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Academic Disidentification in African American College Students: An Exploratory Investigation of the Role of Teacher Trust, Parental Racial Socialization, and Gender

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Academic Disidentification in African American College Students: An Exploratory Investigation of the Role of Teacher Trust, Parental Racial Socialization, and Gender

by

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Dedication

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Academic Disidentification in African American College Students:

An Exploratory Investigation of the Role of Teacher Trust,

Parental Racial Socialization, and Gender

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The purpose of this study was to explore whether academic disidentification (i.e.,

the relation between ASC and GPA), differed based on students' gender and reported

level of parental racial-ethnic socialization and teacher trust. This study was exploratory

in nature, as few researchers have examined the relation between parental racial-ethnic

socialization and academic outcomes or the relation between teacher trust and academic

outcomes. Secondary goals of this study included and examination of (1) the relation

between racial socialization and academic outcomes, (2) the relation between teacher

trust and academic outcomes, (3) the relation between parenting constructs (i.e., racial

socialization and parental warmth) and teacher trust, and (4) the role of parental warmth

as a variable that potentially buffers negative child outcomes or enhances positive child

outcomes.

Participants included 319 African American students (120 males, 199 females)

recruited from a large, southwestern, predominantly white university. Results indicated

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the presence of academic disidentification as unique to upperclassmen males (i.e., the relation between ASC and GPA was significant for females and underclassmen males, but not upperclassmen males). Parental messages of promotion of mistrust were found to significantly moderate the relation between ASC and GPA. Further, in examining the influence of the combination of teacher trust x sex on the relation between ASC and GPA, a significant three-way interaction was present. Teacher trust was also found to be a significant predictor of GPA, with gender significantly moderating this relation.

Gender differences were present for teacher trust, but there were not differences between underclassmen and upperclassmen. Racial socialization variables were not found to significantly predict GPA. However, two types of racial socialization (promotion of mistrust and egalitarianism) and parental warmth were found to be significant predictors of teacher trust. Theoretical and practical implications of these findings are discussed.

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CHAPTER 1

Introduction

The goal of education is clear—to help students achieve to the best of their ability. Yet, what are educators to do when a sector of students is not achieving up to their potential, suffering lower grades, graduation rates, and test scores? This is the dilemma of the racial-ethnic achievement gap, a serious problem that afflicts the African American community. The U.S. Department of Education has named as a part of its mission the goal of closing the achievement gap, preparing individuals of all backgrounds to succeed in college (U.S. Department of Education, 2013). However, such disparities in achievement are apparent at every level of education, including post-secondary education.

The racial-ethnic achievement gap is also influenced by gender differences in academic performance, as African American males are particularly likely to fall prey to the achievement gap. In 2008, only 4% of the nation's college students were African American males, although African American males make up approximately 7% of all traditional college-aged Americans (Aud, Fox, & KewalRamani, 2010). This statistic is due not only to the small number of African Americans in college, but also due to the reality that African American male college enrollment represents the largest gender imbalance of any racial-ethnic group. Of equal concern, of enrolled college students, African American men are least likely to earn their degree. Recent estimates indicate of the small number of African American males enrolled in college, only 34% earn a degree

within 6 years. This represents a nine-percentage-point disparity from their female counterparts and is drastically lower compared to other groups of males (i.e., 66% of Asian/Pacific Islander males, 59% of European American males, and 46% of Latino males) (Ross et al., 2012). However, African females are not exempt from the achievement gap, as they also underperform compared to their Asian, White, and Latino peers (Ross et al., 2012). It is clear that research focusing on African American college student achievement is warranted to aid in understanding how educators can successfully facilitate African American students in earning college degrees.

Statement of the Problem

The current body of research, in its examination of the many factors that impact African American student achievement, reflects that racial-ethnic and gender disparities are particularly complex issues. Such research has historically included examinations of genetic or cultural deficits, which have largely been refuted in the contemporary literature. The current state of achievement gap literature includes an examination of various psychosocial factors (e.g., stereotype threat, oppositional identity, school belonging, and racial-ethnic identity), as well as environmental or contextual factors (e.g., socio-economic status, school composition, and family background).

However, research often fails to contextualize the achievement gap within the context of the stark gender disparity that exists. One line of research is of particular importance in its observation of such gender differences. Existing research has examined a phenomenon that appears to uniquely impact African American male students: academic disidentification (Osborne, 1997). Academic disidentification has been

described as a lack of relation between self-esteem and academic outcomes (Osborne, 1995). Thus, theoretically, for such students academic success is not rewarding and academic failure is not punishing. As might be expected, research has demonstrated academic disidentification negatively impacts academic motivation and achievement (Osborne, 1997).

Osborne (1995; 1997) reported results suggesting adolescent African American males are particularly likely to disidentify with academics and this phenomenon was found to develop over time. He found an attenuation of the relationship between self-esteem and academic outcomes until this relation was no longer significant. Similar findings have been replicated among both high school and college students (Cokley, 2002; Cokley, McClain, Jones, & Johnson, 2011; Major, Spencer, Schmader, Wolfe, & Crocker, 1998). Using the relation between academic self-concept (ASC) and GPA as a measure of identification with academics, Cokley (2002) provided strong evidence of disidentification in African American male college students, while their female counterparts and European Americans remained identified with academics. Again, African American males were found to disidentify over time, evidenced by a significant correlation between ASC and GPA in underclassmen and an attenuated, non-significant relation among upperclassmen.

The question remains, what factors impact the ability of African American males, in particular, to maintain their self-perception of their own academic abilities in the face of poorer academic performance? A review of the literature reveals that few researchers have examined this phenomenon, particularly among college students. Further, to date

no studies have examined variables that may moderate the relation between ASC and GPA (i.e., variables that may impact academic disidentification). Such a dearth in the literature speaks to the importance of conducting such research.

Theoretical Framework

Attribution theory is a useful theoretical lens through which to view academic disidentification. Attribution theory in educational research assumes that individuals attempt to explain the outcomes and behaviors of others in regard to academics (Weiner, 1986; Graham, 1991). In line with one of Major and Schmader's (1998) hypotheses regarding disidentification, the phenomenon may represent students' disregard for academic feedback from university faculty as indicative of their true academic and intellectual abilities. Academic outcomes may be attributed to stable, external conditions that are out of their control and may be discounted as a self-protective mechanism (Meisel, 1986; Weary, 1978). However, it is unclear what factors may impact such a process, moderating the relation between ASC and academic outcomes.

In line with an ecocultural perspective (Bronfenbrenner, 1979) it is integral to encase academic disidentification within the social context in which students live.

Further, building upon this theory, Phenomenological Variant of Ecological Systems

Theory (PVEST; Spencer, 1995, 2006) suggests it is critical to consider factors impacting an individual's perception of experiences in order to understand the interconnected nature of an individual's risk/protective factors, coping strategies, identity development, and adaptive/maladaptive outcomes and behavior (Spencer, 1999; Spencer, 2001). As such, constructs representing influences from African American students' social contexts must

also be examined as variables that impact academic disidentification. Further, risk/protective factors related to race and gender must be considered that might impact the way African American students view themselves or others. Theoretically, such factors would contribute to conditions in which African American male students would disregard academic feedback while their female counterparts remain identified with academics.

Parental racial-ethnic socialization is a construct that provides both an important social context, as family provides the most immediate context for individuals (Lesane-Brown, 2006), and can be constituted as a protective or risk factor that is influenced by race and gender. Parental racial-ethnic socialization involves the explicit or implicit parental messages given to children regarding what it means to be a member of one's racial or ethnic group (Hughes et al., 2006). Four types of parental racial-ethnic socialization originally delineated by Hughes and Chen (1997; 1999) include preparation for bias, or "teaching about prejudice and discrimination," promotion of mistrust, or "communications of cautions or warnings about other racial or ethnic groups," cultural socialization, or "teaching about one's own group's culture, history and heritage," and egalitarianism, or "teaching that all people are equal, regardless of race or ethnicity" (Hughes & Johnson, 2001, p. 985).

Research suggests parental racial-ethnic socialization messages are related to academic outcomes (Hughes et al., 2006). However, there is a dearth of such research and existing research has provided mixed results. There is some literature to suggest preparation for bias may serve a protective function, as several studies have found a

positive relation between these messages and academic achievement outcomes (Bowman & Howard, 1985). However, the literature suggests high levels of preparation for bias and promotion of mistrust, in general, is related to poorer academic performance (Harris-Britt, Valrie, Kurtz-Costas, & Rowley, 2007; Hughes, Witherspoon, Rivas-Drake, & West-Bey, 2009). On the other hand, research suggests a more consistently positive relation to academic outcomes for both cultural socialization and egalitarianism (Caughy, O'Campo, Randolph, & Nickerson, 2002; Cooper & Smalls, 2010; Murry & Brody, 2002).

Few studies have examined parental racial socialization in the context of gender. However, existing research indicates African American males receive more messages of preparation for bias and promotion of mistrust than their female counterparts (Bowman & Howard, 1985; Stevenson, Cameron, Herrero-Taylor, & Davis, 2002; Thomas & Speight, 1999). As research has also shown that the frequency of preparation for bias increases in adolescence (Hughes, 2003), African American male students in late adolescence are likely to receive a higher frequency of preparation for bias and promotion of mistrust messages (Bowman & Howard, 1985). On the other hand, research suggests African American females tend to receive more messages of racial pride, cultural socialization, and achievement (Thomas & Speight, 1999). Such differences may differentially impact the academic motivation and achievement of African American male and female college students, although few studies have examined this idea (see Brown, Linver, Evans, & DeGennaro, 2009; Friend, Hunter, & Fletcher, 2011 for exceptions). In one of the few studies to examine such differences, Smalls and Cooper (2012) provided some evidence

that higher levels preparation bias may have a detrimental effect for males, while having little effect on the academic outcomes of females.

Parental warmth is a second construct that places an individual within the context of family environment. Scholars have suggested that in understanding the impact of parent behavior on child outcomes, it is crucial to understand the context of parenting style (Darling & Steinberg, 1993; Hughes et al., 2006). Parental warmth is considered a crucial dimension of child rearing and involves a parent's emotional warmth through supportive, accepting, and nurturing behavior (Muris, Meesters, & von Brakel, 2003).

The literature indicates parental warmth is a correlate of many child outcomes, including parental racial-ethnic socialization (Brown, Tanner-Smith, Lesane-Brown, & Ezell, 2007; Caldwell, Zimmerman, Bernat, Sellers, & Notaro, 2002; Frabutt, Walker, & MacKinnon-Lewis, 2002; Hill & Tyson, 2008; McHale et al., 2006) and academic outcomes (Alfaro et al., 2009; Fulton & Turner, 2008; Lowe & Dotterer, 2013; Murray, 2009; Spera, 2005; Woolley & Grogan-Kaylor, 2006). Parental warmth has also been found to moderate the negative impact of several parental constructs on youth outcomes, including parental monitoring and minority youths' academic outcomes (Lowe & Dotterer, 2013), as well as physical punishment and a number of outcomes, including externalizing or problem behavior (Deater-Deckard & Dodge, 1997; Deater-Deckard, Ivy, & Petrill, 2006; McLoyd & Smith, 2004; Simons, Wu, Lin, Gordon, & Conger, 2000), cognitive ability (Smith & Brooks-Gunn, 1997), and criminality (McCord, 1997).

However, only one study has explored whether parental warmth impacts the link between parental racial-ethnic socialization and academic outcomes. While Smalls

(2009) found support for democratic-involved parenting (i.e., a relationship comprised of warmth, opportunities to self-govern, and firm standards) moderating the relation between racial barrier messages and emotional school engagement in a sample of African American adolescents, the dearth of research in this area necessitates further exploration.

Schools are another critical social context for individuals. As suggested by a cultural-ecological perspective, individuals and their social contexts reciprocally impact one another (Bronfenbrenner, 1979). Further, in line with PVEST (Spencer, 1995), it is important to consider the ways in which race and gender as risk or protective factors impact the unique stressors students experience within the context of school and the ways these students perceive themselves and others. Students' trust of teachers is a variable impacted by individual differences, but also impacted by students' social contexts. While trust has been suggested to be a theoretically necessary component for academic achievement (Hewett, 1964; Hobbs, 1966), only two studies to date have explored the impact of teacher trust and academic outcomes, reporting higher teacher trust was related to better academic outcomes (Imber, 1973; Yeager et al., in press).

African Americans, particularly males, constitute a highly underrepresented group on college campuses where approximately 80% of college faculty are European American nationwide (US Department of Education, 2009). They may be particularly impacted by a social context of historical institutional racism and discrimination in schools (Graham & Hudley, 2005). Research has found African American students to report lower levels of teacher trust (Adams, 2010; Zirkel, 2005; Yeager et al., in press), as evidenced by a student's perception that instructors possess benevolence, honesty,

reliability, openness, and competence (Adams & Forsyth, 2009). However, few studies have examined trust from students' perspectives and no study to date has examined gender differences within the African American population. Given that a body of existing research suggests African American males are more likely than females to perceive discrimination (Seaton, Caldwell, Sellers, Jackson, 2008; Stevenson et al., 2002) and negative teacher attitudes and behavior toward them (Marcus, Gross, & Seefeld, 1991), an examination of gender and teacher trust is integral to understanding the experience of African American college students.

Significance of the Study

The primary purpose of this study is an exploratory investigation of the role of parental racial-ethnic socialization, parental warmth, teacher trust, and gender in the academic disidentification of African American college students. No study to date has examined the impact of parental racial socialization, parental warmth, or teacher trust on academic disidentification. This research is being conducted to gain a better understanding of the relation between academic self-concept (ASC), GPA, preparation for bias, promotion of mistrust, cultural socialization, egalitarianism, parental warmth, teacher trust, and gender for African American college students.

This study extends prior research in five ways. First, while past research has replicated the existence of academic disidentification existing research has failed to examine psychological variables that may impact this phenomenon. As such, I examine two variables as possible moderators of the relation between ASC and academic outcomes. Second, the existing academic disidentification literature has focused on early

and mid-adolescents. To date, only two studies have examined disidentification in African American college students (see Cokley, 2002; Major, et al., 1998). As such, the current study seeks to further understand this phenomenon in African American college students.

Third, the parental racial-ethnic socialization literature is limited, as few studies examine its impact on actual academic outcomes such as GPA and few studies examine racial-ethnic socialization in the context of gender. The current study will contribute by seeking to understand the parental racial-ethnic socialization of African American college students, who likely experience gendered racial-ethnic socialization messages, and its impact on academic outcomes.

Fourth, this study is only the second study to examine parental warmth as a moderator of parental racial-ethnic socialization and academic outcomes and the first to examine this relation among college students. This research will substantially add to the literature in that it seeks to differentiate between parent behavior and the family context in which such behavior takes place for African American college students. Fifth, few researchers examine teacher trust and even fewer studies examine this variable among African Americans. To date, no study has focused on teacher trust within the African American college student population or gender differences in teacher trust. The proposed study aims to contribute important knowledge on the potential role that teacher trust plays in the lives of African American college students and its impact on academic disidentification and achievement.

In order to gain a deeper understanding of disidentification in African American college students, I will explore the relationship between the variables ASC, GPA, parental racial-ethnic socialization, parental warmth, teacher trust, and gender. Parental racial-ethnic socialization includes preparation for bias, promotion of mistrust, cultural socialization, and egalitarianism (Hughes & Chen, 1997). I will determine whether disidentification in African American college students is replicated in this sample, particularly among males. Further, I will investigate whether parental racial socialization and teacher trust serve as moderators between ASC and GPA, as well as whether parental warmth moderates the relation between parental racial socialization and GPA. A cross-sectional design is proposed, as research suggests an attenuation of the relation between ASC and GPA for upperclassmen as compared to underclassmen (Cokley, 2002). Identifying variables that impact academic disidentification in African Americans would greatly contribute to our understanding of the experience of African American students and aid in finding interventions to reduce the racial-ethnic and gender achievement gap.

Organization of the Study

Chapter 1 has included an introduction to the proposed study, including a statement of the problem, theoretical framework, and the significance of the study. In Chapter 2, I will review the relevant literature. This will include theory and research related to the racial-ethnic academic achievement gap, academic disidentification, parental racial-ethnic socialization, parental warmth, and teacher trust, with a particular focus on African American college students and gender. In Chapter 3, I will provide the proposed methodology and procedures used to collect and analyze data. A main focus of

this analysis will be to determine whether academic disidentification, the relation between ASC and GPA, differs based on students' gender and reported level of parental racial-ethnic socialization and teacher trust.

CHAPTER 2¹

Review of Relevant Literature

The Racial-Ethnic Achievement Gap

The achievement gap, generally speaking, refers to disparities in academic achievement evident in stigmatized racial-ethnic minority populations such as African Americans, Latinos, and Native Americans, as well as low-income populations (Bowen & Bok, 1998). In the current proposed study, I focus specifically on the academic achievement of African American students and gender differences within this population.

Evidence of the Achievement Gap. Evidence of the racial-ethnic gaps in academic achievement can be seen as early as primary school. Results from standardized measures of achievement such as the National Assessment of Educational Progress (NAEP), which measures academic achievement in reading and mathematics, reveal that as early as elementary school, higher percentages of European American and Asian/Pacific Islander students score at or above "proficient," or solid, academic performance levels compared to African American students (Aud et al., 2010). In 2007, 43% of European American 4th graders received proficient reading scores compared to only 14% of African Americans. Similarly, 51% of European American 4th graders received proficient mathematics scores compared to 16% of African Americans (Aud et al., 2010). Gaps in such test scores do not appear to diminish over time, as comparable

American adolescents. The High School Journal, 95(2), 54-68.

¹ A portion of this chapter, written by Shannon E. McClain, was previously published in an article. Other authors who contributed to this article include Kevin Cokley, Martinique Jones, and Samoan Johnson. See Cokley, K., McClain, S., Jones, M., & Johnson, S. (2012). A preliminary investigation of academic disidentification, racial identity, and academic achievement among African

gaps in achievement were also reported for 8th grade European American and African American students (Aud et al., 2010).

Much attention has been given to the achievement gap in secondary education with a particular focus on retention rates among the African American population. Recent data indicate the average high school graduation rate for African American students is approximately 60% compared to 80% of their European American counterparts (Aud et al., 2010). Even for those students who remain in high school, achievement disparities are apparent. National data examining academic achievement in high school students released by the Department of Education in 2005 revealed mean grade point averages (GPA) for African American students to be 2.69, compared to mean GPAs of 3.05 for European Americans (Shettle et al., 2007). Reflecting on NAEP data, Haycock, Jerald, and Huang (2001) noted that for those African American and Latino students who reach 12th grade, on average these 17-year-old students have the reading, mathematics, and science skills of a 13-year-old European American student. As such, it is not surprising that African American students do not attend college at the same rate as European American students. While the percentage of African Americans graduating high school and attending four-year colleges has increased within the past twenty years, 2008 statistics indicate that only 32% of African American 18 to 24-year-olds were enrolled in colleges or universities compared to 44% of their European American counterparts (Aud, et al., 2010).

The Achievement Gap in Post-Secondary Education. Although the achievement gap has slowly decreased over the last 10 years (Aud et al. 2010), disparities

remain, and have yet to be fully explained. Today racial-ethnic disparities in achievement continue to be persistent at every level—including post-secondary education. It remains a particularly striking problem that among the nation's most successful African American students, disparities remain. Among the disproportionately few African Americans who attend colleges or universities, the graduation rate is exceedingly low—approximately 39% of African American undergraduates earn a degree within six years (Ross et al., 2012). In a nation struggling to maintain its international educational prowess and achieve equality for its citizens, the goal of the U.S. Department of Education, as stated in its mission, is to "promote student achievement . . . by fostering educational excellence and ensuring equal access." As a part of this mission, the Department recognizes "the United States must also close the achievement gap, so that all youth— regardless of their backgrounds—graduate from high school ready to succeed in college and careers" (U.S. Department of Education, 2013).

While preexisting gaps in education and achievement may contribute to such achievement gaps evident in colleges and universities, a closer examination of college achievement reveals that this is not the only contributing factor. Recent research conducted by the Education Trust, a Washington-based think tank focusing on the achievement gap, has pointed to data suggesting the academic achievement gap can vary widely from university to university. As such, gaps in college graduation rates are not inevitable and it is imperative to determine what variables contribute to their existence (Lynch & Engle, 2010).

Gender and the Racial-Ethnic Achievement Gap. While the achievement gap contributes to the low percentage of African Americans who enroll in college, African American men are particularly likely to suffer from lower college enrollment, poorer academic performance, and lower graduation rates (McJamerson, 1991). In 2008, only 36% of African American students enrolled in degree-granting institutions were male (Aud et al., 2010). This represented the largest gender imbalance of any race or ethnicity. These statistics indicate that nationwide, only approximately 4% of the nation's college students are African American males, while African American males make up approximately 7% of all traditional college-aged Americans. Not only is there a dearth of male African American college students, but African American men are also less likely to successfully graduate from college than their female counterparts. Recent estimates of college graduation rates indicate only approximately 34% of African American men enrolled in college earn their degrees within six years. This represents a 9-percentagepoint deficit compared to their African American female counterparts (Ross et al., 2012). Such statistics provide insight into the importance of examining gender in the discussion of the state of education for African American students.

While African American men are underperforming compared to women, it is still noteworthy that African American females continue to fall significantly behind their Asian/Pacific Islander, European American, and Latino peers, respectively representing 28, 20, and 10-percentage-point differences in 2010 in six year graduation rates for female students at four-year-institutions (Ross et al., 2012). Gaps in the literature remain and there is a dearth of research examining the role of gender in the racial-ethnic

achievement gap. Further research is warranted to understand psychosocial variables that contribute to such poor outcomes.

Prior Research in the Academic Achievement Gap

In this section, I will review psychological theories and research that have been proposed to explain the achievement gap, including the limitations of this research. The issue of the achievement gap has been explored through the lens of several possibilities. The following psychosocial variables are reviewed, which have been posited to underlie the achievement gap in prior literature: genetics/cultural-deficit theories, oppositional identity, and stereotype threat.

