nakajima, Dembo, Mossler, 2012). Additionally, the present study explicitly focused on traditional aged students. Participants in the present study were restricted to those students who were between ages 18-24, and approximately 80% of the participants identified as either 18 or 19 years of age. Older non-traditional students often have characteristics that differentiate them from younger traditional students and these characteristics impact their college persistence in unique ways. For example, social variables-believed to be integral to traditional aged college students, are less important to older students in that they are more likely to have their social needs met outside of their academic environment (Bean & Metzner, 1985). It is thus warranted to extend this research to those groups of students and those other higher educational settings that were not represented in the present study.

Clinical and Policy Implications

The findings of the present study have a number of clinical and policy implications. Self-efficacy has been found to be an extremely robust predictor of college success and satisfaction and the results of the current study lend additional support to this

premise. It is thus of great importance that university counseling centers, professors, and campus administrators recognize the importance of self-efficacy in the success of college students of Color. Given the great importance of college self-efficacy on student success, it is recommended that those who work directly with students (e.g. counselors, advisers, university instructors, etc.) utilize interventions and strategies that focus specifically on building and enhancing the self-efficacy of students of Color. According to Bandura (1997), one of the most powerful ways to enhance self-efficacy is through mastery experiences. In this regard, students ultimately learn and develop college self-efficacy through being involved with their coursework, their program of study, university professors, and the friends and collegial relationships they have developed in college. Academic successes, such as receiving high exam grades, serve to build on one another by enhancing self-efficacy and making student believe that they can succeed-even when faced with significant challenges. This in turn facilitates further academic success and development. The development of self-efficacy in the social realm operates in a similar fashion. Success in making friends and working with others enhances self-efficacy and promotes further social interaction.

In order to enhance the academic self-efficacy of students, college administrators can bring greater awareness to tutoring, peer-mentorship, and other academic support services. These types of programs can directly impact self-efficacy by facilitating academic mastery experiences. Another significant source of college self-efficacy is through feedback and support from others (Bandura, 1997). In this regard, faculty members often play an especially important role, both in and outside the classroom, in the academic and social development of students of Color (Johnson, 2007; Terenzini et al.,

1994). College student self-efficacy can thus be enhanced through the development of mentorships with professors and greater faculty involvement. The establishment of mentorship relationships early in college serves as socialization experiences that in turn enhance relationships with professors later on (Fuentes, Alvarado, Berdan, DeAngelo, 2012). Faculty-student mentorship programs have been shown to be effective in promoting student success, and the involvement of faculty in the early stages of the student college experience leads to improved grades, decreased student stress, and lower levels of student dropout (Campbell & Campbell, 1997; Phinney, Campos, Cidhinnia, Kallemeyn, & Kim, 2011).

Colleges and universities can promote the social self-efficacy of college students of Color in any number of ways. These often take the form of university sanctioned events and social gatherings. What is truly needed, however, is a dedication towards creating a diverse campus where students of many different backgrounds are able to interact in a free and safe manner- even, or especially, when there are great cultural differences. Programs that focus on facilitating cross-cultural dialogues between students have been shown to be extremely effective, for both White students and students of Color, in improving the campus racial climate, and increasing peer-interaction (Smith, 1997). Even when students perceive a negative or hostile campus climate, they may still feel be able to feel socially integrated as long as they are able to find their "niche" on campus (Tinto, 1993; 2012). Student organizations that are specifically for students of Color, and campus institutions such as college multicultural student centers can serve as "safe" spaces where students of Color can socialize freely with others. Colleges and universities

may thus promote the social integration of students of Color by supporting these types of organizations and institutions.

The aforementioned recommendations for enhancing social and academic self-efficacy are naturally related to the social and academic integration of students of Color. Consequently, the aforementioned recommendations for building college self-efficacy also function to facilitate college integration. It is important that university staff who work with students of Color understand the interrelated aspects of self-efficacy, academic integration, and social integration; and how these different variables impact student attrition. Given that each of these factors plays a unique role in student success, it makes sense that colleges and universities should find ways to enhance and promote these among students. Of special note, the current study lent additional support to the premise that for many students of Color, academic integration takes primacy over the social integration. Colleges and university staff should recognize that for many students of Color, academic integration plays an even greater role in persistence compared to social integration. This recognition should inform the strategies and interventions that colleges and universities utilize to promote greater persistence among students of Color.