Genetics/Cultural-Deficit Theories. In the late 1960's and 1970's, some argued that differences in achievement seen in testing are the product of inherent cognitive and intellectual differences between races (Herrnstein, 1971; Jensen, 1969). This highly controversial argument suggested that African Americans showed less problem solving ability than their European American counterparts (Herrnstein, 1971; Jensen, 1969).

Notably, more recent arguments have been made suggesting racial differences in intelligence quotient (IQ). In Herrnstein and Murray's (1994) controversial book, *The Bell Curve*, the authors argue that differences in scores on IQ tests are not due to differences in SES or test bias, but cognitive ability. They further argue that people with high cognitive ability move to higher SES classes and people with lower cognitive ability move to lower SES classes. Similarly, arguments have been made that cultural deficits contribute to achievement disparities. Psychologists in the 1960's and 1970's suggested

that the African American family was disorganized and, thus, pathological and dysfunctional in comparison to European American families (Allen, 1978; Moynihan, 1965; Jantz & Sciara, 1975). Such research suggested that African American families, partially due to poverty, lacked the values and skills to help their children succeed in school and also suggested that the propensity of fatherless homes contributed to poor achievement (Fowler & Richards, 1978).

These arguments have been highly contested and refuted by many psychologists. Over 60 articles have been written in response to *The Bell Curve* (Alderfer, 2003). Psychologists have pointed out crucial flaws in genetics and cultural deficits theories, including methodological and statistical analysis flaws (Goldberger & Manski, 1995; Hunt, 1995; Slaughter-Defoe, Nakagawa, Takanishi, & Johnson, 1990), inconsistencies in logic (Goldberger & Manski, 1995), and the lack of objectivity neutrality and context (Alderfer, 2003). Research suggesting inherent genetic intellectual differences and cultural deficits between racial groups has been consistently discounted as biased and inaccurate (Dorfman, 1995; Hunt, 1995). Further, contemporary researchers have suggested that past research touting a cultural deficit model often lacked in objectivity, neutrality, and context. For example, early researchers' (e.g., Allen, 1978; Moynihan, 1965) biased approach touted cultural deficits of African American families and parenting as indicators of social pathology. Such research, similarly, was often plagued by methodological errors. For example, Jantz & Sciara (1975) confounded father absence with family income. (Slaughter-Defoe et al., 1990).

Many researchers have called for an ecological perspective, which contextualizes individuals within factors such as families, parental educational status, and minority status (Bronfenbrenner, 1979; Garcia Coll et al., 1996; Slaughter-Defoe et al., 1990), as well as a phenomenological perspective taking into account the impact of an individual's perception of their context and experiences (Spencer, 1995). Such research from a socioecological perspective recognizes the reality of disproportionate socioeconomic disadvantage, limited educational resources, and the impact of stigmatization and discrimination for many people of color (Massey et al., 2003). Thus, the field has largely moved away from deficit-model perspectives. Future research should consider the contextual realities of what it means to be an African American student without pathologizing the group as a whole.

Oppositional Identity. Oppositional culture has been explored as a part of African American identity that contributes to the achievement gap. Fordham and Ogbu (1986) propose that a major reason African American students do poorly in school is their experience of cognitive dissonance in regard to academic efforts and success caused by a belief that academic achievement is analogous with "acting White." To "act White" is to "behave in a manner defined as falling within a White cultural frame of reference" and is, accordingly, frowned upon in African American culture (p. 181). The authors propose that due to the historic mistreatment of African Americans, academics, seen as a part of European American culture, are viewed as something that takes away from African American cultural identity and the welfare of the collective group. Accordingly,

Fordham and Ogbu (1986) argue students come to devalue what is being taught in school in order to avoid "acting White."

Building off of the work of Fordham and Ogbu, Cross (1995) proposed two types of oppositional identity: defensive oppositional identity and alienated oppositional identity. He argued that, historically, oppositional identity in the African American community was defensive—with the goal of overcoming oppression and imposed obstacles. However, he argued alienated oppositional identity is a more recent phenomenon born out of a further isolated lower class experiencing poverty, segregation, and oppression. Rather than a goal of overcoming oppression, alienated oppositional identity seeks to protect the self by rejecting involvement in European American society. Cross emphasizes that this identity is "produced by a sector of the black community that is disconnected and isolated from whites, yet are also interacting with other blacks who are more connected to White society" (Cross, 1995, p.192). Thus, he purports that alienated oppositional identity extends to middle class African Americans, as a method of maintaining racial connectedness.

While oppositional identity theory seems theoretically plausible, it is quite debated in the literature. Several quantitative studies have found no basis for the rejection of academic achievement in African American youth based on a fear of "acting White" (Ainsworth-Darnell & Downey, 1998; Spencer et al., 2001). Further, recent studies suggest African Americans are no more likely than European Americans to suffer from social costs of academic achievement (Carter 2005; Cook & Ludwig 1998; Tyson, Darity, & Castellino, 2005). Bergin and Cooks (2002) found that while some students

reported being accused of "acting White," they were not solely accused of acting White on the basis of academic achievement. Rather, it was in conjunction with other behaviors, such as certain dress, speech, or having many European American friends. The authors point out that students reported that these accusations did not necessarily cause them to avoid academic achievement in order to avoid accusations of acting white. Further, quantitative research supporting oppositional identity theory appears to be relatively weak (Downy, 2008). Thus, the notion that African Americans do not identify with academics in opposition to European American culture is highly contested and does not fully explain gaps in achievement.

Stereotype Threat. Further research has explored stereotype threat as inhibiting African American academic achievement. In terms of academics, stereotype threat is an awareness that African Americans have that others may hold a negative stereotype about their race in regards to their intelligence and academic abilities (Steele, 1997). Steele (1992, 1997) argues that African Americans experience increased anxiety due to the existence of such negative stereotypes, which contributes to their underperformance. Research has shown that cognitive priming of African American students' race is related to poorer performance in academic domains compared to European Americans (Pinel, Warner, & Chua, 2005).

A large body of research has sought to replicate and build on Steele's original stereotype threat theory in a variety of settings, including laboratory studies (Major & O'Brien, 2005), survey research conducted in natural social settings (Charles et al., 2009; Massey & Fischer, 2005; Massey & Mooney 2007), and field experiments providing

interventions to reduce stereotype threat (Aronson et al., 2002; Cohen, Garcia, Apfel, & Master, 2006; Cohen, Garcia, Purdie-Vaughns, Apfel, & Brzustoski, 2009; Walton & Cohen, 2007). While some studies have called stereotype threat into question (e.g., Cullen et al., 2004; Stricker & Ward, 2004), Walton and Spencer's (2009) recent meta-analysis of stereotype threat research provides a solid basis for the validity of the concept. Factors believed to underlie stereotype threat include anxiety (Steele, 1997; Osborne 2001), evaluation apprehension (Aronson et al., 1999), and reduced working memory capacity (Schmader & Johns, 2003).

Steele (1992) further suggested that anxiety induced by stereotype threat might lead to chronic academic disidentification, causing students to devalue academics as a self-protective mechanism. Thus, in his argument, this leads to a more chronic state of reduced motivation and achievement. However, such an explanation is insufficient, as research suggesting that African Americans devalue academics more than other racialethnic groups has, in fact, been mixed (Graham, 1994). There is research to suggest that African Americans do not devalue academics, in and of itself, more than European Americans, as African Americans' views of their academic abilities have been found to impact their self-esteem (Morgan & Mehta, 2004). Owens and Massey (2011) note that while research has been found in support of stereotype threat effects, stereotype threat mechanisms alone are not sufficient to explain reduced achievement.

The Current State of Achievement Gap Research: Building on Prior Knowledge

In addition to stereotype threat and oppositional identity, a plethora of psychological variables have been examined as elements that impact African American

students achievement. Among these variables are racial identity (Cokley & Chapman, 2008; Harper & Tuckman, 2006; Worrell, 2007), minority status stress (Greer, 2007; Gougis, 1986), and belonging uncertainty (Walton & Cohen, 2007). However, highly influential theories such as oppositional identity and stereotype threat have a particular idea in common: academic disidentification.

Oppositional identity theory posits that disidentification with academics protects racial identity and connectedness to other African Americans. On the other hand, Steele (1992) has linked stereotype threat theory to academic disidentification, suggesting that the impact of stereotype threat might lead to more acute academic disidentification, as well as more enduring disidentification over time. It is suggested that academic disidentification serves as a protective mechanism, which may ward off anxiety caused by stereotype threat as well as protect self-esteem. Steele suggests that the prolonged effects of stereotype threat may lead African American students to devalue academics, which he suggests underlies academic disidentification. According to Steele's line of reasoning, individuals who identify with academics may actually be more likely to experience stereotype threat.

Using a sample of African American high school students, Osborne and Walker (2006) found that students who were identified with academics were, indeed, more likely to experience stereotype threat and, in turn, withdraw from school. Although this might seem counterintuitive, Osborne and Walker suggested that students who were identified with academics, and thus valued academics, were paradoxically more impacted by anxiety due to stereotype threat and more likely to withdraw from school than those who

devalued academics. Because these students were more invested in academic outcomes, the effects of stereotype threat were more pronounced and aversive.

While the aforementioned literature has produced varied results, the concept of academic disidentification, more generally, as a factor that negatively impacts academic achievement has been well supported in the literature (Osborne, 2001). As such, research examining academic disidentification bridges gaps across multiple areas of inquiry in the achievement gap. In the current study, I theoretically disagree with Steele's hypothesis that African Americans are more prone to devalue academics and are, thus, more prone to disidentification. There is not strong support to suggest that African Americans are more likely to devalue education. In line with a hypothesis given by Major and colleagues (1998), I suggest academic disidentification represents, rather, a disregard of academic feedback as diagnostic of the student's actual academic and intellectual ability. Thus, these students may value academics, but believe that their academic outcomes may not accurately reflect their abilities as a student. In line with this reasoning, individuals who are identified with academics, or who assess academic feedback to be diagnostic of their true academic or intellectual ability, may be more likely to experience stereotype threat. This is in line with experimental findings suggesting that for African Americans led to believe that a task/test is diagnostic of their abilities, the effects of stereotype threat are exacerbated compared to those who are not led to believe the test is diagnostic of ability. This would also be in line with the findings of Osborne and Walker (2006).

Academic Disidentification

Defining Academic Disidentification. Identification with academics has commonly been described as the extent to which academic goals and accomplishments form the basis of an individual's self-esteem (Osborne, 1995). Identification with academics has been discerned to be a condition that is integral to the condition of learning (Newman, 1981). Theoretically, for individuals who are highly identified with academics, good academic performance will be rewarding and poor academic performance will be punishing. Therefore, such students should be academically motivated as a function of seeking reward and protecting their self-esteem (Osborne, 1997).

Yet, academic feedback and performance is not intrinsically rewarding or punishing (Finn, 1989; Newman, 1981; Osborne, 2001). Academic disidentification has been described as the lack of a relationship between self-esteem and academic outcomes (Osborne, 1995). For the purposes of the current study and consistent with prior investigations (Cokley, 2002; Cokley et al., 2011), academic disidentification is specifically defined as the lack of a significant relation between a student's view of his/her academic abilities in comparison to peers (i.e., academic self-concept) and the student's academic outcomes (i.e., GPA). Fundamentally, it is a phenomenon in which one's academic performance does not impact one's self-views, as it does for those who are identified with academics. Thus, for individuals who are disidentified, academic performance will not highly impact their self-esteem and these individuals will theoretically not be motivated to perform well academically (Osborne, 1997; Steele, 1992).

Academic disidentification has been found to correlate with poorer academic outcomes (Osborne, 1997) and behavioral outcomes (Osborne & Rausch, 2001).

Correlates of identification with academics include learning goals, intrinsic valuing of academics, self-regulation, mastery orientation, and academic competitiveness (Osborne & Rausch, 2001). Thus, for those who disidentify, many areas related to academic achievement may be impacted by or related to this process.

Academic Disidentification and African Americans. Research suggests that

African American students are exceptionally vulnerable to academic disidentification.

Several early studies reported lower correlations of academic achievement and selfesteem among African American students (Demo & Parker, 1987; Hare, 1977; Rosenberg
& Simmons, 1972). Although conventional wisdom suggests a relation between academic
performance and self-esteem should exist (Cokley, 2002), such early research
demonstrated that African American students maintained levels of self-esteem
comparable to their European American counterparts despite suffering from lower
academic achievement. The literature has shown similar findings in more recent years
(Graham, 1994; Osborne1997, 1999, 2001; van Laar, 2000).

Academic Disidentification, African Americans, and Gender. Research conducted by Osborne (1995, 1997, 2001) suggests two ideas central to understanding disidentification: 1) African American males are particularly likely to disidentify and 2) disidentification appears to occur over time. Osborne (1995) asserted that it appears all students generally begin their educational career identified with academics. However, it was not until adolescence that students exhibited disidentification. This idea has been

supported by research reporting the absence of gender differences in African American students' identification with academics prior to adolescence (McMillan, Frierson, & Campbell, 2011). In the most recent examination of academic disidentification, Cokley and colleagues (2011) reported that younger male African American high school students were identified with academics, reporting a relation between ASC and GPA of .87. However, evidence of disidentification occurred in older African American male high school students, as this relation significantly attenuated to .30. Conversely, the authors found African American female students' identification with school increased over time.

This is consistent with prior research, as Osborne (1995, 1997) reported findings in two longitudinal studies that 8th grade students, regardless of race or gender were identified with academics, exhibiting a significant positive relation between self-esteem and academic outcomes. Yet, African American males' academic identification was markedly altered over time, with correlations starkly decreasing from .23 in grade 8 to -.02 in grade 12 (Osborne, 1997). On the other hand, the correlations of their female counterparts, European Americans and Latino students showed slight decreases, but remained significant. Such findings indicating that African American males' self-esteem appeared to be virtually uninfluenced by academic outcomes points to the significance and importance of understanding disidentification among African American males.

Disidentification in African American College Students. While it may seem that disidentification would not significantly impact students who are able to excel enough to reach colleges and universities, the academic achievement gap remains apparent in post-secondary education. Thus, it is imperative to undergo inquiry into

whether and how disidentification impacts college students. Osborne's (1995, 1997) research suggests that African American males are particularly likely to show signs of disidentifying in early adolescence and disidentify by grade 12. Thus, are such disidentified individuals attending college? Major et al. (1998) provided evidence of disidentification in African American college students in two experimental studies. Further, Cokley (2002) provided strong evidence for academic disidentification among African American male college students, as it appeared African American males showed a progressively reduced positive relation between academic self-concept and GPA (dropping from .52 for underclassmen to .17 for upperclassmen), while African American females and European Americans maintained a significant positive relation. However, there is a dearth of literature examining academic disidentification in African American college students, warranting further exploration.

What Underlies Academic Disidentification? A question integral to academic disidentification research is what does this mechanism actually represent and what variables impact the phenomenon? Several researchers have hypothesized possible processes underlying the propensity of African American students' disidentification. Crocker and Major (1989) suggest that there are three possible reasons underlying this lack of relation between self-esteem and academic outcomes: 1) attributing negative outcomes to stigmatization, 2) devaluing outcomes on which the individual's group fares poorly or is perceived by others to fare poorly, and 3) making in-group social comparisons to similarly stigmatized individuals rather than out-group comparisons.

Building off of this line of thinking, Major and Schmader (1998) suggest that disidentification is the product of two possibilities: 1) reduction of the centrality or importance of the domain, similar to Crocker and Major's devaluing hypothesis or 2) discounting of the "diagnosticity," or validity, of their academic feedback and, as such, rejecting the feedback as an accurate indicator of their competency. Steele (1992) further suggested that anxiety induced by stereotype threat may lead to the chronic academic disidentification, causing students to devalue academics as a self-protective mechanism. While a survey of the literature reveals the majority of the research has used a theoretical framework in line with Steele (1992), emphasizing the devaluing of the academic domain, research suggesting that African Americans devalue academics more than other racial-ethnic groups has, in fact, been mixed (Graham, 1994).

Several studies showing evidence of disidentification in African American students have also found significant relations between academic self-concept and global self-esteem, which were not statistically different from European American students (Cokley, 2002; Morgan & Mehta, 2004). Thus, self-beliefs about academics appear to equally influence general self-esteem for African Americans and European Americans. Academics, in and of itself, does not appear to be devalued, as students' own beliefs about their academic competence impacts their self-esteem. Further, the academic socialization literature suggests that African American parents place the same amount of value on education for their children as European American parents (Steinberg, Dornbusch, & Brown, 1992; Suizzo, Robinson, Pahlke, 2008).

In this study, I suggest the framework consistent with Crocker and Major's (1998) second hypothesis regarding academic disidentification: that African American students who disidentify are disregarding the academic feedback they receive as accurate indicators of their academic and intellectual ability, which may impact academic motivation and achievement.

Disregarding Academic Feedback. Although several theories of self-esteem propose that individuals' self-beliefs are largely based on social feedback from others (Festinger, 1954), this does not appear to be true for individuals who disidentify in a domain. The attributional mechanism of discounting may allow individuals to maintain positive self-views, as they discount evidence that is inconsistent with their self-view as a protective mechanism (Kelley, 1971). Whether feedback is internalized and impacts selfesteem is largely influenced by an individual's assessment of whether the feedback is warranted (Crocker & Major, 1994; Major & Schmader, 1998). Major and Schmader (1998) note that "outcomes are deemed to be deserved when they are believed to accurately reflect the relevant contributions and qualities of the individuals or groups receiving those outcomes" (p. 224). Research examining the feedback attributions of African Americans has suggested that when it appears an unfair procedure has taken place (e.g., discrimination) or they do not have control over their outcomes or the circumstances that impact their outcomes, individuals are less likely to believe their outcomes are warranted (Crocker & Major, 1994; Lind & Tyler, 1988; Major, 1994). Thus, African Americans, who face stigmatization and stereotypes in the academic domain, may be more likely to disregard academic feedback.

Consistent with this idea, Major et al. (1998) reported experimental data suggesting African American college students were more likely than European Americans to discount the validity of feedback from intellectual tests, with their reported self-esteem less reactive to such feedback. African Americans were also found to be more likely to attribute their score to a biased test and racial disadvantages. The authors reported in a second experimental study in which participants received feedback on a writing task that African American students' self-esteem was, again, less reactive to feedback than European Americans (i.e., their self-esteem did not rise with positive feedback as European American students' did). Further, when African American students received negative feedback, their self-esteem was higher if race was cognitively primed before the task. As such, African American college students may be more likely to discount feedback from academic or intelligence-related tasks than their European American counterparts, particularly if race is primed. Such a mechanism could lead to academic disidentification. However, it is unclear what variables may contribute to such students' disregard of feedback. Thus, it is important for research to further examine what specific variables may impact academic disidentification

Measurement of Academic Disidentification. Academic disidentification has typically been measured in two ways: as a correlation between global self-esteem and GPA (Osborne, 1995; 1997; 2001) or a correlation between academic self-concept (ASC) and GPA (Cokley, 2002; Cokley et al., 2011). With both methods, a theoretical assumption is made that the extent to which academic outcomes forms the basis of one's

self-esteem or academic self-concept is an indicator of the extent to which one identifies with academics.

While Osborne (1995, 1997, 2001) has used a measure of global self-esteem, researchers have suggested the investigation of a construct more proximal to academic outcomes, such as academic self-concept, may better reflect the complexities of selfconcept's relation to academics (Demo & Parker, 1987; Marsh, 1993; Osborne, 1995). Further, for academic disidentification research conducted with individuals in late adolescence, using a measure of academic self-concept appears to be most appropriate and accurate assessment. While self-concept appears to be fairly consistent through adolescence (Hurtado, 1994), in late adolescence the different components of the selfconcept become more discrete (Marsh & Shavelson, 1985). Thus, traditional college-age students may have a more differentiated sense of self than those in early or mid adolescence, allowing them to base their global self-esteem on other proficiencies, while their academic self-concept is more specifically influenced by academic achievement (Cokley, 2002). Cokley (2002) found stronger evidence for disidentification with African American male college students as measured by ASC than global self-esteem. Other studies have found ASC to result in a more accurate assessment of disidentification, as well, when compared to global self-esteem (Morgan & Mehta, 2004). As such, I use academic self-concept as a part of the measurement of academic disidentification.

It should be noted that the examination of disidentification in this manner is an understudied topic, as between 2005 and 2010 the literature shows an absence of studies

examining the attenuation of the relation between ASC and GPA. Such a gap in the current literature is likely due to the divergent ways that academic disidentification has been defined and operationalized. Cokley et al. (2011) note that although researchers have examined variables suggested to underlie disidentification, such as devaluing academics (Cokley & Chapman, 2008; Strambler & Weinstein, 2010) and academic disengagement (Cokley & Moore, 2007; Nussbaum & Steele, 2007), the examination of the relation between ASC and GPA remains an important, although neglected, area of inquiry given that perplexing nature of ASC typically being a strong predictor of academic outcomes.

Academic Self-Concept. Academic self-concept can generally be viewed as a student's view of his/her academic abilities in comparison to peers (Cokley, 2000). More specifically, the construct has been described as an individual's cognitive awareness of his/her attributes coupled with affective responses to those perceived attributes and competence (Bong & Clark, 1999). This involves cognitive questions such as "Can I do the task?", an evaluative component involving a question of "How well can I do the task?", and an affective component which is "What affective response do I have regarding how well I can do the task?"

Research investigating the relation between ASC and academic achievement has consistently found ASC to be a correlate of achievement (Awad, 2007, Cokley, 2000; Reynolds, 1988; Witherspoon et al., 1997). In fact, ASC is arguably the strongest psychological correlate of academic outcomes (Cokley & Chapman, 2008). This relation has been found in African American samples, as well (Cokley, 2002; Cokley, 2008;

Cokley et al., 2011). Thus, the question remains, for those who disidentify (i.e., for whom this significant relation does not exist), what contributes to the attenuation of what is typically such a strong and consistent relation? Research has found African Americans to have levels of academic self-concept or academic self-esteem equal to European American (Gray-Little & Hafdahl, 2000; Reynolds, 1988) or higher on average (Brookover & Passalacqua, 1982; Cokley, 2002; Lay & Wakstein, 1984). When academic disidentification is further examined, it is noteworthy that most individuals who are disidentified are showing high academic self-concept with low academic outcomes rather than low academic self-concept and high academic outcomes.

Other variables that have been found to be correlates of academic self-concept include academic interest, intrinsic motivation, gender, year in school, parental socio-economic status, quality of student-faculty interactions, ethnic identity, and institution characteristics (e.g., PWCU or HBCU) (Cokley, 2000; Cokley & Chapman, 2008; Dusek and Flaherty 1981; Hurtado, 1994; Maehr, Karabenick, & Urdan, 2008; Pascarella & Terenzini, 1991). The question remains why or how these individuals are able to maintain such high levels of academic self-concept in spite of poorer academic outcomes.

As most research in the ASC literature has examined early and mid-adolescent populations, there is a dearth of research examining this construct in college populations, particularly for college students of color (Cokley et al., 2003; Gerardi, 1990). In this study, I will contribute to such a gap in the literature by examining the role of ASC in the academic disidentification of African American college students. Two variables are hypothesized to impact academic disidentification, thus, theoretically contributing to

African American students' heightened tendency to discount academic feedback: parental racial socialization and teacher trust.

Theoretical Framework

In the current study, I use the lens of two theories to contextualize the ways in which ecological and individual factors impact individuals' perceptions, emotions, and actions as related to academic disidentification: ecocultural theory (Bronfenbrenner, 1979, Weisner, 2002) and phenomenological variant of ecological systems theory (PVEST; Spencer, 1995)

Ecocultural Theory. Ecocultural theory considers individuals who change and grow within the context of the immediate settings that the person lives as impacted by the larger context in which the settings are imbedded (Bronfenbrenner, 1979). Because the achievement gap is such a complex issue, an ecological approach provides a particularly appropriate lens. Bronfenbrenner's original theory placed individuals and systems within the context of those with whom they have direct contact (e.g., families, neighborhoods, schools) as well as greater cultural contexts (e.g., cultural values, customs, laws).

Bronfenbrenner (1979) notes that research focusing on only one layer of processes as an explanation for development and behavior will run the risk of distortion of reality and oversimplification.

The current study encases academic disidentification within two critical social contexts. The proposed study adds a focus on family, and more specifically parents, which is the most immediate context for individuals. Parents play a crucial role in child and adolescent development. Further, for racial-ethnic minority families, in particular,

societal and cultural pressures from the discriminatory environments in which they live impact family dynamics in significant ways (Garcia Coll et al., 1996). Additionally, within the social context of school, students' perceptions of teachers as trustworthy are examined.

Phenomenological Variant of Ecological Systems Theory (PVEST). PVEST expands upon ecocultural theory by highlighting the importance of individuals' intersubjective experiences (Spencer, 1995; Spencer, Dupree, Hartmann,1997). In such a phenomenological approach, an individual's perception of experiences, rather than simply the experiences themselves, are highlighted in attempt to understand how individuals make meaning from their diverse experiences (Spencer et al., 1997; 2008). As such, these perceptions are theorized to influence an individual's coping strategies, identity development, and various outcomes and behavior (Spencer, 1999; Spencer, 2001). PVEST is a comprehensive theory outlining five interdependent components. These components are represented in a circular model with bi-directional relationships between the components.

The first component, *risk and protective contributors*, consists of contexts and characteristics perceived as risks or protective factors in the context of specific developmental periods throughout the life course (Spencer et al., 1997, 2006). This component is dependent on an individual's self-other appraisal process, in which what is perceived to be a risk or protective factor is influenced by what an individual believes others think of him/her (Spencer et al., 1997). Examples might include socioeconomic status, household makeup, race/ethnicity, and gender. While risk placed on an individual

may predispose them to adverse outcomes, protective factors may buffer stress and promote resilience.

The second component, *net stress engagement*, includes experiences that challenge an individual's wellbeing and psychosocial identity in addition to the supports available to manage such experiences (Spencer, 2006). This encompasses the ways that risk and protective factors actually occur in every day experiences. Examples include risk experiences, such as a perceived discriminatory experience, and protective experiences, such as racial socialization and parental warmth intended to buffer the experiences of such discrimination.

Spencer and colleagues suggest that individuals use problem solving strategies to resolve the stressful experiences delineated in net stress engagement, which comprises the third component, *reactive coping mechanisms*. Spencer (1995, 2006) notes that such problem solving strategies can lead to either adaptive coping solutions or maladaptive coping solutions. PVEST suggests that reactive coping mechanisms in combination with self-other appraisal create *emergent identities*, which define how individuals view themselves within various contexts and comprise the fourth component of PVEST. Thus, the way an individual thinks and believe others think about themselves related to race and gender help define an individual's identity, including racial identity, gender identity, and self-efficacy (Spencer, 1995, 2006). These are conceptualized as more stable coping responses across time and setting and can be either positive or negative.

Finally, in this model continuous self-other appraisal processes, reactive coping mechanisms, and emergent identities are thought to produce *life stage coping outcomes*,

the fifth component of the model. This includes behavioral and health outcomes that can be either adverse or productive. Such outcomes span the domains of academic achievement, physical and mental health, ability to engage in healthy relationships, and productive or deviant behavior (Spencer et al., 1997). Given that it is cyclical in nature, this process is theorized to unfold repeatedly across the lifespan, with self-other appraisal occurring with each component and as individuals assess personal and contextual changes that occur in their daily lives and across time (Spencer, 2006).

In the current study's examination of the gender differences in academic disidentification, an emphasis is placed on the self-other appraisal process as it relates to African American college students, in particular. Race and gender are theorized to be risk/protective factors that influence the net stress engagement (e.g., parental racial socialization experiences, perceived parental warmth, and experiences with teachers in school), reactive coping mechanisms (e.g., decreased teacher trust), emergent identities (e.g.., academic self-concept), and life stage outcomes (i.e., academic achievement) of African American college students. This theoretical lens is particularly relevant, as Swanson, Cunningham, and Spencer (2003) note that past research has failed to successfully understand the different expressions of Black males' resilience in spite of chronic challenges. As such, they suggest that without an understanding of the comprehensive nature of PVEST, African American males may easily be blamed for the ways in which they are coping. Further, given PVEST's demonstrated utility in explaining or predicting both academic achievement (Spencer, 2001) and negative learning attitudes (Spencer, 1997), it is a particularly appropriate lens for this study.

Parental Racial-Ethnic Socialization

Defining Parental Racial-Ethnic Socialization. In this study, I will examine parental racial-ethnic socialization as a variable that impacts academic achievement in African American college students. Racial-ethnic socialization describes a process in which individuals learn what it means to be a member of one's racial or ethnic group, receiving both explicit and implicit messages from others (Hughes et al., 2006). While socialization, generally speaking, involves learning knowledge, skills, values, and roles appropriate to a group or society (Bush & Simmons, 1990), people of color learn socialization messages specific to culture, ethnicity, and race. This process is particularly important in light of historical, institutional, and subtler contemporary forms of racism that impact the lives of people of color (Bentley, Adams, & Stevenson, 2008). In the present study, I define racial-ethnic socialization using Hughes and Chen's (1997, 1999) delineation of types of messages parents give to their children about race and ethnicity: 1) preparation for bias is characterized as preparing children for future encounters with prejudice and racism, 2) promotion of mistrust is defined simply as promoting racial mistrust, 3) cultural socialization includes teaching children about their own racial-ethnic group's culture, history and heritage, and 4) egalitarianism involves emphasizing the equality of all racial-ethnic groups.

Research has examined racial-ethnic messages passed from parents to their children, as parents or primary caregivers are typically the primary socialization unit in the lives of youth (Gecas, 1981). The racial-ethnic socialization literature demonstrates that most African American parents engage in some kind of racial-ethnic socialization

(Barr & Neville, 2008; Sanders Thompson, 1994; Thornton et al., 1990) and that teaching children about race impacts children's racial attitudes and preferences (Spencer, 1983). In particular, cultural socialization has been consistently shown to be the most frequently endorsed type of parental racial-ethnic socialization, with promotion of mistrust tending to be the least frequently endorsed (Caughy et al., 2002; Hughes & Chen, 1999).

Hughes' et al. (2006) meta-analysis of parental racial-ethnic socialization research determined predictors of parental racial-ethnic socialization have been found to include parental variables (e.g., level of education, socio-economic status, immigration status, and racial-ethnic identity), child variables (e.g., age and gender), and contextual variables (e.g., experience with discrimination and neighborhood variables). Further, parental racial-ethnic socialization has also been shown to correlate with outcome variables such as ethnic identity, coping with discrimination/prejudice, self-esteem, and various psychosocial outcomes (Hughes et al., 2006).

Parental Racial-Ethnic Socialization in Late Adolescence. Racial messages that parents give to their children typically do not remain static over time. The age of the child impacts the frequency and types of messages that parents give, as changes in children's life experiences and cognitive abilities allows parents to engage in different types of racial-ethnic socialization (Hughes & Chen, 1997). In adolescence, in particular, there is an increase in the extent to which parents engage in socialization around race and ethnicity with their children (Hughes, 2003).

Adolescence is a period of significant developmental changes. Improvements in cognitive and intellectual functioning change the way individuals are capable of seeing

their world. Such changes include improvements in abstract thought, decision making, and planning and organization (Yergelun-Todd, 2007). In particular, the development of abstract thought and formal reasoning abilities allows adolescents to have a more indepth understanding of race. Gains in formal reasoning seen in late adolescence may allow individuals to identify more incidents of racism compared to those in childhood or early adolescence (Seaton et al., 2008). Indeed, research has shown African Americans tend to identify incidents of discrimination in their lives with increased frequency in adolescence (Romero & Roberts, 1998; Seaton et al., 2008).

Further, adolescence is an integral period for identity development, including racial and ethnic identity. As Spencer's PVEST model (1995) stresses, developmental changes across the lifespan influence the ways individuals make meaning. Spencer, Dupree, and Hartmann (1997) note that adolescence is a primary time for such changes to influence aspects of self-organization. While children are able to identify race and often participate in their group's cultural practices, adolescence typically instigates the complex process of actively exploring one's racial and ethnic identity and understanding the significance of race and ethnicity in one's life (Hughes, 2003; Ruble et al., 2004). The process of making personal meaning of one's own racial-ethnic identity is also likely to instigate adolescents to evaluate their environment with race in mind, recognizing a greater number of race-related experiences, and thus engage their parents in a greater number of race-related discussions (Hughes & Chen, 1997). In late adolescence, traditional-age college students find themselves presented with new challenges and stressors presented by college life. College students of color are likely to be faced with

minority-status stress, including racism, discrimination, or insensitive comments by others that also impacts their worldview (Smedley, Myers, & Harrell, 1993). Such experiences may also prompt more thought and discussion around race and ethnicity with parents and others.

Bronfenbrenner's (1979) ecological theory emphasizes the ways in which an individual and his/her environment reciprocally influence each other. As such, adolescents' development is also impacted by reciprocal changes in parent behavior. Research suggests that adolescent development prompts parents to engage in increased amounts of racial-ethnic socialization (Hughes, 2003). Specifically, several studies have found that preparation for bias and promotion of mistrust often do not occur until adolescence, while messages of cultural socialization and egalitarianism tend to be transmitted earlier (Fatimilehin, 1999; Hughes, 2003; Hughes & Chen, 1997; McHale et al., 2006). Parents may not deem these messages to be appropriate until children have a more complex understanding of race in adolescence (Hughes & Chen, 1997). Increases in preparation for bias, including more specific methods for coping with racism, and promotion of mistrust, are likely to contribute to adolescents' changing worldviews.

Parental Racial-Ethnic Socialization and Gender. An in-depth understanding of racial-ethnic socialization includes an understanding of how child variables may impact such parental messages and the differential effects that these messages might have. In line with PVEST, it is integral to consider factors impacting an individual's perception of experiences such as racial-ethnic socialization (Spencer, 1999; Spencer,

2001). However, an investigation of gender is an often absent and under-studied area of inquiry in racial-ethnic socialization research (Brown et al., 2009).

Existing research has found that parents may engage in different frequencies and types of racial-ethnic socialization with their children based on the child's gender. Research suggests that African American girls tend to receive parental messages of perseverance, tenacity, hard work, and striving for sexual equality (Buckley & Carter, 2005; Hill, 2001). While African American boys have been reported to receive similar messages, several studies have also found a more specific focus on teaching boys to selfregulate behavior, resolve racial encounters, and overcome racism (Spencer, Dupree, Swanson, & Cunningham, 1998). For instance, several studies have found that African American males are more likely to receive messages regarding racial barriers and alertness to discrimination (Bowman & Howard, 1985; Hughes, Hagelskamp, Way, & Foust, 2009; Hughes, Witherspoon, et al., 2009; Stevenson, et al., 2002), resembling preparation for bias and promotion of mistrust, than their female counterparts. On the other hand, African American girls have been reported to receive more messages of racial pride and equality, resembling cultural socialization and egalitarianism (Bowman & Howard, 1985; Brown, Linver, & Evans, 2009; Caughy, Nettles, & Lima, 2011; Sanders Thompson, 1994), as well as messages that prepare girls for sexism (Thomas & King, 2007).

For example, Thomas and Speight (1999) reported African American males received more messages of negative stereotypes and overcoming racism, while African American females received more messages on the importance of achievement and racial

pride. Moreover, in a qualitative study, Ferguson (2000) found that parents felt the need to convey messages of the risks associated with being an African American male in our society and the reality of coping with such racial and gendered barriers. Although some studies have reported no gender differences in racial socialization (Caughy et al. 2002; Frabutt et al., 2002; Thompson, Anderson, & Bakeman, 2000), the literature appears to suggest that gender may play an important role in the racial socialization of African Americans. Such inconsistent findings may be due to differences in sample age and the varied ways in which racial socialization has been measured (Thomas & Speight, 1999). For instance, given that racial barrier messages tend to increase in frequency in adolescence, gender differences may not be apparent in younger samples compared to adolescent samples.

Such gender differences may occur within African American families due to the varied gender socialization and social, cognitive, and physical development of African American males and females. African American males tend to report experiencing more racism and discrimination than their female counterparts (Fischer & Shaw, 1999; Seaton et al., 2008; Stevenson et al., 2002). Sidanius and Pratto (1999) argue that as a part of our culture's racial hierarchy, males tend to be the primary target of racial discrimination to reduce the competition for power. Further, research suggests African American males tend to be viewed as more threatening (Stevenson, Herrero-Taylor, et al., 2002).

Additionally, reported differences in school experience, including the disproportionate suspension from school and incarceration of African American males likely contributes to such messages intended to be protective (Stevenson, Cameron, et al., 2002).

On the other hand, parents of African American girls have the unique task of preparing their child for challenges unique to both African Americans and women, as they represent a "double jeopardy" minority status. Thomas and King (2007) describe prevalent negative depictions or stereotypes of African American women, stating:

African American girls have to negotiate the historical images from slavery of African American women presented to them, from the all- giving nurturer (Mammy) to the angry, hostile girl who rolls her head and curses out people (Sapphire) to the scantily clad girls in music videos who use their sexuality to their advantage to gain status, material goods, or manipulate men (Jezebel). (p. 138)

However, an image of African American women representing strength is also prevalent in the African American community, as the "modern Superwoman image or the Strong Independent Black Woman" is often embraced (Thomas, Hacker, & Hoxha, 2011, p. 532).

Such distinct experiences may lead African American parents to differentially socialize their sons and daughters around preparation for bias, promotion of mistrust, cultural socialization, and egalitarianism. For instance, in a recent study, Varner and Mandara (2012) found African American mothers had different discrimination concerns for sons versus daughters, which differentially impacted academic socialization. African American mothers were found to be more concerned about sons' future racial discrimination compared to daughters, but more concerned about daughters' future gender discrimination. Only racial discrimination concerns were found to impact

mothers' academic expectations of their children, as anticipated future racial discrimination was related to lower academic and behavioral expectations. Such findings suggest gendered expectations impact the way parents interact with their children. Further, it is important to consider whether males may be aware of and process racial socializations differently than females given their divergent experiences. For instance, if males are more likely to perceive that discrimination is relevant to them than females, they may be more attuned to parental racial barrier messages (Hughes, Hagelskamp, et al., 2009). Further research is needed to gain in depth knowledge of how gender impacts racial-ethnic socialization.

Parental Racial Ethnic Socialization and Academic Outcomes. Parental racial-ethnic socialization research is particularly important given the behavior's potential to impact psychosocial outcomes. Prior research has explored the impact of parental messages about race and ethnicity on their children's academic outcomes. However, there is a dearth of such research examining the relation between racial-ethnic socialization and actual academic outcome variables, such as GPA or test scores (Hughes et al., 2006).

Hughes et al. (2006) note that because parental racial-ethnic socialization is related to variables that impact academic outcomes (e.g., positive ethnic identity and high self-esteem; Demo & Hughes, 1990; Smith, Walker, Fields, Brookins, & Seay, 1999), one might expect parental-racial socialization to indirectly impact academic outcomes.

Indeed, research has found that conveying racial messages to children can have a positive academic impact, as parental messages of cultural socialization and egalitarianism are

positively associated with academic adjustment and achievement (Caughy et al., 2002; Cooper & Smalls, 2010; Hughes, Witherspoon, et al., 2009; Murry & Brody, 2002; Wang & Huguley, 2012). Anglin and Wade (2007) also reported such findings using a college student sample. However, the small literature of such research with adolescent populations has also produced conflicting results. Neblett, Philip, Cogburn, and Sellers (2006) reported egalitarianism to be related to positive academic outcomes, while racial pride messages were related to lower grades and lower levels of academic curiosity. Cultural socialization has been most consistently related to positive academic outcomes, as well as related constructs such a more overt academic self-presentations (Murry, Berkel, Brody, Miller, & Chen, 2009) and academic efficacy (Hughes et al., 2009).

Research suggests that different types of racial-ethnic socialization methods may differentially impact academic outcomes. Studies examining the impact of preparation for bias have yielded mixed results. Some studies have found a positive relation between preparation for bias and academic outcomes (Murry et al., 2009; Brown & Krishakumar, 2007). For example, Bowman and Howard (1985) reported a positive relation between adolescents' racial barrier messages and grades. However, it appears that in excess, these messages have a negative impact on academic performance (Frabutt et al., 2002). Hughes, Witherspoon, and colleagues (2009) reported that preparation for bias was correlated with lower levels of academic achievement. These findings challenge the idea that giving youth messages about the potential for discrimination is innately protective. Several studies have indicated that preparation for bias messages may have unintended negative consequences (Huynh & Fuligni, 2008; Smalls, 2009; Smith, Atkins, & Connell,

2003). There is some evidence to suggest that only moderate levels of preparation for bias, rather than low levels or high levels, yield beneficial outcomes (Harris-Britt et al., 2007). Further, promotion of mistrust appears to more consistently have a negative impact on cognitive and academic outcomes (Hughes & Chen, 1999; Marshall, 1995). Generally speaking, the literature points to cultural socialization, egalitarianism, and moderate levels of preparation for bias as beneficial to academic outcomes, while promotion of mistrust and low or high levels of preparation for bias tends to be related to poorer academic outcomes (Brown et al., 2009; Harris-Britt et al., 2007).

Parental Racial-Ethnic Socialization, Academic Outcomes, and Gender. Few studies have examined gender as a moderator of parental racial-ethnic socialization and academic outcomes. Yet, it has been suggested that in the African American community, race and gender intersect in such a way such that it may help African American females to achieve academically, while hindering African American males (Hill, 1999). Given the propensity of African American males to underachieve compared to their female counterparts, it is particularly important to explore the possibility that differences in achievement may be related to different messages given to males and females, as well as the possibility that similar parental racial-ethnic messages may have a different impact on males and females.

Studies have indicated parenting behaviors such as discipline, monitoring, and support may have different impacts on males and females (Annunziata et al., 2006; Kapungu et al., 2006). As such, parental racial-ethnic messages may also differentially impact males and females. This is particularly relevant given that African American

males and females have been found to have differential school experiences, including higher frequency of discipline for problem behavior and increased vulnerability for school failure (Honora, 2002). Indeed, research suggests the protective function of racial identity attitudes in school engagement and perceived school performance differs by gender (Chavous, Rivas-Drake, Smalls, Griffin, & Cogburn, 2008; Dotterer, McHale, & Crouter, 2009).

While few studies examine gender as a moderator of parental racial-ethnic socialization and academic achievement, a small body of research exists in support of gender as a variable that influences the relation between these variables (Brown et al., 2009; Friend, Hunter, & Fletcher, 2011). There is some research to suggest that cultural socialization may have a particularly positive affect on African American males in buffering the detrimental effects of racial discrimination on academic outcomes (Brown, Livner, Evans, & DeGennaro, 2009; Dotterer, McHale, & Crouter, 2009; Wang & Huguley, 2012).

Further, there is research that suggests there are gender differences in the impact of preparation for bias or preparation for bias combined with other types of racial-ethnic socialization on academic outcomes. Smalls and Cooper (2012) found that for African American adolescent males low in private regard (i.e., reporting a less positive evaluation of their racial group), preparation for bias was associated with lower grades. On the other hand, for their female counterparts who were also low in private regard, preparation for bias was not significantly related to academic outcomes. In another recent study, Caughy, Nettles, and Lima (2011) found among African American young children,

cultural socialization was related to higher cognitive scores among girls, while a combination of types of racial-ethnic socialization messages (i.e., cultural socialization, coping with discrimination, and promotion of mistrust) was related to higher cognitive scores among boys. Such findings point to the complex nature of the role of gender in racial socialization's impact on academic achievement. Further research is warranted to understand the ways gender might moderate the relation between racial socialization and academic achievement.

Parental Warmth

Defining Parental Warmth. In this study, parental warmth is a second variable examined that places an individual and their academic outcomes within the context of family environment. Family experiences, particularly parent-child relationships, serve as net stress engagement within the PVEST model and, as such, represent examples of the ways that risk or protective factors occur in daily life. Theorists such as Darling and Steinberg (1993) have conceptualized parenting style as an influential context affecting the impact that parent behaviors and parent-child interactions have on a child. The authors note the importance of distinguishing between parenting style (i.e., emotional climate) and actual parenting practices used. As such, Darling and Steinberg indicate it is critical to consider parenting style variables as moderators of the relation between parenting practices and child outcomes. Similarly, Hughes et al. (2006) note that variables such as parent-child relationship quality are strong determinants of youth outcomes and, as such, parental racial-ethnic socialization cannot fully be understood in isolation from such variables. In line with such reasoning, I suggest that an examination

of parenting style will provide a more complete idea of the ways in which the family context influences academic outcomes. More specifically, parenting style is operationalized in this study through the variable parental warmth, a main dimension of parental rearing. In this study, parental warmth is defined as the child's perception of a parent's emotional warmth through supportive, accepting, and nurturing behavior (Muris, Meesters, & von Brakel, 2003).