Limitations

One significant limitation of the current study has already been alluded to and involves the REMS, the scale that was utilized to assess experiences of racial microaggressions. The lack of significant results linking experiences of racial microaggressions to college self-efficacy, social integration, and academic integration may potentially be explained by the structure of the REMS. The REMS checklist is a broad measure that assesses experiences of multiple forms of microaggressions in a

multitude of different settings. As this study focused specifically on racial microaggressions experienced by college students of Color during their first year in college, it is highly possible that the REMS was too broad a scale and was thus unable to fully capture the racial microaggressions uniquely experienced by college students of Color. It is possible that a measure that specifically was tailored to the types of racial microaggressions that college students of Color are most likely to face in the various environments and situations in college may have yielded different results.

Another limitation of the present study has to do with the reliance on self-report. Though one of the most widely utilized means of examining psychological phenomena, the over-reliance of self-report in psychological research has also been criticized (Haeffel & Howard, 2010). Critics of self-report measures point to inherent biases and demand characteristics that influence studies. Though it was hoped that the confidential and even impersonal nature of the study (the study was distributed wholly through online means) would minimize social desirability effects, it is still possible that a certain amount of systematic error could have occurred through both conscious and unconscious processes. Another significant criticism of self-report that pertains to this study relates to the validity of the constructs being assessed in the current study. It can be argued that the scales utilized in this study do not fully capture the constructs that they are purporting to assess. For example, the REMS, which is the scale that assesses experiences of racial microaggressions, is relatively new and other researchers may have different conceptualizations of how racial microaggressions are experienced by people of Color.

An additional limitation of this study involves the representativeness of the current sample to the general population of college students of Color in the U.S. Though

an attempt was made at increasing the heterogeneity of the sample in terms of both gender and racial identification so that results may be more generalizable, the participants in the current study likely do no accurately represent the demographic characteristics of students of Color in the U.S. as a whole. Because of this, significant caution should be taken in the interpretation of the results. This caution should also apply when generalizing the results of the current study to different racial and ethnic groups. Though minimal differences were found between the different racial groups in the current study, this may have had more to do with the small sample sizes between groups, as opposed to actual lack of true differences between groups.

Though the current study focused the college persistence, the study in actuality tested a model of *voluntary* dropout. That is, students actively making the decision to leave or stay in school. In reality the "decision" to leave school is often not a choice and students are compelled or forced to leave college for many different reasons. Needing to leave school due to family obligations such as having to take care of family members, having physical or mental health problems that interfere with schooling, and financial problems are just a few examples of reasons for dropping out that are not explicitly addressed in Tinto's model of student attrition. Because the current study purposely focused on only one aspect of student persistence, interpretation is limited to only those students who voluntarily make the choice to leave their institution.

One final limitation involves the self-selected nature of those who participated in the study. It is possible that those individuals who participated in the study, either through Amazon Mechanical Turk (AMT) or through multicultural student center list-servs, are different from students of Color in general. Those students of Color who may have been

struggling the most may have been the least likely to take the time to fill out a survey, particularly without immediate apparent benefits. It is also clearly possible that some students of Color may have already dropped out of school by the time in the semester that the survey was distributed. An attempt was made to target those students who are most at risk of dropout; however, it is possible that many students had already formally dropped out, or stopped participating in college. This would likely make these students less likely to read e-mails and respond to research requests via listserv.

Conclusions

Despite some of the aforementioned limitations, the present study makes important contributions to the literature and increases clarity on the factors that directly and indirectly impact minority student college persistence. As colleges and universities continue to work towards addressing minority student retention, it is of great importance that schools take into account the unique contextual factors that impact persistence for students of Color. Though the novelty of the present study is a significant strength of this research, it must be emphasized that this study also represents a very preliminary examination of how racial microaggressions could impact college functioning, and that further research is warranted. As colleges and universities in the U.S. become increasingly diverse, and as the nature of racism and prejudice continues to evolve, it is paramount that researchers continue to study and assess how college students of Color experience and navigate the acts of prejudice and marginalization to which they are subjected.

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