Correlates of Parental Warmth. Scholars have documented that parental warmth and variables that encompass parental warmth (e.g., democratic-involved parenting style, parental care, quality of parent-child relationship) are significantly related to various youth outcomes, including emotional well-being (Brody & Flor, 1997; Cooper & McLoyd, 2011; Murry et al., 2005), decreased anxiety (Muris, Meesters, Merckelbach, & Hulsenbeck, 2000; Rapee, 1997), and fewer behavior problems (Chen, Liu, & Li, 2000; Lowe & Dotterer, 2013; Palmer & Hollin, 2001; Scaramella, Conger, & Simons, 1999).

Research has also explored parental warmth as a correlate of parental racial-ethnic socialization. It appears that parents who are more emotionally warm may engage in increased parental racial-ethnic socialization with their children (Caldwell, Zimmerman, Bernat, Sellers, & Notaro, 2002; Hill & Tyson, 2008), including cultural socialization (Brown et al., 2007; McHale et al., 2006) and preparation for bias (McHale et al., 2006). However, Frabutt and colleagues (2002) report findings that moderate amounts of parental messages about discrimination were related to increased maternal warmth in a sample of African American adolescents.

Finally, of further relevance to the current study, maternal warmth has been found to be a correlate of youth academic outcomes, with evidence supporting that increased maternal warmth is related to academic achievement, school engagement, academic motivation, and school satisfaction (Alfaro et al., 2009; Grolnick & Ryan, 1989; Fulton & Turner, 2008; Lowe & Dotterer, 2013; Murray, 2009; Spera, 2005; Woolley & Grogan-Kaylor, 2006).

Parental Warmth as a Moderator of Youth Outcomes. While parental warmth has been found to be a correlate of various youth outcomes, it has been found in the literature to moderate (i.e., lessen) the negative impact of parental constructs on youth outcomes, as well as enhance the positive impact of certain parental constructs on youth outcomes. Such research provides support for Darling and Steinberg's theory regarding parenting style's moderating impact and provides an added layer of depth in understanding the nuanced effect parental warmth can have on youth.

Parental warmth has been found to moderate the relation between peer rejection and behavior problems (Patterson, Cohn, & Kao, 1989), parental monitoring and minority youths' academic outcomes (Lowe & Dotterer, 2013), family involvement at school and children's achievement (Simpkins, Weiss, McCartney, Kreider, & Dearing, 2006), as well as physical punishment and a number of outcomes, including externalizing or problem behavior (Deater-Deckard & Dodge, 1997; Deater-Deckard et al., 2006; McLoyd & Smith, 2004; Simons et al., 2000), cognitive ability (Smith & Brooks-Gunn, 1997), and criminality (McCord, 1997).

Few studies have examined parental warmth or parenting style as a moderator of the relation between racial-ethnic socialization and youth outcomes. Two studies have examined such relationships using mental health outcome variables. Cooper and McLoyd (2011) found the affective quality of African American mother-adolescent relationships to moderate the relation between racial barrier socialization and psychological well being. However, their findings are in some ways counterintuitive and were only significant for girls. The authors reported that for girls with less positive relationships with their mothers, receiving higher levels of racial barrier messages predicted fewer symptoms of depression and higher self-esteem. Conversely, for girls with more positive maternal relationships, increased racial barrier messages were linked to more negative psychological outcomes.

The authors suggest it may be that "in conjunction with a more positive mother—adolescent relationship, moderate levels of racial barrier socialization may facilitate greater psychological well-being among African American girls" (p. 900). The authors also note that adolescent gender appears to influence the ways in which parent-child relationships impact African American adolescents' response to racial-socialization messages, as the authors failed to find a significant moderating relationship for boys. On the other hand, McHale et al. (2006) did not find any evidence of preparation for bias to be a significant moderator of the relation between youth ethnic identity or mental health.

Parental Warmth as a Moderator of Parental Racial-Ethnic Socialization and Academic Outcomes. To date, only one study has examined parental warmth as a moderator of parental racial-ethnic socialization and academic outcomes. Using an

African American sample, Smalls (2009) found that democratic-involved parenting (i.e., a relationship comprised of warmth, opportunities to self-govern, and firm standards) moderated the relation between racial barrier messages and emotional school engagement in a sample of adolescents. Specifically, for African American adolescents with higher levels of perceived democratic-involved parenting, a significant positive relation existed between racial barrier messages and emotional engagement in school. Conversely, adolescents who perceived lower levels of democratic-involved parenting displayed a negative relation between these variables. The authors suggest that racial-ethnic socialization might have a positive effect on school engagement when coupled with a parenting style that is warm, supportive, and allows for some child autonomy.

While only one study has examined this moderating effect, it is noteworthy that two other research studies exist examining the impact of parental warmth on the link between parenting and academic outcomes. Maternal warmth was found to be a significant moderator of both 1) parental academic socialization and determination to persist on schoolwork in a study of Mexican-origin parents and adolescents (Suizzo et al., 2012) and 2) parental monitoring and academic motivation among a multi-ethnic minority youth sample (Lowe & Dotterer, 2013). These studies provide support that a supportive home environment significantly influences the ways that parenting behaviors impact academic outcomes.

Parental Warmth and Child Gender. With regard to differences in parental warmth based on child gender, Mandara, Murray, Telesford, Varner, and Richman (2012) note that most survey studies examining parental warmth do not find evidence of

significant gender differences (e.g., Bean, Barber, & Crane, 2006; Mandara & Pikes, 2008; Mandara, Varner, & Richman, 2010), although several observational studies report gender differences in observed maternal warmth (Mandara et al., 2012; Tamis-LeMonda, Briggs, McClowry, & Snow, 2009). While there is not strong empirical evidence for differences in displays of warmth toward males and females, theorists have suggested that gender socialization might allow males and females to be impacted by parental warmth in different ways, thus differentially impacting outcomes. Some scholars suggest that gender socialization cause youth to interpret their surroundings through a gendered filter. As such, it has been suggested youth may have a heightened focus on stimuli they perceive to be more male or female dependent on their gender (Huston, 1983; Huston & Alvarez, 1990) and that girls may place more importance on affective relationships (Gilligan 1982; Gilligan, Lyons, & Hanmer, 1990). Thus, warmth may have a stronger impact on girls than boys (Linver & Silverberg, 1997).

The literature reveals research in this area is quite mixed. While Linver and Silverberg (1997) report that gender impacted the strength of the relation between warmth and psychosocial maturity, the authors did not find gender impacted the relation between warmth and academic outcomes. Further, when examining gender differences in warmth as a moderator between parenting behavior and youth outcomes, the literature is equally mixed. Reported gender differences are reported in warmth as a moderator of parental monitoring and school trouble (Lowe & Dotterer, 2013), as well as racial barrier socialization and both depressive symptoms and self-esteem (Cooper & McLoyd, 2011). However, gender differences were not found in warmth as a moderator of parental

monitoring and youths' engagement and motivation (Lowe and Dotterer, 2013) and racial barrier messages and externalizing behavior (Cooper & McLoyd, 2011). As such, further research is warranted to better understand parental warmth and child gender.

Teacher Trust

Defining Teacher Trust. Interpersonal trust, as a general construct, has been described as multifaceted, involving an individual's willingness to accept risk based on internal judgments of whether another individual is benevolent, honest, reliable, open, and competent (Hoy & Tschannen-Moran, 1999). However, relationships involving trust include the risk of harm or betrayal, as recognized by the trustor (Rousseau et al., 1998; Solomon & Flores, 2001). Trust is important when individuals are in interdependent relationships, relying on one another to achieve their goals. Such relationships are evident in schools, where student outcomes are dependent on evaluation by instructors. Teacher trust, for the purposes of the proposed study, involves a student's trust toward his/her instructor, as evidenced by a student's perception that instructors embody benevolence, honesty, reliability, openness, and competence (Adams & Forsyth, 2009).

Teacher Trust and African American Students. Research suggests that students of color are more likely to mistrust European American teachers (Adams, 2010; Zirkel, 2005). In a recent study examining a construct highly related to teacher trust, Yeager and colleagues (in press) found that African American adolescents were more likely than European American students to have decreased school trust. Such perceptions

are likely due to a combination of factors. Research suggests African American students tend to believe European Americans hold negative stereotypes about their group (Sigelman & Tuch, 1997) and to believe that discrimination is pervasive in our society (Branscombe, Schmitt, & Harvey, 1999). Further, African American students report higher levels of unfair treatment by teachers (Ancis, Sedlacek, & Mohr, 2000; Cohen & Steele, 2002).

A construct related to teacher trust in African Americans is cultural mistrust.

Cultural mistrust has been described as the extent to which African Americas mistrust

European Americans; this phenomenon is suggested to derive from a history of the

experienced racism and oppression of African Americans (Terrell & Terrell, 1981).

Terrell and Terrell (1981) further suggest that such mistrust leads to a belief that

European American instructors will not evaluate African American students fairly.

Biafora, Taylor, Warheit, Zimmerman, and Vega (1993) reported that one-third of

adolescent African Americans in their sample reported mistrust of European Americans

generally, as well as teachers.

The literature suggests that teachers, in fact, consistently report lower academic expectations, lower motivation to learn, and classroom performance outcomes for African American students (Chang & Sue, 2003). Further, European American teachers tend to show an underperformance bias toward African American students in grades and cognitive abilities (Kellow & Jones, 2008; Oates, 2003; Plewis, 1997), as well as a tendency to rate African American students have having more negative qualities than their European American counterparts (Chang & Demyan, 2007; Takei & Shouse, 2008).

To the extent that African American students perceive that teachers provide differential opportunities to students based on implicit and explicit stereotypes and bias, they may come to mistrust teachers. The reciprocal relationship between African American students' and European American teachers' perceptions of one another likely contribute to African American students' lower levels of teacher trust.

Teacher Trust, African Americans, and Gender. To my knowledge, the literature has yet to examine gender differences in teacher trust among African American students, constituting a significant gap in knowledge. However, a body of research exists suggesting gender differences in perceptions of teacher behaviors and attitudes in the classroom. As previously mentioned, African American males have an increased tendency to perceive discrimination in general. Further, Marcus et al. (1991) reported African American males were significantly more likely to perceive that teachers gave them negative feedback and more direction, called on them less, gave them fewer choices, and trusted them less than their female counterparts and European American students. Similarly, in a recent study Wang and Huguley (2012) reported that 9th grade African American males were more likely to perceive teacher discrimination than females. Thus, it seems such perceptions may contribute to decreased teacher trust in African American males. This is an area of research that clearly warrants further exploration.

Further, a fairly large body of research suggests that teachers may, indeed, have different perceptions of African American males. Teachers have been reported to have lower expectations of African American males than females (Wood, Kaplan, & McLoyd,

2007). Ross and Jackson (1991) found in a study in which teachers were given vignettes of hypothetical African American students that teachers had lower expectations of success for male students than females despite the students' equivalent characteristics. However, it must be noted that African American females may also be likely to experience mistrust of their instructors, as research suggests female African American students may believe negative expectations are placed on them by others, including teachers (Thomas, Hacker, & Hoxha, 2011). In a recent qualitative study exploring the racial identity of African American girls, it was found that 15% of participants' responses reflected disappointment with negative classroom environments, negative expectations of teachers, and/or suspicion of teachers (Thomas, Hoxha, & Hacker, 2013). In line with PVEST's emphasis on understanding on how individuals' perceptions of their experiences influence coping strategies, the unique racial and gendered risk factors and stressors related to African American students warrants an examination of lowered teacher trust as a possible reactive coping mechanism that may have maladaptive effects.

Teacher Trust and Academic Outcomes. Past research has examined the importance of students' perceptions of teachers in academic outcomes, showing such perceptions to be a significant predictor of achievement (Stipek, 2002; Wentzel, 1997). However, research examining the role of trust, specifically, in such outcomes has been limited. While a body of research exists suggesting a significant link between *teachers*' trust of students and academic achievement (Bryk & Schneider, 2002; Forsyth, Barnes, & Adams, 2005; Goddard, Tschannen-Moran, & Hoy, 2001), the role of *students*' trust of teachers in student achievement has largely been neglected.

Early scholars suggested that trust is a theoretically necessary component for academic achievement (Hewett, 1964; Hobbs, 1966). In the first study to examine the relation between trust and achievement, Imber (1973) found that student's trust of teachers was significantly related to higher grades, but unrelated to IQ scores. More recent research has identified trust in school environment as a crucial component for achievement (Bryk & Schneider, 2002; Goddard et al., 2001). However, only two studies have examined trust of teachers specifically (Imber, 1973; Yeager et al., in press).

In a series recent field experiments conducted by Yeager and colleagues (in press), a series of experimental interventions were put in place to assess the impact of teacher feedback and school trust on academic outcomes. In two experimental studies, the authors manipulated feedback that was critical of middle and high school students' work on a task. They found that when this feedback included messages that the teacher had high standards for the student and believed the student could meet these standards, students were more likely to revise and improve their work. The authors suggested that such feedback from teachers removed attributional ambiguity from the situation and, as such, these students were less likely to attribute these outcomes to teacher bias. The authors found such interventions were particularly successful for African American students low in teacher trust, compared to their European American counterparts. Such research highlights that increasing African American students' trust may improve academic outcomes.

A theoretically related line of research suggests a negative relationship exists between students' perceived discrimination from adults at school and academic outcomes

(Carter, 2005; Chavous et al., 2008; Dotterer et al., 2009; Neblett et al., 2006; Smalls, White, Chavous, & Sellers, 2007). With regard to gender moderating this relationship, two studies have found this negative effect to be stronger for African American males than females (Chavous et al., 2008; Wang & Huguley, 2012). However, future research should examine more directly the link between teacher trust and academic outcomes among African American students. Given that for students who are mistrustful of teachers, it is expected that there will be a decrease in motivation to earn high grades or to place value on earned grades, such a dearth in research warrants further exploration.

Teacher Trust and Racial-Ethnic Socialization. While prior research has not examined the relation between parental racial socialization and teacher trust, scholars have theorized that a number of factors impact levels of generalized trust in the African American population, including racial socialization (Nunnally, 2012; Smith, 2010). As such, research is warranted to explore racial-ethnic socialization as a construct that might impact teacher trust.

One study, published in a book chapter, has directly examined the relation between racial socialization and related trust constructs, such as generalized trust. In the only direct examination of racial socialization and trust, a study examining data from 2007 National Politics and Socialization Survey data found that socialization resembling cultural socialization was related to increased trust of other Blacks and other racial-ethnic minorities, while socialization resembling preparation for bias and promotion of mistrust was related to decreased trust of European Americans (Nunnally, 2012).

Teacher Trust and African American College Students. Faculty-student relationships have been found to be an important part of the college experience, impacting academic achievement (Astin, 1993; Cokley, 2000; Cokley, 2002) and student satisfaction with college (Astin, 1999; Mayo, Murguia, & Padilla, 1995). However, for African American students, particularly those attending predominantly White colleges and universities (PWCUs), mistrust and social distance between African American students and European American faculty may create barriers between student-faculty relationships (Arnold, 1993; Smith & Borgstedt, 1985).

In 2007, approximately 80% of college faculty were European American, with 7% reported to be African American (Department of Education, 2009). Such statistics give insight into the racial dynamics of student-teacher interactions for college students, particularly on campuses of PWCUs. There is some research to suggest that African American students at PWCUs, in particular, report less contact with professors outside of class and less favorable relationships with their professors (Allen, 1992; Nettles, 1991). African Americans at PWCUs have been found to report more negative perceptions of academic performance evaluations, less positive student-faculty relationships, and an increased perception of faculty as culturally insensitive compared to those at historically Black colleges and universities (HBCU's; Cokley, 2000; Fleming, 1984; Turner, 2002).

To date, no studies have been conducted specifically examining teacher trust in college students. However, research examining cultural mistrust has found African American college students were more likely than European American students to be singled out and receive differential treatment, with individuals high in cultural mistrust

most likely to report such perceptions (Thompson, Neville, Weathers, Potson, & Atkinson, 1990). Further, research has examined broader perceptions of college faculty. Chism and Satcher's (1998) investigation of African American students' perceptions of European American and African American faculty revealed students perceived European American faculty, in comparison to African American faculty, to be less knowledgeable about the needs of African American students, less approachable, less concerned about students, and less involved outside the classroom. The authors note that these results suggest that these perceptions may disrupt effective relationships with European American professors and contribute to African American students' hesitation in seeking out faculty members as mentors. Such findings suggest that the decreased teacher trust reported in youth (Adams, 2010) may also be seen in college students.

Attribution Theory

Attribution theory is used as another theoretical framework for the proposed research study. Attribution theory is a theory of motivation concerned with the perceived causes of outcomes (i.e., attributions; Weiner 1979; 1986). Applied to educational psychology, the theory suggests students make attributions for why they receive certain academic outcomes (Graham, 1991). Research suggests individuals are even more likely to engage in an attributional search when an outcome is negative (e.g., poor grades; Weiner, 1986).

Several attribution styles have been found to relate to academic achievement motivation, based on their impact on expectancy of outcomes and emotional consequences (Graham, 1991). Academic failures that are perceived to be stable over

time can diminish expectancies, leading to learned helplessness, described as the perception of little to no relation between behaviors and outcomes (Meisel, 1986). Such an outcome occurs when students perceive their outcomes to be out of their control (Licht & Dweck, 1984). Further, literature suggests individuals who have an external locus of control, tending to perceive that there is not a strong link between their behavior and outcomes, will show reduced achievement motivation (Graham, 1991). Such perceptions of external causality have been shown to protect self-esteem (Weary, 1978).

African American students have been found to make more external attributions compared to European Americans (Friend & Neale, 1972). Crocker et al. (1991, 1994) reported when African American college students performed poorly on an experimental task, they were more likely to blame teachers' bias (i.e., an external attribution). Stable, external attributions have been linked to reduced academic motivation (Graham, 1991).

Further, Crocker et al. (1991) reported African American college students' selfesteem was buffered by an external attribution of evaluator bias when given negative feedback by a European American on an experimental task. Interestingly, African American students were more likely than European American students to attribute both positive and negative feedback to evaluator prejudice. As such, their self-esteem was not impacted by evaluator feedback, which was likely disregarded.

Moreover, research by Yeager and colleagues (in press) suggests that using the lens of attribution theory can allow scholars to partially explain poorer performance among African American students and successfully intervene for those low in school trust. The authors hypothesized that in ambiguous situations students low in school trust

might perceive critical feedback as reflective of teacher bias. The authors demonstrated that particularly for African American students low in school trust, students' perception of teacher feedback had a significant effect on academic outcomes. In particular, in the authors' third in a series of experimental studies, a brief intervention was conducted to shift students' attributions to feedback on their academic work that is critical in nature. Students in the experimental group were encouraged to attribute such feedback to teachers' high standards and teachers' belief that the student can meet these standards. The students receiving this intervention showed significantly improved grades over the course of the semester, such that the achievement gap between African American and European American students in this study reduced by 39%. This study provides remarkable support for impact of attributions on student outcomes, particularly for African American students.

In light of such prior research and based on attribution theory, I propose that the lack of a significant relation between academic self-concept and academic outcomes found in those who exhibit academic disidentification may be related to an attribution of their academic outcomes to stable, external causes—specifically, teachers whom they do not trust. As such, I suggest that such students disregard feedback from instructors as indicative of their true academic ability. Individuals who have received heightened preparation for bias and promotion of mistrust, as well those who show decreased teacher trust, may be likely to perceive they do not have control over their outcomes or the circumstances that impact their outcomes due to heightened perceptions that they are stigmatized (Brega & Coleman, 1999).

Summary

I have reviewed the literature on the racial-ethnic and gender academic achievement gap, academic disidentification, parental racial-ethnic socialization, parental warmth, and teacher trust. Given the state of achievement for African American students, it is clear that further research is warranted to elucidate why this population shows evidence of academic disidentification, particularly for males. By taking critical social contexts, such as family and school relationships, into account, I aim to provide a richer understanding of variables that impact academic achievement. In particular, it appears parental racial-ethnic socialization and teacher trust may play an important role in the academic disidentification of African American male college students. Further, I suggest that parental warmth may play an important role in parental racial-ethnic socialization's impact on academic achievement. Attribution theory is used as a theoretical framework to understand how these variables may impact disidentification. The following section will outline the research questions to be examined in the current section.

The Current Study: Research Questions and Hypotheses

Research Question 1. Do gender differences exist in GPA, ASC, teacher trust, racial socialization (i.e., preparation for bias, promotion of mistrust, cultural socialization, and egalitarianism), and parental warmth?

Hypothesis 1. It was predicted that gender differences would exist in GPA, teacher trust, preparation for bias, promotion of mistrust, cultural socialization, and egalitarianism, with males reporting lower GPAs, teacher trust, cultural socialization, and egalitarianism than females, but higher levels of preparation for bias, and promotion of

mistrust. Conversely, I hypothesized that there would be no significant gender difference in ASC or parental warmth.

Rationale. Consistent with prior research examining gender disparities in African American college students' academic achievement (Cokley, 2001; Cokley & Moore, 2007), African American males are expected to have lower GPAs than females.

Although research has yet to examine gender differences in teacher trust in African Americans, research has shown African American males to perceive discrimination in general (Fischer & Shaw, 1999) and to be significantly more likely to perceive that teachers gave them negative feedback and more direction, called on them less, gave them fewer choices, and trusted them less than their female counterparts and European American students (Marcus et al., 1991). Thus, it seems such perceptions may contribute to decreased teacher trust in African American males.

While the literature examining gender differences in African Americans has been mixed, my hypothesis regarding racial socialization is in line with research finding that African American males receive a higher frequency of preparation for bias and promotion of mistrust than their female counterparts (Bowman & Howard, 1985; Hughes, Hagelskamp, et al., 2009; Hughes, Witherspoon et al., 2009; Stevenson et al., 2002; Thomas & Speight, 1999) and a lower frequency of cultural socialization and egalitarianism (Bowman & Howard, 1985; Brown, Linver, & Evans, 2009; Caughy, Nettles, & Lima, 2011; Sanders Thompson, 1994),

Research examining gender differences in ASC has been mixed. Support has been shown for males reporting higher ASC (Fleming, 1984), females reporting higher

ASC (Allen, 1992), and no gender differences in ASC (Cokley et al., 2011; Martinez & Dukes, 1991; Reynolds, 1988). My hypothesis is in line with research suggesting a lack of gender differences in ASC (Cokley et al., 2011; Martinez & Dukes, 1991; Reynolds, 1988). Cokley (2000) suggests that divergent findings may be due to different psychometric tools used to measure ASC and the measurement of ASC in this study is consistent with studies showing no gender differences.

Similarly, the literature examining gender differences in parental warmth has been mixed. While there is some observational research to suggest parental warmth to be higher among female youth (Mandara et al., 2012; Tamis-LeMonda et al., 2009), my hypothesis is in line with survey research that suggests there are no gender differences in levels of parental warmth (Bean et al., 2006; Mandara & Pikes, 2008; Mandara et al., 2010).

Research Question 2. Does identification with academics (relation between ASC and GPA) in African American college students attenuate over time and is this moderated by gender?

Hypothesis 2. It was expected that ASC would be positively related to GPA for underclassmen males and females and upperclassmen females. On the other hand, it was expected that the relation between ASC and GPA in male upperclassmen would be weaker and, further, non significant.

Rationale. The academic self-concept literature reveals ASC has consistently been found to be a correlate of achievement (Awad, 2007, Cokley, 2000; Reynolds, 1988; Witherspoon et al., 1997). Such consistent results make ASC, arguably, the strongest

psychological correlate of academic outcomes (Cokley & Chapman, 2008). Such findings have been replicated in African American samples (Cokley, 2002; Cokley, 2008). A study assessing academic disidentification, as measured by the lack of a significant relation between ASC and GPA, found African American males show a tendency to disidentify. (Cokley, 2002; Cokley et al., 2012).

However, the literature suggests academic disidentification may develop over time and uniquely impact African American males (Osborne, 1995; Cokley et al., 2011). Cokley (2002) found in a sample of African American college students that male undergraduates identified with academics, showing a significant positive correlation, while a significant relation was not found among upperclassmen. Conversely, the study found that African American females and European Americans remained identified with academics. Thus, I expect to replicate such findings.

Research Question 3. What is the relation between parental racial-ethnic socialization in adolescence and GPA among African American college students and does this relation differ by gender or level of parental warmth?

Hypothesis 3a. It was expected that both preparation for bias and promotion of mistrust would be negatively associated with GPA. It was expected that gender would moderate the relations between both preparation for bias and GPA, as well as promotion of mistrust and GPA. Specifically, it was hypothesized that for males, a negative relation between preparation for bias and GPA, as well as promotion of mistrust and GPA, would be significantly stronger than that for females.

Rationale. The research assessing the relation between preparation for bias and academic outcomes has been mixed. While some studies have found preparation for bias to be positively related to academic outcomes (Bowman & Howard, 1985), in excess these messages have been found to have a negative impact on academic outcomes (Frabutt et al., 2002; Harris-Britt et al., 2007). Hughes et al. (2009) found a negative relation between preparation for bias and academic outcomes.

However, the literature suggests that African American males receive a higher frequency of preparation for bias than their female counterparts (Bowman & Howard, 1985; Hughes, Hagelskamp, et al., 2009; Hughes, Witherspoon, et al., 2009; Stevenson et al., 2002; Thomas & Speight, 1999). Further, research has shown individuals in late adolescence tend to receive a higher frequency of preparation for bias than youth or those in early adolescence (Hughes, 2003; Hughes & Chen, 1997). As most of this research has focused on youth or those in early adolescence, such research may not reflect the impact of preparation for bias in college-aged students. Thus, it is predicted that African American males, who are likely to receive higher levels of preparation for bias based on age and gender, will show a negative relation between preparation for bias and GPA, stronger than the relation among African American females, in line with findings that preparation for bias in excess leads to poorer academic outcomes (Frabutt et al., 2002; Harris-Britt et al., 2007). This is in line with Smalls and Cooper's (2012) findings suggesting that for African American males preparation for bias is associated with lower grades, while for females preparation for bias is not significantly related to academic outcomes.

Although few studies have examined the impact of promotion of mistrust on academic outcomes, research has consistently found that promotion of mistrust is negatively related to academic and cognitive outcomes (Hughes & Chen, 1999; Marshall, 1995). Thus, my hypothesis is consistent with such findings. As research suggests that African American men tend to receive higher levels of promotion of mistrust than their female counterparts (Bowman & Howard, 1985; Hughes et al., 2009; Stevenson et al., 2002; Thomas & Speight, 1999), this relation is predicted to be significantly stronger for males.

Hypothesis 3b. Conversely, it was expected that both cultural socialization and egalitarianism would be positively associated with GPA. It was anticipated that gender would be a moderator of the relation between cultural socialization and GPA, with males having a stronger relation. An a priori hypothesis was not made regarding gender as a moderator of egalitarianism and GPA.

Rationale. Parental messages of cultural socialization and egalitarianism are more consistently positively associated with academic adjustment and achievement (Anglin & Wade, 2007; Caughy et al., 2002; Cooper & Smalls, 2010; Hughes, Witherspoon, et al., 2009; Murry & Brody, 2002; Wang & Huguley, 2012). My hypothesis is in line with such literature suggesting that these types of parental racial-ethnic socialization messages will be related to better academic outcomes.

Although there is a dearth of research examining gender as a moderator of the relation between cultural socialization or egalitarianism and GPA, there is some research to suggest that cultural socialization may have a particularly positive affect on African

American males in buffering the detrimental effects of racial discrimination on academic outcomes (Brown et al., 2009; Dotterer et al., 2009; Wang & Huguley, 2012). Thus, my hypothesis regarding a stronger relationship between cultural socialization and GPA for males is in line with such findings. Given the lack of research in this area, I do not make an a priori hypothesis regarding gender as a moderator of egalitarianism and GPA.

Hypothesis 3c. Further, it was expected that parental warmth would moderate (i.e., lessen) the negative impact of both preparation for bias and promotion of mistrust on GPA for both males and females, as well as moderate (i.e., strengthen) the relation of both cultural socialization and egalitarianism with GPA.

Rationale. Currently, only one study has examined parental warmth as a moderator of parental racial-ethnic socialization and academic variables (see Smalls, 2009). However, there is more evidence for the buffering effect of parental warmth on relations such as peer rejection and behavior problems (Patterson, Cohn, & Kao, 1989) as well as physical punishment and a number of outcomes, such as externalizing or problem behavior (Deater-Deckard & Dodge, 1997; Deater-Deckard et al., 2006; McLoyd & Smith, 2004; Simons et al., 2000), cognitive ability (Smith & Brooks-Gunn, 1997), and criminality (McCord, 1997). As such, it is expected that the context of a perceived warm, supportive parental relationship will buffer the negative effects of preparation for bias and promotion of mistrust on GPA.

Further, in line with scholars such as Darling and Steinberg (1993) who theorize that warm parent-child relationships can "enhance the effectiveness of a specific parenting practice, making it a better practice than it would be in a different stylistic

context'' (p. 493), it is predicted that the positive impact of cultural socialization and egalitarianism on GPA will be strengthened in the context of a perceived warm parental relationship. Such enhancing effects have also been found between parental monitoring and minority youths' academic outcomes (Lowe & Dotterer, 2013), as well as family involvement at school and children's achievement (Simpkins et al., 2006).

Research Question 4. Do gender differences exist in level of teacher trust and does class status moderate this relation?

Hypothesis 4. It was expected that men would report lower levels of teacher trust than females. It was further anticipated that class status would significantly moderate the relation between teacher trust and gender, such that upperclassmen males would report lower levels of teacher trust compared to underclassmen males, underclassmen females, and upperclassmen females.

Rationale. As no prior research has examined the impact of gender or class status on teacher trust in African American college students, the proposed examination is exploratory in nature. As aforementioned, research has shown African American males to perceive more discrimination in general (Fischer & Shaw, 1999) and to be more likely to report differential treatment by teachers (Marcus et al., 1991). Thus, it seems such perceptions may contribute to decreased teacher trust in African American males. Further, for African American men who increasingly become the statistical minority as upperclassmen on PWCU campuses (Aud et al., 2010), and who tend to suffer from lower grades than their European American and African American female counterparts,

teacher trust may decrease over time serving to buffer the negative effects of low grades on ASC.

Research Question 5. What is the relation between teacher trust and GPA and does gender moderate this relation?

Hypothesis 5. It was expected that there would be a positive relation between teacher trust and GPA. It was further expected that sex would significantly moderate the relation between teacher trust and GPA, such that a stronger relation between teacher trust and GPA would exist for males as compared to females.

Rationale. Early scholars suggested that trust is a theoretically necessary component for academic achievement (Hewett, 1964; Hobbs, 1966). In the first study to examine the relation between students' trust of teachers and achievement, Imber (1973) found that student's trust was significantly related to higher grades. More recent research has identified trust in school environment, more broadly, as a crucial component for achievement (Bryk & Schneider, 2002; Goddard et al., 2001). Recent research suggests that trust may place a particularly important role in the academic achievement of African American adolescents (Yeager et al., in press). This area of research is vastly understudied, as most research in this area is conducted from teachers' perspectives (Hoy & Tschannen-Moran, 1999). Thus, this research question is exploratory within a sample of African American college students, and predicts outcomes in line with Imber's (1973) findings.

While no research has focused on gender differences in the role of teacher trust and African American student achievement, the current study uses PVEST (Spencer,

1995) as a lens to consider the ways in which gender might serve as a risk or protective factor, which impacts the unique stressors students experience within the context of school and the ways these students perceive themselves and others. Students' trust of teachers is a variable impacted by individual differences, but also impacted by students' social contexts. African American males are in a unique position in their status as hyperminorities at PWCUs. School serves as a context for African American males in which teachers report lower expectations and African American male students perceive more discrimination as compared to their female counterparts (Marcus et al., 1991; Wood et al., 2007). Given males' experience in school, perceptions of a lack of teacher trust may lead to more maladaptive reactive coping mechanisms as compared to their female counterparts. Thus, I hypothesize that the relation between teacher trust and academic outcomes will be stronger for African American males.

Research Question 6. Is there a relation among parenting practices during adolescence (i.e., parental racial socialization and parental warmth) and levels of teacher trust among African American college students?

Hypothesis 6a. It was expected that preparation for bias and promotion of mistrust would both be significant predictors negatively related to teacher trust, while cultural socialization, egalitarianism, and parental warmth would be significant positive predictors of teacher trust. Further, it was expected that promotion of mistrust would be the strongest predictor of teacher trust compared to the other parenting constructs.

Rationale. Prior research has not examined the relation between parental racial socialization and teacher trust. Only one study, published in a book chapter, has directly

examined the relation between racial socialization and related trust constructs, such as generalized trust or cultural mistrust. Thus, the proposed examination is exploratory in nature. However, scholars have theorized that a number of factors impact levels of generalized trust in the African American population, including racial socialization (Nunnally, 2012; Smith, 2010). I suggest that parental messages about race do not inherently promote trust or mistrust, but rather dependent on the content of these messages racial socialization might influence levels of trust among youth. In the only direct examination of racial socialization and trust, a study examining data from 2007 National Politics and Socialization Survey data found that socialization resembling cultural socialization was related to increased trust of other Blacks and other racial-ethnic minorities, while socialization resembling preparation for bias and promotion of mistrust was related to decreased trust of European Americans (Nunnally, 2012).

Furthermore, research has found promotion of mistrust to be related to more negative psychosocial and academic outcomes (Brown et al., 2009; Marshall, 1995). Theoretically, it seems plausible that receiving more parental messages cautioning about contact with other racial groups or cautioning about barriers to success (i.e., promotion of mistrust) would be related to lower teacher trust among African American students at a PWCU. This would be in line with Nunnally's (2012) findings.

Regarding preparation for bias, it has been noted that African American students' fears that they may be unfairly judged might stem from socialization stressing the biases of European Americans (Biafora et al., 1993; Marshall, 1995). Further, a greater emphasis on discussion of racial discrimination may lead youth to expect persistent

discrimination and unfair treatment (Branscombe et al., 1999). Zirkel (2005) suggests factors such as perceived discrimination impact African Americans' decreased teacher trust.

Egalitarianism and cultural socialization are more consistently associated with positive child outcomes (Caughy et al., 2002; Murry & Brody, 2002; Wang & Huguley, 2012). Theoretically, it seems plausible for those who receive a greater frequency of messages regarding the equality of all people regardless of racial group, these individuals might be more trustful, in general and of those in racial outgroups. On the other hand, theoretically it does not seem that messages of cultural socialization would be linked to levels of teacher trust. While teaching about one's own cultural group and heritage might be used to instill racial pride in youth, these messages in isolation do not appear to be theoretically linked to outgroup trust. This would be in line with Nunnally's finding that racial pride messages were linked to increased trust of racial-ethnic minorities, but unrelated to trust of European Americans.

Finally, with regard to parental warmth, although studies have not directly examined the link between parental warmth and teacher trust, research suggests a warm parenting style is positively related to various positive psychosocial youth outcomes (Alfaro et al., 2009; Grolnick & Ryan, 1989; Fulton & Turner, 2008) and parents who are more emotionally warm may engage in increased parental racial-ethnic socialization with their children (Caldwell, Zimmerman, Bernat, Sellers, & Notaro, 2002; Hill & Tyson, 2008). Theoretically, in line with attachment theory and social learning theory, it seems that youth who experience a warm, nurturing parent style might expect more benevolent

relationships from others (King, 2002).

Hypothesis 6b. It was expected that parental warmth would moderate the relation between egalitarianism and teacher trust (i.e., strengthen the relation), as well as promotion of mistrust and teacher trust (i.e., weaken the relation).

Rationale. Parental warmth has yet to be examined a moderator of these relations given the dearth of research in this area. However, similar to hypothesis 3c, the rationale for the hypothesis is based prior research that shows the potential buffering effect of parental warmth on negative child outcomes (Deater-Deckard et al., 2006; McCord, 1997; Patterson et al., 1989), as well as enhance more positive child outcomes (Darling and Steinberg, 1993).

Research Question 7. Does academic identification (relation between ASC and GPA) differ by level of racial-ethnic socialization (significant two-way interaction) and does academic identification (relation between ASC and GPA) differ by gender, based on level of parental racial-ethnic socialization (significant three-way interaction)?

Hypothesis 7a. It was expected that preparation for bias, promotion of mistrust, and egalitarianism would moderate the relation between ASC and GPA, such that lower levels of preparation for bias and promotion of mistrust would be associated with a stronger relation between ASC and GPA, while higher levels of egalitarianism would be associated with a stronger relation in this relation.

Rationale. Research suggests that high levels of preparation for bias and promotion of mistrust have a detrimental affect on academic outcomes (Harris-Britt et al., 2007; Hughes & Chen, 1999; Hughes, Witherspoon, et al., 2009; Marshall, 1995).

However, studies have shown that preparation for bias may also be protective for the selfsystem, allowing individuals to maintain their self-esteem (Major, Quinton, & Schmader, 2003). Thus, for students who receive higher levels of preparation for bias, there may be a detrimental impact on academics, while also serving a protective role of protecting the academic self-concept. While promotion of mistrust has not been found to have a positive impact on the self-system (Branscombe et al., 1999), using rationale consistent with attribution theory, messages promoting the mistrust of European Americans may allow African American students to attribute poorer academic performance to racial prejudice, as research has linked such messages with a heightened sense of feeling stigmatized by others (Brega & Coleman, 1999). Research has found among African American college students' self-esteem was buffered by external attributions of evaluator bias when given negative feedback by a European American (Crocker et al., 1991). Thus, having received messages promoting the mistrust of European Americans might serve as a basis for such external attributions (i.e., poor grades due to discrimination) for African American students. As such, academic self-concept may remain constant despite poorer performance in school.

Conversely, messages of egalitarianism tend to be associated with positive academic outcomes (Caughy et al., 2002; Murry & Brody, 2002; Wang & Huguley, 2012). Again, using rationale consistent with attribution theory, for students who receive messages teaching that people are equal and deemphasizing racial differences, such students might be less likely to attribute their academic outcomes to teacher bias,

allowing for a stronger relation between the way they perceive their academic capabilities and their actual academic outcomes.

Hypothesis 7b. It was expected that for higher levels of preparation for bias (and promotion of mistrust), the relation between ASC and GPA will differ by sex. It is expected that for those higher in preparation for bias, females will show a significant positive relation between ASC and GPA, while males show a weaker, non-significant relation between ASC and GPA. On the other hand, for those lower in preparation for bias, males and females would show a significant, positive relation between ASC and GPA.

Rationale. Research suggests males tend to receive higher levels of preparation for bias and promotion of mistrust, as well as show a tendency to perceive more discrimination than females (Bowman & Howard, 1985; Hughes et al., 2009; Fischer & Shaw, 1999; Seaton et al., 2008; Stevenson et al., 2002; Thomas & Speight, 1999). Thus, such parental messages might allow males in particular to attribute poorer academic performance to racial prejudice, allowing such external attributions to keep academic self-concept stable despite poorer performance in school.

Research Question 8. Does identification with academics (relation between ASC and GPA) differ by level of teacher of mistrust (significant two-way interaction) and does this relation differ by gender based on level of teacher trust (significant three-way interaction)?

Hypothesis 8a. It was expected that teacher trust would moderate the relation between ASC and GPA, such that higher levels of teacher trust would be associated with a stronger relation between ASC and GPA.

Rationale. In one of the only studies to date to examine the relation between teacher trust and academic outcomes, Imber (1973) reported students' increased trust in teachers was related to higher grades. Although no studies have been conducted examining the role of teacher trust and ASC, attribution theory provides a basis to expect decreased teacher trust may result in a buffered ASC despite poor grades. For those who show decreased teacher trust, it seems plausible that such a lack of belief in the benevolence, honesty, reliability, and competence of their instructors (Adams & Forsyth; Hoy & Tschannen-Moran, 1999) may lead to the disregard of academic feedback. Research has suggested that when it appears that an unfair procedure has taken place (e.g., discrimination) or individuals believe that they do not have control over their outcomes or the circumstances that impact their outcomes, individuals are less likely to believe their outcomes are warranted (Crocker & Major, 1994; Lind & Tyler, 1988; Major, 1994). Recent research also suggests that interventions aimed at changing students' attributions of teacher feedback and improving academic outcomes is particularly effective for African American students low in school trust (Yeager et al., in press). For such students, it may be that this increases the likelihood that negative feedback from instructors is legitimate, thus increasing academic motivation, improving achievement, and decreasing the need to buffer ASC.

Hypothesis 8b. It was predicted that for lower levels of teacher trust the relation between ASC and GPA would differ by sex. For those lower in teacher trust, it was expected that females would show a significant positive relation between ASC and GPA, while males show a weaker, non-significant relation between ASC and GPA. On the other hand, it was expected for those higher in teacher trust, both males and females would show a significant positive relation between ASC and GPA.

Rationale. Again, given African American males' increased tendency to report experiencing racism and their unique experiences in schools, I predict African American male students will be significantly more likely to have their ASC buffered by a lack of teacher trust. Thus, for these African American males lower in teacher trust, it is plausible that they may believe their grades are the result of unfair procedures or that they have little control over their academic outcomes because of untrustworthy teachers. For these individuals, the attributional mechanism of discounting may allow positive selfviews, such as academic self-concept, to be maintained (Kelley, 1971). Such evidence of poor academic ability would, thus, be discounted, and one's self-perceptions of academic abilities would be protected.

CHAPTER 3

Methods

The aim of this study is an exploratory investigation of the role of parental racial-ethnic socialization, parental warmth, teacher trust and gender in the academic disidentification of African American college students. Given the perplexing nature of academic disidentification, as ASC is typically found to be a strong predictor of academic outcomes (Awad, 2007; Cokley, 2000), it is critical to explore what variables might moderate this relation for those who disidentify with academics. However, there is currently a dearth of such knowledge.

No study to date has examined the impact of parental racial socialization or teacher trust on academic disidentification. This research is being conducted to gain a better understanding of the relation between academic self-concept (ASC), GPA, preparation for bias, promotion of mistrust, egalitarianism, cultural socialization, parental warmth, teacher mistrust, and gender among African American college students.

Participants

Participants for this study were recruited via convenience and snowball sampling methods with the criteria that subjects identify as African American, were 18 years or older and current undergraduate students. Convenience sampling occurred via recruitment through the subject pools of the Educational Psychology and Psychology departments at the University of Texas at Austin, as well as recruitment postings on the University of Texas website "Know Events" and recruitment emails sent to university professors (see Appendix B). Snowball sampling occurred via email requests to

participants to forward information about the study to others who met the criteria of the study (i.e., African American undergraduate students 18 years or older). All participants of Educational Psychology of Psychology Department subject pools received course credit in exchange for participation in the study. All participants outside of these subject pools were entered into a series of drawings for \$50 Visa gift cards.

A priori power analysis was conducted using G*Power to determine the smallest sample size needed for all statistical procedures used, including one-way ANOVA analysis, two-way ANOVA analysis, and all regression models. The model requiring the largest number of participants to detect a medium effect size that is significant at the .05 level was used to determine the appropriate number of participants. Results indicated approximately 141 participants are needed to produce a minimum power of .80 for all analyses. Using a significance level of .05, it was expected that 141 subjects would provide 80% power of detecting a medium effect size in a regression model with nine total predictors.

The sample for this study consists of 319 individuals. Participants ranged in age from 18 to 28 years (M = 20.12, SD = 1.86, median = 20.00). All participants included in the sample identified as African American or Black: 89.7% African American, 10.0% biracial, and 0.3% other. Only one participant racially identified as "other" (i.e., Nigerian-American). Table 1 includes more detailed demographic information, including frequency and percent of sample, for race, sex, classification (i.e., year in school), socioeconomic status, and mother and father's highest level of education.

Measures

Academic Self-Concept Scale (ASCS; Reynolds, Ramirez, Magrina, & Allen, 1980). The ASCS is a 40-item Likert-type scale with response options ranging from 1 (strongly disagree) to 4 (strongly agree). The ASCS is designed as a measure of an academic facet of general self-concept in college students (Reynolds, 1988). Studies consisting of African American samples report adequate reliability: .87 (Cokley, 2008), .90 (Awad, 2007), .91 (Cokley et al., 2003). Construct validity with African American samples has also been demonstrated with reported positive correlations between ASC and both GPA and self-esteem (Cokley, 2002). Items are keyed positively, such that higher scores are representative of a more positive academic self-concept. Sample items include: "I lack the ability for courses in my major (reverse score)." "Instructors believe I am a good student." In this study, a Cronbach's alpha of .92 was obtained. See Appendix E for items of this scale.

Parental Ethnic-Racial Socialization Scale. This instrument is a version of measures by Hughes and colleagues (Hughes & Chen, 1997; Hughes & Johnson, 2001). It was slightly expanded upon by Pahlke, Suizzo, and McClain (2013) for more appropriate use with college students. It includes 34 Likert-type items ranging from 1 (never) to 5 (very often). The scale is designed to assess students' perceptions of their parents' racial-ethnic socialization with them when they were in middle school and high school. The questionnaire is divided up among four subscales: *Preparation for Bias*, *Promotion of Mistrust, Cultural Socialization*, and *Egalitarianism*.

The scale proposed for use in this study has shown adequate reliability with a college sample, with internal consistency (Cronbach's alpha) reported to be .90 for Preparation for Bias, .84 for Promotion of Mistrust, .84 for Cultural Socialization, and .82 for Egalitarianism (Pahlke, Suizzo, & McClain, 2013). Further, internal consistency of scales using similar items derived from Hughes and colleagues have reported adequate internal consistency ranging from .77 to .90 (Hughes & Chen, 1997; Hughes et al., 2009; McHale et al., 2006). Such reliability has been replicated in African American samples, with reported internal consistency of .78 (Hughes, Witherspoon, et al., 2009) and .91 (Hughes & Chen, 1997) for Preparation for Bias, .68 (Hughes & Chen, 1997) and .73 (Hughes & Johnson, 2001) for Promotion of Mistrust, .78 (Hughes, Witherspoon, et al., 2009), and .73 (Hughes, Hagelscamp, et al., 2009) for cultural socialization, and .86 (Hughes & Johnson, 2001) for egalitarianism. Construct validity of Hughes and Chen's (1997) original measure was confirmed by principal components factor analysis in which items were adequately represented by the proposed underlying dimensions.

Preparation for Bias consists of the mean of 9 items. Sample items include: "Told you that some people may treat you badly or unfairly because of your race." In this study, a Cronbach's alpha of .85 was found for the preparation for bias subscale. Promotion of Mistrust consists of the mean of 6 items. Items on this scale were expanded upon for use with a college sample. Sample items include: "Done or said things to keep you from trusting kids from other racial or ethnic groups." Initial Cronbach's alpha was run with 8 items and found to be .77 in this sample. The removal of two items (i.e., 12 and 26) significantly improved the internal consistency of this subscale. Thus, in this

study, the final Cronbach's alpha for this subscale was found to be .86. *Cultural Socialization* consists of the mean of 7 items. Sample items include: "Encouraged you to read books concerning the history or traditions of your ethnic or racial group." Cronbach's alpha for in this study was found to be .89 for this subscale. Finally, *Egalitarianism* consists of the mean of 9 items. Sample items include: "Told you that American society is fair to all races and ethnicities." The Cronbach's alpha in this study was found to be .83 for this subscale. See Appendix E for items of this scale.

Parental Warmth Subscale: Egna Minnen Beträffande Uppfostan-Child (EMBU-C; Muris, Meesters, & von Brakel, 2003). The parental warmth subscale of the EMBU-C is a 10-item Likert-type scale with response options ranging from 1 (no, never) to 4 (yes, most of the time). This subscale is intended to be a measure of child perceptions of parents' warmth and support. Questions measure the frequency of parental behaviors that are supportive, accepting, and nurturing in nature. Respondents were instructed to complete the questionnaire thinking about their primary parental figure or guardian and indicate afterward whom that is (e.g., biological mother, biological father, stepmother, stepfather, grandmother, grandfather, etc.).

The parental warmth subscale has shown adequate reliability, as a study examining the psychometric properties of the EMBU-C, internal consistency (Cronbach's alpha) for this subscale was reported to be .77 and .81 when respondents report maternal warmth and paternal warmth, respectively (Muris, Meesters, & von Brakel, 2003). A second study exploring the psychometric properties of the EMBU-C supports these finds, with a reported Cronbach's alpha of .84 for the warmth subscale (Young, Wallace, Imig,

Borgerding, 2012). Recent studies have also shown similar levels of internal consistency, with alpha levels for the subscale reported to be .89 (Suizzo et al., 2012) and .91 (Ivanova, Veenstra, & Mills, 2012).

Further, both Muris et al. (2003) and Young et al. (2012) have confirmed the construct validity of this measure, as a principle components factor analysis indicated the proposed underlying dimensions adequately represented items. Sample items from this subscale include: "Your parent listens to you and considers your opinion" and "Your parent shows that he or she loves you." The Cronbach's alpha in this study was found to be .94 for this scale. See Appendix G for items on this scale.

Teacher Trust Scale (Adams & Forsyth, 2009). The teacher trust scale is a 13item Likert-type scale with response options ranging from 1 (*strongly disagree*) to 5
(*strongly agree*). The teacher trust scale is designed as a measure of students'
perceptions of teachers' trustworthiness. The language has been altered slightly for more appropriate use with college students. Internal consistency (Cronbach's alpha) has been reported to be .90 (Adams & Forsyth, 2009) and .83 (Adams, 2010) for the scale.

Internal structure validity has been supported by an exploratory factor analysis with factor loadings ranging from .62 to .85 (Adams, 2010). Construct validity has been supported by factor analysis, showing an alignment of items with the discernment facets of trust (Hoy & Tschannen-Moran, 1999), as well as concurrent and predictive validity measures (Forsyth, Adams, & Hoy, 2011). Although this instrument has not been used with a homogenous African American sample, adequate reliability and validity has been reported with a racially diverse sample including a 32% African American makeup

(Adams & Forsyth, 2009). Items are keyed positively, such that higher scores are representative of more teacher trust and lower scores are representative of more teacher mistrust. For the purposes of the current research proposal, items have been slightly altered to make language more appropriate for use with a college sample. Sample items include: "Instructors at my university have high expectations for all students." "I can believe what instructors at my university tell me." "Instructors at my university evaluate me fairly." The Cronbach's alpha for this study was found to be .89 for this scale. See Appendix H for items of this scale.

Demographic Questionnaire. A demographic questionnaire developed for this study was composed of questions about race/ethnicity, sex, year in school, and socioeconomic status, and mother's/father's highest level of education. The demographic questionnaire examined GPA in two ways, both self-report. First, participants were asked to list their cumulative GPA. Participants were also asked to select their cumulative GPA from a category (i.e., 1 = lower than 2.0 [mostly D's], 2 = 2.00 - 2.49 [Mostly C's, a few D's], etc.). The intention behind the second method of obtaining GPA was to obtain a more accurate assessment of GPA for freshman, who might not know their college GPA. Final analyses include the continuous GPA variable. The Pearson product-moment correlation between both measures of GPA is .90, indicating that for students who completed both items, there is a strong relation between students' estimates of their GPA for both measures. See Table 2 for descriptive statistics of demographic variables. See Appendix D for sample demographic questionnaire.

Procedures

The proposed study adheres to the guidelines and procedures outlined by the Institutional Review Board (IRB) for the Protection of Human Subjects at the University of Texas at Austin. As such, the research proposal, informed consent, and a draft of the survey, was submitted to the IRB of the University of Texas at Austin and approval was received. Research subjects participated in the study by completing a series of online questionnaires via Qualtrics, a web-based survey program. Participants had the ability to take the survey at any location of their choosing. However, it was emphasized to participants to find a location where they could answer questions confidentially without outside bias or input. It was anticipated that the online survey should take no more than 25 minutes to complete.

Using Qualtrics, participants viewed a cover letter describing the study as an investigation of parental messages about race, attitudes toward instructors, and academic achievement (see Appendix A). The cover letter included the investigator's contact information in the event that students had questions or concerns regarding the study. Given that data was collected via the Internet, participants provided electronic consent to participate in the study. The study maintained confidentiality, as participants' identities remained anonymous to the investigator and other participants. Individuals were informed they could choose not to participate in the study if they do not agree to the terms of consent and they could withdraw from the study at any time. Alternative options without penalty were provided to students who chose to forgo participation to fulfill their research requirement. Once participants completed the study, they were instructed to e-

mail the investigator verification of participation. Participants were consequently e-mailed a participation receipt as well as written debriefing providing information about the study (see Appendix C).

CHAPTER 4

Statistical Analysis

Preliminary Analysis

Main analyses for this study include the use of Pearson product-moment correlations, analysis of variance, and multiple regression. Before conducting analyses, preliminary analyses were conducted in order to verify all assumptions have been met to be able to perform these procedures. These assumptions include normal distribution, linearity of relationship between independent and dependent variables, homoscedasticity, and the absence of multicollinearity.

Normality of all variables was examined via histograms, normal Q-Q plots, and skewness and kurtosis statistics. Histograms and normal Q-Q plots revealed a reasonably normal distribution for all variables, with the exception of parental warmth, which was revealed to have a negative skew (i.e., most participants reported having warm, supportive relationships with their parents). Skewness, which assesses the symmetry of a distribution on a variable, and kurtosis, which assesses the peakedness of a distribution, revealed that although the values for this data were slightly abnormal, they are acceptable for the analyses of this study, as skewness will not make a significant difference in the analysis with reasonably large sample sizes (i.e., 200+ cases) (Tabachnick & Fidell, 2007). Thus, the skewness of parental warmth is permissible, as multiple regression is robust to such violations of normality. See Table 3 for results of skewness and kurtosis statistics.

Linearity of the relationship between residuals and predicted dependent variable scores was assessed via residuals scatterplots of the data (i.e., normality P-P plots of the regression standardized residual and a scatterplot of standardized residuals). The relationship between variables appeared linear (i.e., a reasonably straight line in the P-P plots and the absence of a clear or systematic pattern in a scatterplot of standardized residuals).

Homoscedasticity, the assumption that the variance of residuals about predicted dependent variable scores are the same for all predicted scores, was also demonstrated via the residuals scatterplots of the data (i.e., scatterplots of the standardized predicted dependent variables by the standardized residuals demonstrated for the independent variables). This confirmed the presence of normally distributed residuals.

Multicollinearity, which occurs when two independent variables in a regression model are highly correlated, was assessed by examined Pearson product-moment correlations among all variables. See Table 4 for these correlations. The highest correlation between any two independent variables in an analysis for this study was a correlation of .53 between cultural socialization and egalitarianism. Given that this is below .7, multicollinearity was not suspected to be a problem. Further analysis of multicollinearity was assessed via examination of tolerance statistics for each independent variable in multiple regression analyses. A tolerance statistic of .20 or less would indicate that the multiple correlation with other variables is high (Menard, 2002). This did not occur in this study. All multiple regression analyses using interaction terms

in this study utilized the centering of independent variables prior to analysis to reduce the risk of multicollinearity.

The data were assessed for outliers using stem-and-leaf diagrams and scatterplots of mean residuals. This revealed there were no outliers, as defined by cases that have a standardized residual of more than 3.3 or less than -3.3 (Tabachnick & Fidell, 2007). Further, examinations of 5% trimmed mean statistic indicated the presence of more extreme values had little impact on mean scores. Thus, no outliers were removed from the dataset.

Descriptive statistics

Descriptive statistics (i.e., mean, standard deviation, minimum and maximum scores) were examined for each variable for the total sample. Further, Pearson product-moment correlations were assessed for all variables. See Table 2 and Table 4 for these statistics. Generally, these statistics did not reveal irregularities in the data. However, unequal group sizes were revealed for sex (males = 120, females = 199). Although for certain analyses (e.g., ANOVA) it is preferable to have roughly equal group sizes, if the variances of the dependent variable for groups are roughly equal and the group sizes have a ratio of less than 4:1, power should not be noticeably reduced and data can be validly analyzed despite unbalanced designs (James, 2009). In this sample, tests of homogeneity of variance revealed roughly equal variance between males and females (p > .05). Thus, the unequal group size for this sample, while not ideal, is permissible.

Pearson product-moment correlations revealed the variables ASC, teacher trust, sex, class status, paternal education, maternal education, and family income were

significantly correlated with GPA, with effect sizes ranging from medium (ASC and teacher trust) to small (class status, paternal education, maternal education, family income, and sex). Further, significant correlates of teacher trust included academic self-concept, GPA, parental warmth, promotion of mistrust, egalitarianism, and sex, with effect sizes ranging from medium (academic self-concept, GPA) to small (parental warmth, promotion of mistrust, egalitarianism, and sex) (Cohen, 1988). Sex was found to significantly correlate with the following variables, showing a small effect size: promotion of mistrust, teacher trust, parental warmth, and GPA. See Table 4 for further significant correlations between variables in this dataset.

Main Analyses

Hypothesis 1. It was predicted that gender differences would exist in GPA, teacher trust, preparation for bias, promotion of mistrust, cultural socialization, and egalitarianism, with males reporting lower GPAs, teacher trust, cultural socialization, and egalitarianism than females, but higher levels of preparation for bias and promotion of mistrust. Conversely, I hypothesized that there would be no significant gender difference in ASC or parental warmth. A one-way between-groups analysis of variance was conducted using the variables GPA, ASC, parental warmth, teacher trust, preparation for bias, promotion of mistrust, egalitarianism, cultural socialization and gender as the independent factor to examine whether significant mean differences exist between males and females in these variables.

Prior to running analyses, Levene's test for homogeneity of variances was assessed. Levene's test assesses the null hypothesis that population variances differ

between the two groups. This statistic revealed that population variances differ for the variable parental warmth (p < .05). Thus, this variable violates the homogeneity of variance assumption and the Welsh and Brown-Forsythe statistics were used to assess statistical significance of mean gender differences for this variable. For all other variables, the null hypothesis that the group variances differ was rejected (p > .05) and, thus, the assumption of homogeneity of variances was met.

Results indicated a statistically significant difference in gender mean scores for the variable GPA: F(1, 317) = 10.78, p = 001. Females reported higher GPA's (m = 3.00, SD = 0.54) than males (m = 2.68, SD = 0.68). A statistically significant difference in gender mean scores was found for promotion of mistrust: F(1, 314) = 9.06, p < .01. Males reported higher promotion of mistrust (m = 2.42, SD = 0.89) than females (m = 2.12, SD = 0.84). A statistically significant difference in gender mean scores was found for teacher trust: F(1, 315) = 10.69, p = .001. Females reported higher levels of teacher trust (m = 2.81, SD = 0.46) than males (m = 2.63, SD = 0.46). A statistically significant difference in gender mean scores was found for parental warmth: F(1, 306) = 5.73, p < 0.000.05. Females reported higher levels of parental warmth (m = 3.58, SD = 0.54), than males (m = 3.42, SD = 0.66). For these variables, significant differences in mean scores were small, with the effect sizes (i.e., eta squared) equal to .02, .03, .02, and .02, respectively (Cohen, 1988). No significant gender differences were found for ASC, F (1, 317) = 0.46, p > .05, preparation for bias, F(1, 314) = 0.10, p > .05, egalitarianism, P(1, 314) = 0.10, egalitarianism, P(1, 314) = 0.10, egalitarianism, P(1, 314) = 0.10, egalitarianism, P(1, 314314) = 1.49, p > .05, or cultural socialization F(1, 314) = 2.30, p > .05.

Thus, hypothesis 1 is partially supported. Gender differences in GPA, teacher trust, and promotion of mistrust, as well as non-significant mean gender scores in ASC supported this hypothesis. Conversely, a significant gender difference in parental warmth and non-significant mean gender scores in preparation for bias, cultural socialization, and egalitarianism failed to support this hypothesis.

Hypothesis 2. It was predicted that ASC would be positively related to GPA for underclassmen males and females and upperclassmen females. On the other hand, it was predicted that the relation between ASC and GPA in male upperclassmen will be weaker and, further, non significant. In line with past research (Cokley, 2002; Cokley et al., 2011; Osborne, 1995, 1997), this hypothesis was assessed by conducting Person product-moment correlations to examine whether the relationship between academic self-concept and GPA was significantly attenuated over time (i.e., a comparison of male underclassmen versus upperclassmen male and female underclassmen versus female upperclassmen). The magnitude of the correlation was used to determine whether students are identified with academics (i.e., a significant correlation) or disidentified (i.e., a non-significant correlation). See Table 5.

For male underclassmen, Pearson product-moment correlations revealed a strong, positive correlation between ASC and GPA, r = .50, n = 60, p < .001. For male upperclassmen, results further reveal a weak, non-significant correlation between ASC and GPA, r = .24, n = 60, p > .05. For female underclassmen, Pearson product-moment correlations reveal a moderate, positive correlation between ASC and GPA, r = .38, n = 93, p < .001. For female upperclassmen, results reveal a strong, positive correlation

between ASC and GPA, r = .61, n = 106, p < .001. These results supported the hypothesis that males begin college identified with academics and disidentify with academics over time, while females remain identified with academic throughout college.

Hypothesis 3a. It was predicted that both preparation for bias and promotion of mistrust would be negatively associated with GPA. It was expected that gender would moderate the relations between both preparation for bias and GPA and promotion of mistrust and GPA (i.e., the negative relation between preparation for bias (as well as promotion of mistrust) and GPA will be weaker and non-significant for females, while the relation between preparation for bias (as well as promotion of mistrust) and GPA will be stronger and significant for males).

Results of Pearson product-moment correlations revealed that these variables were not were not significant correlates of GPA: preparation for bias (r = -.03) and promotion of mistrust (r = .00). Thus, these variables were not significant predictors of GPA, which failed to support hypothesis 3a.

Hypothesis 3b. It was predicted that both cultural socialization and egalitarianism would be positively associated with GPA. It was further hypothesized that gender would moderate the relation between cultural socialization and GPA. An a priori hypothesis regarding gender as a moderator of egalitarianism and GPA was not made.

Results of Pearson product-moment correlations revealed that these variables were not were not significant correlates of GPA: cultural socialization (r = -.03) and egalitarianism (r = -.02). Thus, these variables were not significant predictors of GPA, which failed to support hypothesis 3b.

Hypothesis 3c. It was predicted that parental warmth would moderate (i.e., lessen) the negative impact of both preparation for bias and promotion of mistrust on GPA for both males and females, as well as moderate (i.e., strengthen) the relation of both cultural socialization and egalitarianism with GPA.

Because racial socialization variables (i.e., preparation for bias, promotion of mistrust, cultural socialization, and egalitarianism) were not significant predictors of GPA, results failed to support hypothesis 3c.

Hypothesis 4. It was predicted that males would report lower levels of teacher trust than females and that class status would significantly moderate the relation between teacher trust and gender, such that upperclassmen males would report lower levels of teacher trust compared to underclassmen males, underclassmen females, and upperclassmen females.

To assess this hypothesis, I conducted a two-way between-groups analysis of variance, using the factors sex and class status and the dependent variable teacher mistrust. Main effects of sex and class status were examined, as well as the interaction between the factors class status and gender. Levene's test of equality of error variances indicated that the variance of teacher trust was equal across groups (p > .05). Thus, the assumption of homogeneity of variance is not violated. Results indicated that there was a statistically significant main effect for sex, F(1, 313) = 10.55, p = .001. However, there was not a significant main effect for class status, F(1, 313) = 0.19, p > .05. Further, the interaction effect for sex and class status was not statistically significant, F(1, 313) = 1.01, p > .05.

Thus, hypothesis 4 was partially supported as males reported significantly lower teacher trust, but was not supported by a non-significant interaction between sex and class status. The effect size for the significant sex difference was small (partial eta squared = .03).

Hypothesis 5. It was predicted that there would be a positive relation between teacher trust and GPA. It was further expected that sex would significantly moderate the relation between teacher mistrust and GPA, such that a stronger relation between teacher trust and GPA would exist for males as compared to females.

To assess this hypothesis, I conducted a hierarchical multiple regression analysis. The criterion variable was GPA and the predictor variables were teacher mistrust and sex. Class status and paternal education were entered in the first step to control for their influence, followed by teacher trust and sex in the second step. Third, in order to determine the impact of sex, I added an interaction term to the model using the variables teacher mistrust and sex. A statistically significant increase in R² would indicate that an interaction was present for teacher mistrust x sex.

Results indicated the first step explained 5.2% of the variance in GPA. After the entry of teacher trust and sex in the second step the total variance explained by the model as a whole was 23.0% of the variance in GPA, F(4, 306) = 24.15, p < .001. Sex and teacher mistrust explained an additional 18.2% of the variance in GPA, after controlling for class status and paternal education, R squared change = .182, F change (2, 306) = 36.68, p < .001. After the entry of the interaction term sex x teacher mistrust in the third step, the total variance explained by the model as a whole was 27.3% of the variance in

GPA, F(5, 305) = 24.35, p < .001. Thus, the interaction explained an additional 4.5% of variance in GPA, R squared change = .045, F change (1, 305) = 36.68, p < .001. In the final model, only class status, paternal education, teacher trust, and sex x teacher trust were statistically significant, with teacher trust having the highest beta value ($\beta = .40$, p < .001), followed by sex x teacher trust ($\beta = -.22$, p < .001), class status ($\beta = -.16$, p = .001), and paternal education ($\beta = .11$ p < .05). See Table 6.

Further analysis was conducted by plotting and probing the significant interaction effect through simple slope analysis (Aiken & West, 1991). Simple slope analysis indicted that the slope for males (β = 0.71) was higher than it was for females (β = 0.22). These results support hypothesis 5, as teacher trust was a positive predictor of GPA and an increase in teacher trust was more strongly related to an increase in GPA for males compared to their female counterparts. See Figure 1 for a graph of this interaction.

Hypothesis 6a. It was predicted that preparation for bias and promotion of mistrust would both be significant predictors negatively related to teacher trust, while cultural socialization, egalitarianism, and parental warmth would be significant positive predictors of teacher trust.. Further, it was expected that promotion of mistrust would be the strongest predictor of teacher trust compared to the other parenting constructs.

To assess this hypothesis, I conducted a hierarchical multiple regression analysis to determine which variable is the better predictor of teacher trust. The criterion variable was teacher trust and the predictor variables were promotion of mistrust, egalitarianism, and parental warmth. Cultural socialization and preparation for bias were not included in

the analysis, as these variables were not significant correlates of teacher trust (r = .02; r = .09).

In the first step, I entered sex to control for its influence. In the second step, I entered the variables promotion of mistrust, egalitarianism, and parental warmth. Results indicated the first step explained 3% of the variance in teacher trust. After the entry of promotion of mistrust, egalitarianism, and parental warmth in the second step the total variance explained by the model as a whole was 8.8% of the variance in teacher trust, F (4, 302) = 8.41, p < 001. Promotion of mistrust, egalitarianism, and parental warmth explained an additional 6.7% of the variance in teacher trust, after controlling for sex, R squared change = .067, F change (3, 302) = 7.54, p < 001. In the final model, only sex, promotion of mistrust, and maternal warmth were statistically significant, with promotion of mistrust having a highest beta value (β = -.15, p = .01), followed by sex (β = .13, p < .05) and parental warmth (β = .13, p < .05). Egalitarianism was a marginally significant predictor (β = .10, p = .09).

These results partially support hypothesis 6a, as promotion of mistrust was a significant negative predictor and the strongest predictor of teacher trust, as well as that parental warmth egalitarianism were positive predictors of teacher trust. This hypothesis was not supported by the findings that preparation for bias and cultural socialization were not significant predictors of teacher trust.

Hypothesis 6b. It was predicted that parental warmth would moderate the relation between both egalitarianism and teacher trust (i.e., strengthen the relation), as well as promotion of mistrust and teacher trust (i.e., weaken the relation). To assess this

hypothesis, I conducted two hierarchical multiple regression analyses. In both models, the criterion variable was teacher trust. In model one, the predictor variable was promotion of mistrust, while in model two, the predictor variable was egalitarianism.

In model one, sex was entered in the first step to control for its influence. In the second step, I entered the variable promotion of mistrust. Third, I entered the interaction term promotion of mistrust x warmth. A statistically significant increase in R^2 would indicate the presence of a statistically significant interaction. Results indicated the first step explained 3% of the variance in teacher trust. After the entry of promotion of mistrust and egalitarianism in the second step the total variance explained by the model as a whole was 8.2% of the variance in teacher trust, F(2, 303) = 10.17, p < 001. Promotion of mistrust and parental warmth explained an additional 5.9% of the variance in teacher trust, after controlling for sex, R squared change = .059, F change (2, 303) = 7.54, P < 001. After the entry of the interaction term promotion of mistrust x warmth in the third step, the total variance explained by the model as a whole was 8.3% of the variance in teacher trust, F(4, 302) = 7.89, p < .001. The interaction term explained less than 1% of additional variance in teacher trust, R squared change = .003, F change (1, 302) = 1.05, p > .05. See Table 8.

In model two, sex was entered in the first step to control for its influence. In the second step, I entered the variable egalitarianism. Third, I entered the interaction term egalitarianism x warmth. A statistically significant increase in R² would indicate the presence of a statistically significant interaction. Results indicated the first step explained 3% of the variance in teacher trust. After the entry of promotion of mistrust

and egalitarianism in the second step the total variance explained by the model as a whole was 7.2% of the variance in teacher trust, F(3, 303) = 8.96, p < 001. Egalitarianism and parental warmth explained an additional 4.9% of the variance in teacher trust, after controlling for sex, R squared change = .049, F change (2, 303) = 8.03, p < 001. After the entry of the interaction term egalitarianism x warmth in the third step, the total variance explained by the model as a whole was 8.0% of the variance in teacher trust, F (4, 302) = 7.61, p < .001. The interaction term explained an additional 1.1% of variance in teacher trust, F squared change = .010, F change (1, 302) = 3.57, p = .06. See Table 9.

Hypothesis 6b was not supported by these findings. Although a marginally significant two-way interaction of egalitarianism x warmth ($\beta = -.12$, p = .06) was found, it was not in the predicted direction. Further, the hypothesis was not supported by a non-significant interaction of promotion of mistrust x warmth.

Hypothesis 7a. It was predicted that preparation for bias, promotion of mistrust, and egalitarianism would moderate the relation between ASC and GPA, such that lower levels of preparation for bias and promotion of mistrust would be associated with a stronger relation between ASC and GPA, while higher levels of egalitarianism would be associated with a stronger relation in this relation.

To assess this hypothesis, I conducted three hierarchical multiple regression analyses. The criterion variable was GPA and the predictor variable was preparation for bias in model one, promotion of mistrust in model two, and egalitarianism in model three.

In model one, sex, class status, and paternal education were entered in the first step to control for their influence. In the second step, I entered the variables ASC and preparation for bias. Third, I entered the interaction term preparation for bias x ASC. A statistically significant increase in R^2 would indicate the presence of a statistically significant interaction. Results indicated the first step explained 8.0% of the variance in GPA. After the entry of ASC and preparation for bias in the second step the total variance explained by the model as a whole was 23.3% of the variance in GPA, F (5, 304) = 19.80, P < 001. ASC and preparation for bias explained an additional 15.7% of the variance in GPA, after controlling for sex, class status, and paternal education, R squared change = .157, F change (2, 304) = 31.56, P < 001. After the entry of the interaction term preparation for bias x ASC in the third step, the total variance explained by the model as a whole was 23.5% of the variance in GPA, F (6, 303) = 16.78, P < .001. The interaction term explained less than 1% of additional variance in teacher trust, R squared change = .004, F change (1, 303) = 1.54, P > .05.

In model two, sex, class status, and paternal education were entered in the first step to control for their influence. In the second step, I entered the variables ASC and promotion of mistrust. Third, I entered the interaction term promotion of mistrust x ASC. A statistically significant increase in R^2 would indicate the presence of a statistically significant interaction. Results indicated the first step explained 8.0% of the variance in GPA. After the entry of ASC and promotion of mistrust in the second step the total variance explained by the model as a whole was 25% of the variance in GPA, F (5, 304) = 21.66, p < 001. ASC and promotion of mistrust explained an additional 17.4% of the variance in GPA, after controlling for sex, class status, and paternal education, F squared change = .174, F change (2, 304) = 35.82, F < 001. After the entry of the

interaction term promotion of mistrust x ASC in the third step, the total variance explained by the model as a whole was 26% of the variance in GPA, F (6, 303) = 18.91, p < .001. The interaction term explained an additional 1% of variance in GPA, R squared change = .01, F change (1, 303) = 4.03, p = .05. See Table 11.

In model three, sex, class status, and paternal education were entered in the first step to control for their influence. In the second step, I entered the variables ASC and egalitarianism. Third, I entered the interaction term egalitarianism x ASC. A statistically significant increase in R^2 would indicate the presence of a statistically significant interaction. Results indicated the first step explained 8.0% of the variance in GPA. After the entry of ASC and egalitarianism in the second step the total variance explained by the model as a whole was 24.5% of the variance in GPA, F (5, 304) = 21.07, P < 001. ASC and egalitarianism explained an additional 16.8% of the variance in GPA, after controlling for sex, class status, and paternal education, R squared change = .168, F change (2, 304) = 34.43, P < 001. After the entry of the interaction term egalitarianism x ASC in the third step, the total variance explained by the model as a whole was 25.0% of the variance in GPA, F (6, 303) = 18.20, P < .001. The interaction term explained an additional .08% of variance in teacher trust, R squared change = .008, F change (1, 303) = 3.14, P = .08. See Table 12.

These results partially supported hypothesis 7a. This hypothesis was supported by promotion of mistrust significantly moderating the relation between ASC and GPA, such that lower levels of promotion of mistrust were associated with a stronger relation between ASC and GPA (β = -.10, p = .05). See Figure 2 for a graph of this interaction.

Further, egalitarianism was a marginally significant moderator, such that higher egalitarianism was associated with a stronger relation between ASC and GPA (β = .09, p = .08). This hypothesis was not supported by the finding that preparation for bias was not a significant moderator.

Hypothesis 7b. It was predicted that for higher of preparation for bias (and promotion of mistrust), the relation between ASC and GPA would differ by sex. It was expected that for those higher in preparation for bias, females would show a significant positive relation between ASC and GPA, while males would show a weaker, non-significant relation between ASC and GPA. On the other hand, for those lower in preparation for bias (or promotion of mistrust), it was expected both males and females would show a positive significant relation between ASC and GPA.

To assess this hypothesis, I conducted two separate hierarchical multiple regressions. The criterion variable was GPA and the predictor variables were ASC, sex, and preparation for bias in the first model, and ASC, sex, and promotion of mistrust in the second model. For model one, I entered class status and paternal education in the first step to control for their influence, followed by ASC and sex in the second step. Third, I added the following interaction terms to the model: ASC x sex, preparation for bias x sex, ASC x preparation for bias. Fourth, in order to determine the impact of preparation for bias on the relation between ASC and sex on GPA, I added a three-way interaction term to the model using the variables ASC x sex x preparation for bias. A statistically significant increase in R² would indicate that a three-way interaction is present for ASC x sex x preparation for bias.

Results of model one indicated the first step explained 5.2% of the variance in GPA. After the entry of ASC and sex in the second step the total variance explained by the model as a whole was 23.6% of the variance in GPA, F(4, 305) = 2.82, p < .001. ASC and sex explained an additional 18.8% of the variance in GPA, after controlling for class status and paternal education, R squared change = .188, F change (2, 305) = 37.96, p < .001. After the entry of the interaction terms ASC x sex, preparation for bias x sex, ASC x preparation for bias in the third step, the total variance explained by the model as a whole was 24.4% of the variance in GPA, F(7, 305) = 15.28, p < .001. These interaction terms explained an additional 1.6% of the variance in GPA, R squared change = .016, F change (3, 302) = 2.19, p > .05. Finally, after the entry of the three-way interaction term ASC x sex x preparation for bias in the fourth step, the total variance explained by the model as a whole was 24.2% of the variance in GPA, F(8, 301) =13.33, p < .001. This three-way interaction term explained less than 1% of additional variance in GPA, R squared change < .001, F change (1, 301) = 0.01, p > .05. In the final model, the following variables were significant predictors: class status ($\beta = -.18, p <$.001), paternal education ($\beta = .12 \ p < .05$), ASC ($\beta = .43, \ p < .001$), sex ($\beta = .11, \ p < .05$), and sex x preparation for bias ($\beta = .11, p < .05$). See Table 13.

For model two, I entered class status and paternal education in the first step to control for its influence, followed by ASC and sex in the second step. Third, I added the following interaction terms to the model: ASC x sex, promotion of mistrust x sex, ASC x promotion of mistrust. Fourth, in order to determine the impact of promotion of mistrust on the relation between ASC and sex on GPA, I added a three-way interaction term to the

model using the variables ASC x sex x promotion of mistrust. A statistically significant increase in R^2 indicates that a three-way interaction is present for ASC x sex x promotion of mistrust.

Results of model two indicated the first step explained 5.2% of the variance in GPA. After the entry of ASC and sex in the second step the total variance explained by the model as a whole was 23.6% of the variance in GPA, F(4, 305) = 24.82, p < .001. ASC and sex explained an additional 18.8% of the variance in GPA, after controlling for class status and paternal education, R squared change = .188, F change (2, 305) = 37.97, p < .001. After the entry of the interaction terms ASC x sex, promotion of mistrust x sex, ASC x promotion of mistrust in the third step, the total variance explained by the model as a whole was 24.4% of the variance in GPA, F(7, 302) = 15.25, p < .001. Thus, these interaction terms explained an additional 1.6% of the variance in GPA, R squared change = .016, F change (3, 302) = 2.12, p > .05. Finally, after the entry of the three-way interaction term ASC x sex x promotion of mistrust in the fourth step, the total variance explained by the model as a whole was 24.2% of the variance in GPA, F(8, 301) =13.34, p < .001. Thus, this three-way interaction term explained less than 1% of additional variance in GPA, R squared change < .001, F change (1, 301) = 0.27, p > .05. In the final model, the following variables were significant predictors: class status ($\beta = -$.18, p < .001), paternal education ($\beta = .10$, p = .05), ASC ($\beta = .41$, p < .001), sex ($\beta = .17$, p < .05), and ASC x promotion of mistrust ($\beta = -.13$, p = .01). See Table 14.

These analyses did not support hypothesis 7b, as there were no significant threeway interactions with the terms ASC x sex x preparation for bias or ASC x sex x promotion of mistrust.

Hypothesis 8a. It was predicted that teacher trust would moderate the relation between ASC and GPA, such that higher levels of teacher trust would be associated with a stronger relation between ASC and GPA.

To assess this hypothesis, I conducted a hierarchical multiple regression analysis. The criterion variable was GPA. In the first step, I entered sex, class status, and paternal education to control for their influence. In the second step, I entered the variables ASC and teacher trust. Third, I entered the interaction term teacher trust x ASC. A statistically significant increase in R² would indicate the presence of a statistically significant interaction. Results indicated the first step explained 8.0% of the variance in GPA. After the entry of ASC and teacher trust in the second step the total variance explained by the model as a whole was 30.5% of the variance in GPA, F(5, 305) =28.18, p < 001. ASC and teacher trust explained an additional 22.7% of the variance in GPA, after controlling for sex, class status, and paternal education, R squared change = .227, F change (2, 304) = 50.61, p < 001. After the entry of the interaction term teacher trust x ASC in the third step, the total variance explained by the model as a whole was 30.6% of the variance in GPA, F(6, 304) = 23.80, p < .001. The interaction term explained less than 1% of additional variance in GPA, R squared change = .004, F change (1, 304) = 1.63, p > .05. In the final model, the following variables were significant predictors: ASC ($\beta = .29$, p < .001), teacher trust ($\beta = .30$, p < .001), class

status (β = -.16, p = .001), sex (β = .11, p < .05)and paternal education (β = .10, p < .05). See Table 15.

These results fail to support hypothesis 8a, as teacher trust was not a significant moderator of the relation between ASC and GPA.

Hypothesis 8b. It was predicted that for lower levels of teacher trust the relation between ASC and GPA would differ by sex. For those lower in teacher trust, it was expected that females would show a significant positive relation between ASC and GPA, while males show a weaker, non-significant relation between ASC and GPA. On the other hand, it was expected for those higher in teacher trust, both males and females would show a significant positive relation between ASC and GPA.

To assess this hypothesis, I conducted a hierarchical multiple regression analysis. The criterion variable was GPA and the predictor variables were ASC, sex, and teacher trust. I entered class status and paternal education in the first step to control for its influence, followed by ASC and sex in the second step. Third, I added the following interaction terms to the model: ASC x sex, ASC x teacher mistrust, sex x teacher mistrust. Fourth, in order to determine the impact of teacher mistrust on the relation between ASC and sex on GPA, I added a three-way interaction term to the model using the variables ASC, sex, and teacher mistrust. A statistically significant increase in R² would indicate that a three-way interaction is present for ASC x sex x teacher mistrust.

Results of this analysis indicated the first step explained 5.2% of the variance in GPA. After the entry of ASC and sex in the second step the total variance explained by the model as a whole was 23.6% of the variance in GPA, F(4, 306) = 24.90, p < .001.

ASC and sex explained an additional 18.8% of the variance in GPA, after controlling for class status and paternal education, R squared change = .188, F change (2, 306) = 38.09, p < .001. After the entry of the interaction terms ASC x sex, ASC x teacher mistrust, sex x teacher mistrust in the third step, the total variance explained by the model as a whole was 28.7% of the variance in GPA, F (7, 303) = 18.86, p < .001. Thus, these interaction terms explained an additional 5.8% of the variance in GPA, R squared change = .058, F change (3, 303) = 8.41, p < .001. Finally, after the entry of the three-way interaction term ASC x sex x teacher mistrust in the fourth step, the total variance explained by the model as a whole was 29.4% of the variance in GPA, F (8, 302) = 17.13, p < .001. Thus, this three-way interaction term explained an additional .09% of additional variance in GPA, R squared change = .009, F change (1, 302) = 3.80, p = .05. In the final model, the following variables were significant predictors: class status (β = -.14, p = .01), ASC (β = .36, p < .001), sex (β = -.11, p < .05), sex x teacher trust (β = -.24, p < .001), and ASC x sex x teacher trust (β = .11, p = .05). See Table 16.

These results partially support hypothesis 8b. The hypothesis is supported, as there was a significant three-way interaction with addition of the term ASC x sex x teacher trust. Further analysis was conducted by plotting and probing the significant three-way interaction effect through simple slope analysis (Aiken & West, 1991). This analysis revealed that the interpretation of this three-way interaction deviates from the hypothesized findings. Simple slope analysis indicted that for students who reported low teacher trust, the slope for males and females was equal ($\beta = 0.19$). For students who reported moderate teacher trust, the slope for females ($\beta = 0.34$) was higher than it was

for males (β = .29). Finally, for students who reported high levels of teacher trust, the slope for females was higher for females (β = 0.64) than it was for males (β = 0.61). See Figures 3, 4, and 5 for graphs of this interaction.

CHAPTER 5

Discussion

The present study extended the literature by examining academic disidentification among African American college students. While two studies have found evidence of academic disidentification within this population (see Cokley, 2002; Major, et al., 1998), this is the first study conducted with the purpose of examining psychosocial variables that may contribute to academic disidentification. The primary goal of this study was to explore whether academic disidentification (i.e., the relation between ASC and GPA), differs based on students' gender and reported level of parental racial-ethnic socialization and teacher trust. This study was exploratory in nature, as there is a dearth of research examining the relation between parental racial-ethnic socialization and academic outcomes, as well as teacher trust and academic outcomes. Attribution theory and Phenomenological Variant of Ecological Systems Theory were used as theoretical lenses in understanding hypothesized links among variables. Secondary goals of this study included an examination of 1) the relation between racial-ethnic socialization and academic outcomes, 2) the relation between teacher trust and academic outcomes, 3) the relation between parenting constructs (i.e., racial socialization and parental warmth) and teacher trust, and 4) the role of parental warmth as a potential buffer for negative child outcomes or enhancer of positive child outcomes.

Results indicated the presence of academic disidentification as unique to upperclassmen males (i.e., the relation between ASC and GPA was significant for females and underclassmen males, but not upperclassmen males). Gender differences in

mean scores were found for GPA, teacher trust, and promotion of mistrust. Racial socialization variables were not found to be significant predictors of GPA. However, teacher trust was found to be a significant predictor of GPA, with gender significantly moderating this relation. Gender differences were present for teacher trust, but not differences between underclassmen and upperclassmen. Two types of racial socialization (promotion of mistrust and egalitarianism) and parental warmth were found to be significant predictors of teacher trust.

Promotion of mistrust was found to significantly moderate the relation between ASC and GPA, with egalitarianism found to be a marginally significant moderator of this relation. Preparation for bias and teacher trust did not moderate this relation. However, when examining the influence of the combination of teacher trust and sex on the relation between ASC and GPA, a three-way interaction was present. However, such a three-way interaction was not present in examining preparation for bias or promotion of mistrust.

Such findings advance the literature in contributing to an understanding of what impacts identification with academics and contributing to the dearth of research exploring the impact of racial socialization and teacher trust on academic outcomes. Further, these findings highlight gender differences that help shed light on factors that might impact African American males' propensity for underperforming academically compared to their female counterparts. Such results shed light on important future areas of research inquiry and provide implications for educational and counseling interventions related to African American college students.

Findings Related to Academic Disidentification

The primary purpose of this study was to gain a better understanding of academic disidentification among African American college students. While several studies have documented the presence of academic disidentification over time in African American students, to date only two studies have examined this phenomenon within the college student population (Cokley, 2002; Major et al., 1998). There were three research questions related to academic disidentification in the current study: 1) Does the current study replicate the finding that academic disidentification is present in an African American college student sample, present only for male upperclassmen?, 2) Do parent constructs (i.e., types of parental racial-ethnic socialization and parental warmth) and teacher trust moderate the relation between ASC and GPA?, and 3) Does the presence of three-way interactions impact academic disidentification, such that the relation among these variables is different dependent on both sex and class status?

Replication of Academic Disidentification. The results of this study suggested academic disidentification was present for upperclassmen male students, while underclassmen males and both underclassmen and upperclassmen females were identified with academics. This is a noteworthy finding, as African American male college students represent a unique population due to their scarcity in predominantly white college campuses, as well as their propensity to fall prey to the academic achievement gap. This study supports prior research that has found African American males to uniquely show evidence of academic disidentification over time (Cokley, 2002; Cokley et al., 2012; Osborne, 1997; 1999).

One rationale for the study of academic disidentification as particularly critical to a greater understanding of academic achievement among African American students is that the literature suggests ASC is perhaps the strongest psychological correlate of academic outcomes (Cokley & Chapman, 2008). Thus, it is particularly striking that for a particular group of students, this construct lacks the same predictive power. This study lends support to the idea that for African American males, in particular, by the time they are upperclassmen, what is typically a strong relation between the way a student perceives his academic abilities and his actual academic outcomes, not only weakens over time, but becomes statistically non-significant. In the current study, male students were able to maintain a relatively high ASC, despite lower GPAs than their female counterparts. While replicating such findings is important, the present study also sought to build on prior literature by exploring what psychosocial variables might contribute to this phenomenon.

Moderators of the Relation Between ASC and GPA. This study primarily examined two constructs hypothesized to influence academic disidentification: parental racial-ethnic socialization and teacher trust. This was an exploratory examination, as this is an extremely understudied area of research. Several predictions were made regarding two-way interactions impacting GPA.

The first prediction was that the racial-ethnic socialization variables preparation for bias, promotion of mistrust, and egalitarianism would moderate the relation between ASC and GPA. This prediction was partially supported, as promotion of mistrust was a statistically significant moderator and egalitarianism was a marginally significant

moderator. However, preparation for bias did not significantly impact this relation.

Although, in this study, racial socialization variables were not significantly correlated with GPA, it appears that racial socialization has an indirect effect on GPA through ASC. Specifically, it appears that parental messages promoting wariness of other racial groups were related to a decrease in the strength of the relation between ASC and GPA.

The second prediction regarding two-way interactions was that teacher trust would moderate the relation between ASC and GPA. These data suggested that teacher trust, alone, did not significantly impact the relation between ASC and GPA. However, predictions were also made about the presence of three-way interactions impacting GPA. It was predicted that the relation between ASC and GPA would differ for males and females based on levels of 1) preparation for bias, 2) promotion of mistrust, and 3) teacher trust. Although the three-way interactions for preparation and promotion of mistrust were insignificant, a significant three-way interaction was present for teacher trust x sex x ASC. Thus, it appears that the impact of teacher trust on the relation between ASC and GPA is dependent on gender.

The aforementioned three-way interactions were explored in an effort to shed light on what influences academic disidentification (i.e., the relation between ASC and GPA). Plotting and probing of the significant three-way interaction revealed that these variables impact GPA in an unexpected way. It appears that when males and females report low teacher trust, this trust has a similar impact on the extent to which ASC influences GPA (i.e., equal slopes), rather than the expected finding of a reduced relation for males. However, further examination reveals that despite low trust's similar impact

on the strength of this relation, males with low trust have significantly lower GPAs than females, which remains constant across ASC due to the two groups' equal slopes. Thus, although two students perceive themselves to have the same academic ability (equal levels of ASC), it would be predicted that the male student reports a lower GPA than the female student across all levels of ASC. As such, for those low in teacher trust, the extent to which ASC reflects academic outcomes differs by gender. It appears that low teacher trust allows male students to maintain higher perceptions of their capabilities as students relative to their reported grades. Thus, low trust is likely to contribute to academic disidentification for African American male college students.

On the other hand, for students with moderate or high levels of teacher trust, trust has a stronger impact for females on the extent to which ASC influences GPA (i.e., steeper slope). Among these students, the gap in GPA between males and females is not as marked as those with low trust. While it appears there is not the same risk for disidentification and low GPA among these students, even when males do report perceiving a trusting relationship with their university professors, their identification with academics is not strengthened to the same extent as their female counterparts experiencing similar levels of trust. Moreover, male students were more likely to report having low trust than their female counterparts, putting them at greater risk for disidentification.

Together, these findings suggest that the extent to which students' perceptions of their academic abilities actually reflect their academic outcomes is influenced by parental messages of wariness of other racial groups and the extent to which students perceived

their teachers to be trustworthy. Specifically, it appears that regardless of gender, parental messages promoting wariness of other racial groups were related to a decrease in the strength of the relation between ASC and GPA. For males, in particular, it appears that the extent to which students perceive their university instructors are trustworthy significantly influenced the extent to which their ASC reflected their reported grades. These findings are the first knowledge to date that research has provided as to what psychosocial factors might influence identification with academics. Future research is needed to provide more context around what contributes to disidentification.

One possible explanation for the presence of these findings can be explicated via attribution theory, which was a theoretical lens for this study. Attribution theory focuses on the ways causal attributions impact future cognitive, affective, and behavioral responses. Causal attributions are commonly categorized based on locus (i.e., internal or external), stability (i.e., stable or unstable), and controllability (i.e., controllable or uncontrollable) (Weiner, 1986). For students who are receiving messages of racial mistrust or who have a tendency to distrust their instructors, there might be a tendency to attribute their academic outcomes to teacher bias. This would be an example of an external, stable, and uncontrollable attribution, which research suggests is a formula for poor academic motivation (Graham, 1991). Thus, for such students, a reduced relation between ASC and academic outcomes might represent students' disregard for academic feedback from teachers as indicative of their true academic and intellectual abilities. Such reasoning is in line with Major and Schmader's (1998) hypothesis regarding the cause of academic disidentification.

One concept that this study's findings highlight is the influence of interpersonal relationships on academic motivation and achievement. Martin and Dowson (2009) suggest the need to understand the importance of relatedness to academic motivation and achievement. The scholars note that relationships, particularly feedback from significant others, have the ability to impact the types of attributions students are capable of making. For instance, parents can serve as models to make attributions about educational or other types of outcomes. It may be that for parents who tend to impart messages of racial mistrust to their children, these parents might be more likely to model external attributions of outcomes (i.e., academic outcomes caused by teacher bias). Similarly, teachers have the ability to influence such attributions via their relationship with the student and the student's witnessing of the teacher's relationship with other students. For instance, research has found that when instructors deliver feedback that is equivalent to students' performance, students perceive an increased amount of control over academic achievement (Perry & Tunna, 1988; Thompson, 1994). Conversely, if feedback given by teachers is inconsistent, students might feel a decreased sense of control.

It is also important to view such findings through the lens of Phenomenological Variant of Ecological Systems Theory (PVEST), as this theory considers factors impacting an individual's perception of experiences in order to understand the interconnected nature of an individual's risk/protective factors, coping strategies, identity development, and adaptive/maladaptive outcomes and behavior (Spencer, 1999; Spencer, 2001). Rather than simply denigrating particular types of parental racial-ethnic socialization or students' mistrust of teachers as harmful to academic achievement, it is

important to place individuals' experiences in context. Race can serve as a risk factor in which students are exposed to unique race-related stressors. For many students and families, the experience or threat of racial discrimination is a reality. Through the lens of net stress engagement within PVEST, if students or parents perceive the experience of discrimination or anticipate this experience, parents might engage in racial-ethnic socialization to buffer such experiences. Similarly, based on students' perceptions, a decrease in level of teacher trust might serve as a reactive coping mechanism and create an emergent identity in which the students' academic and intellectual perceptions of themselves do not match their academic outcomes. As such, behaviors and perceptions that serve to be protective might provide a paradox in which students' perceptions of their academic abilities are protected, while simultaneously allowing for poorer academic outcomes. As such, the result may be life stage coping outcomes that are academically adverse, such as failing to graduate college.

The Relation Between Racial-Ethnic Socialization and GPA

A secondary goal of this study was to explore the relation between types of racialethnic socialization and GPA. The literature examining the impact of parental racialethnic socialization on academic achievement has been quite mixed. In this study, it was
predicted that racial-ethnic socialization variables would be significant predictors of
GPA, with preparation for bias and promotion of mistrust as positive predictors and
cultural socialization and egalitarianism as negative predictors. Counter to my
hypotheses, these racial socialization variables were not significant predictors of GPA. In
fact, significant correlations did not exist between any type of racial socialization and

GPA within this sample. These data are consistent with prior studies that have found no relation between one or more of these racial-ethnic socialization variables and GPA (Cooper & Smalls, 2010; Friend, Hunter, & Fletcher, 2011; Neblett, Philip, Cogburn, & Sellers, 2006; Wang & Huguley, 2012). For instance, Miller and MacIntosh (1999) found no significant association between parental racial-ethnic socialization and academic outcomes after controlling for other demographic, risk, or protective factors.

These findings are somewhat surprising given that cultural socialization is more consistently associated with positive academic outcomes and promotion of mistrust with negative academic outcomes (Anglin & Wade, 2007; Caughy et al., 2002; Cooper & Smalls, 2010; Hughes & Chen, 1999; Hughes, Witherspoon, et al., 2009; Marshall, 1995; Murry & Brody, 2002; Wang & Huguley, 2012). However, the literature examining racial-ethnic socialization as a predictor of GPA is small. Further, the literature around egalitarianism and preparation for bias has been mixed, with some studies suggesting a positive association with academic outcomes, while other suggest a negative association (Hughes et al., 2006). Hughes and colleagues (2008) suggest that for preparation for bias, in particular, mixed findings in the literature might stem from the complicated reality of these messages. They note it is challenging to frame messages about racial discrimination in ways that always benefit youth. Perhaps for some students, the ways in which their parents socialize around discrimination and ways of coping with discrimination has a positive effect, while having a negative effect for other students, essentially nullifying any impact that preparation for bias would have on GPA.

Another potential reason that there may be such inconsistency among the literature is that racial-ethnic socialization and academic outcomes have both been measured in many different ways (Hughes et al., 2006). In this literature "academic outcomes" have included such varied constructs as grade point average, academic adjustment, academic self-esteem, academic curiosity, academic persistence, et cetera. Thus, while one might expect these academic constructs to be related, few studies have explicitly examined direct outcomes such as grades, providing a gap in the literature in how racial-ethnic socialization is linked to real world outcomes.

Although the current and aforementioned studies fail to find a direct link between racial-ethnic socialization variables and GPA, several of these studies suggest racial-ethnic socialization is linked to academics in various other ways. Cooper and Smalls (2010) suggest while it might seem plausible that racial-ethnic socialization be directly linked to academic achievement, it may be that there are important mediators of this relation. The authors further indicate the possibility that racial socialization practices might influence academic outcomes through its impact on academic self-esteem or other variables. This is in line with the present study's aforementioned finding that promotion of mistrust significantly moderated the relation between ASC and GPA, with egalitarianism also found to be marginally significant moderator. In the present study, it appears racial socialization may have influenced GPA through its relation with ASC, as promotion of mistrust and egalitarianism were significantly associated with ASC. However, such a link is unlikely to fully explain the influence of racial-ethnic socialization on GPA, as research suggests that racial socialization is also a correlate of

psychosocial outcomes including ethnic identity, self-esteem, coping with discrimination, as well as other types of academic outcomes (Hughes, Rodriguez, et al., 2006). Future research is needed to understand the complex ways in which parental racial-ethnic socialization affect African American students' grades.

The Relation Between Teacher Trust and GPA

Another goal of this study was to examine the impact of teacher trust on GPA. While teacher trust has been theoretically linked to academic outcomes for decades (Hewett, 1964; Hobbs, 1966), research exploring trust from the perspective of students and its impact on academic outcomes has been a highly understudied area of research. It was hypothesized that teacher trust would be positively associated with GPA. This hypothesis was supported, in line with past research that suggests students' teacher trust is a significant predictor of academic achievement (Stipek, 2002; Wentzel, 1997). It was found that after controlling for parental education level and whether students were upperclassmen or underclassmen, there was a significant effect for teacher trust's association with GPA. This was found to be a large effect, relative to the literature on academic achievement (Keith, 1999). This was the first study to examine the impact of teacher trust on academic outcomes in an African American college student population. Further, as aforementioned, a three-way interaction of teacher trust x sex x ASC was also found to significantly predict GPA.

These findings are incredibly important given the extreme dearth of research on teacher trust. For students across various backgrounds, it is likely important to academic success that students perceive their instructors are generally well intentioned, truthful,

and proficient at their jobs. Research suggests students who find their teachers to be caring and accepting perceive that they learn more in school and are more emotionally, cognitively, and behaviorally engaged in class (Connell & Wellborn, 1991; Teven & McCroskey, 1997).

However, teacher trust may be particularly important for racial-ethnic minority students at PWCU's. Research suggests African American students are more likely to perceive unfair treatment by teachers (Ancis, Sedlacek, & Mohr, 2000; Cohen & Steele, 2002). At PWCU's, minority status stress (i.e., unique stressors such as experiences with racism, questions of belonging, or insensitive comments in the classroom), may subtly influence classroom experiences for these students. Research suggests that African American college students tend to perceive particularly high levels of minority status stress relative to other racial-ethnic minority students (Cokley, McClain, Enciso, Martinez, 2013; Smedley et al., 1993). For a number of racial-ethnic minority students, college may represent students' first or most substantial contact with dominant culture teachers, administrators, and peers, which may add to perceived levels of stress (Ying, Lee, & Tsai, 2004). Such experiences may place students in a space in which they are contemplating their trust of teachers in ways they had not previously. Given the prevalence of the racial-ethnic achievement gap at the post-secondary level, prior research highlighting the importance of student-faculty relationships (Astin, 1993; Cokley, 2000; Cokley, 2002), and this study's findings of the significant predictive power of teacher trust on African American college students' academic outcomes, the examination of teacher trust certainly warrants further investigation.

The Relation Between Parenting and Teacher Trust

Given that so little is known about teacher trust, particularly among African American students, this study also sought to examine the ways in which parenting style and behavior (i.e., racial-ethnic socialization and parental warmth) impacts students' trust of teachers. It was hypothesized that preparation for bias and promotion of mistrust would both be significant predictors negatively related to teacher trust, while egalitarianism and parental warmth would be significant positive predictors of teacher trust, and cultural socialization would not be a significant predictor. Further, it was expected that promotion of mistrust would be the strongest predictor of teacher trust compared to the other parenting constructs.

This hypothesis was partially supported, as promotion of mistrust was a significant negative predictor and the strongest predictor of teacher trust, as well as that parental warmth and egalitarianism were positive predictors of teacher trust. However, this hypothesis was not supported by the findings that preparation for bias and cultural socialization were not significant predictors of teacher trust.

This is the first study to examine the effects of parenting style and behavior constructs on teacher trust. Based on these findings, it appears that parental messages of promotion of mistrust and egalitarianism are particularly likely to influence students' trust of their teachers. This is particularly important, given that this study also suggests teacher trust is a strong predictor of GPA. While promotion of mistrust appears to have a detrimental influence in its negative association with teacher trust, it is again important to view such findings through the lens of PVEST. Such parental messages are likely

intended to be protective and may be in response to racism that either the parents or their children have experienced. Interventions related to teacher trust with African American students should not seek to blame parents, but rather seek to promote increased awareness of how parents, students, and instructors can promote understanding and productive relationships between students and instructors.

Parental Warmth as a Moderating Variable

Few studies have examined the impact of both parental racial-ethnic socialization and a parenting style variable such as parental warmth with regard to youth outcomes. However, scholars suggest that studying parenting behavior such as racial-ethnic socialization within the context of parenting style is important in providing a more in depth analysis of youth outcomes (Darling & Steinberg, 1993). In line with past research that suggests parental warmth may moderate the impact of parent behavior on youth outcomes (Lowe & Dotterer, 2013; McLoyd & Smith, 2004; Smith & Brooks-Gunn, 1997), parental warmth was examined in this study as a moderator of several different relations.

Although it was hypothesized that parental warmth would strengthen the relation between egalitarianism and teacher trust and weaken the relation between promotion of mistrust and teacher trust, this study failed to support these predictions. Further, parental warmth was also hypothesized to moderate the relation between types of racial socialization and GPA, but as racial socialization variables were not predictive of GPA, the data did not support this hypothesis. Such findings are in line with past research that

has failed to find parental warmth moderates parent behavior and youth outcome relations (Lee, Altschul, & Gershoff, 2013; McHale et al., 2006).

While in the present study parental warmth was a significant negative correlate of promotion of mistrust and positive correlate of egalitarianism and cultural socialization, parental warmth did not significantly influence the proposed parent behavior – youth outcome relations. Jackson-Newsom, Buchanan, and McDonald (2008) note that research examining the effect of parenting style appears to be less consistent in African American families. They further suggest that because authoritarian parenting styles are more common among African American families compared to their European American counterparts (Hill, McBride, Murry, & Anderson, 2005), potential differences in cultural norms might affect how parenting styles such as warmth are received and interpreted among African American youth. As such, it may be that the impact of parental messages about race on students' level of teacher trust or academic outcomes is less impacted by a warm parenting style. Future research is needed to better understand the impact parental warmth among African American college students.

Gender Differences Among Variables and Gender as a Moderator

The racial-ethnic achievement gap continues to persist into post-secondary education with stark gender differences also apparent. This is particularly true among African American students, who show the largest gender academic achievement gap of any racial-ethnic group (Ross et al., 2012). Therefore, in an attempt to more fully understand psychosocial variables that foster or hinder academic achievement in African American college students, there was a focus on gender throughout this study.

Mean Gender Differences. With regard to gender, first it was hypothesized that gender differences would exist in the following variables: GPA, teacher trust, preparation for bias, promotion of mistrust, cultural socialization, and egalitarianism, with males reporting lower GPAs, teacher trust, cultural socialization, and egalitarianism than females, but higher levels of preparation for bias, and promotion of mistrust. Conversely, it was hypothesized that there would be no significant gender difference in ASC or parental warmth.

Results indicated these hypotheses were partially supported by gender differences in GPA, teacher trust, and promotion of mistrust, as well as a lack of gender differences in ASC. Conversely, the following findings did not support my hypothesis: the presence of gender differences in parental warmth and non-significant mean gender scores in preparation for bias, cultural socialization, and egalitarianism.

It is well documented that African American female college students tend to outperform their male counterparts. The findings in this study are in line with prior research and national data from the Department of Education that support this notion (Cokley, 2001; Cokley & Moore, 2007; Ross et al., 2012). Less is known about gender differences in ASC, racial socialization, and parental warmth.

This is the first study to focus on gender differences in levels of teacher trust among African American students. The finding that males were lower in teacher trust is important, as it provides a richer educational context to prior research suggesting that African American males are more likely to perceive racism, perceive more negative feedback from their teachers, and more likely to actually experience bias from teachers

and administrators (Farkas, 2003; Fischer & Shaw, 1999; Marcus et al., 1991; Neal, McCray, Webb-Johnson, & Bridgest, 2003; Neal, McCray, Webb-Johnson, & Bridgest, 2003; Thomas, Cord, Stevenson, Bentley, & Zamel, 2009; Skiba et al., 2011). It was also predicted in this study that class status (i.e., whether students were underclassmen or upperclassmen) would moderate the relation between gender and teacher trust. This hypothesis was not supported. Thus, these data suggest that while males did have lower levels of teacher trust, this was not influenced by male class status differences such as lower levels of trust among upperclassmen. Although, in line with attribution theory, it might be expected that a confirmation bias might allow students with a tendency to attribute academic outcomes to teacher bias to continually increase in teacher trust over time (Yeager et al., 2013), this study does not support such logic. It appears that the amount of teacher trust for male underclassmen and upperclassmen remained relatively stable.

A limited number of studies have focused on gender differences in racial-ethnic socialization. Generally, the literature tends to suggest African American males tend to receive a higher frequency of messages from parents promoting the mistrust of racial outgroups (Bowman & Howard, 1985; Hughes, Hagelskamp, Way, & Foust, 2009; Hughes, Witherspoon, et al., 2009; Stevenson, et al., 2002; Thomas & Speight). This study supports such findings. Although the literature tends to suggest African American males receive fewer cultural socialization messages than females (Bowman & Howard, 1985; Brown, Linver, & Evans, 2009; Caughy, Nettles, & Lima, 2011; Sanders Thompson, 1994), these data support prior research that find an absence of gender

differences in cultural socialization. Research around gender and egalitarianism and preparation for bias has tended to be mixed. This study's findings are in line with research suggesting there are not gender differences in egalitarianism or preparation for bias (Caughy et al. 2002; Frabutt et al., 2002; Thompson, Anderson, & Bakeman, 2000).

In speculating why such gender differences did or did not occur among racialethnic socialization variables, it may be valuable to consider literature regarding the prevalence of different types of racial-ethnic socialization. The literature suggests that cultural socialization, egalitarianism, and preparation for bias are particularly common and salient methods of parental racial-ethnic socialization, often cited as crucial or primary methods of socialization among African American families (Demo & Hughes, 1990; Hughes & Chen, 1999; Hughes et al., 2006; Thornton et al., 1990). On the other hand, promotion of mistrust tends to be more rarely endorsed as a method of socialization (Hughes & Chen, 1997, 1999; Hughes & Johnson, 2001; Thornton et al., 1990). As such, parents may view imparting messages about their cultural heritage, racial equality, and an awareness of discrimination as equally important for their sons and daughters. On the contrary, parents who engage in promotion of mistrust may believe such messages are particular important for males, who are more likely to experience suspension or expulsion from school, arrest, and be sentenced more harshly than their female counterparts (Noguera, 2003; Steffensmeier, Ulmer, & Kramer, 1998). More research is needed to better understand parent perceptions and the impact of gendered racial socialization.

Similar to literature on parental racial-ethnic socialization, the literature on gender differences in parental warmth has been relatively mixed. Contrary to the hypothesized

American parents tend to use a parenting style including more warmth with female children compared to male children (Mandara et al., 2012; Tamis-LeMonda, Briggs, McClowry, & Snow, 2009). It may be that mothers of African American boys perceive it to be necessary to engage in higher levels of control and less sensitivity due to boys' increased risk for school and criminal punishment (Tamis-Lemonda et al., 2009). Alternatively, it may be that parents' conceptualizations of masculinity and femininity may play a role in the existence of such differences, as they may find it more acceptable to use warmth with girls, while believing boys need "tough love." Given that the present study found parental warmth to be a positive predictor of teacher trust, it is noteworthy that males tended to report experiencing relationships that were less warm, accepting, and supportive than their female counterparts.

Gender as Moderator. Given the state of the racial-ethnic achievement gap, gender was examined as a moderator of several relations. First, it was hypothesized that gender would moderate the relation between types of racial-ethnic socialization and GPA. However, because racial socialization variables were not found to be predictors of GPA, these data failed to support this hypothesis. Second, it was hypothesized that gender would moderate the relation between teacher trust and GPA. This hypothesis was supported. Thus, this study suggests that not only do African American male college students tend to report lower levels of teacher trust, but also teacher trust was a stronger predictor of GPA for males than for females. Finally, as previously discussed, the presence of the three-way interaction teacher trust x sex x ASC revealed that low trust

appears to be particularly detrimental to males. It may be that African American males weigh trust more heavily than females. Potentially, trust may be more important to academic motivation for students who are particularly marginalized or stereotyped in academic domains, as a lack of trust may have a greater tendency to foster the belief that their effort will not result in better academic outcomes (Yeager et al., in press). While African American males and females both face challenges in the classroom at PWCU's, African American males face unique educational challenges (i.e., stereotypes, implicit bias, increased risk of punishment for behavioral problems) that often undermine the privilege that would typically come with being male (Thomas & Stevenson, 2009).

While some might argue such issues are of less concern because such students have been successful or resilient enough to reach post-secondary education, successful persistence in college is influenced by perceptions of the campus racial climate (Locks, Hurtado, Bowman, & Oseguera, 2008). Further, it seems plausible that past experiences in education or witnessing the past experiences of other African American male students may continue to impact African American male students' potential for academic success as they transition to college. The stress inherent in this transition to college or, for some students, being in a very different racial-ethnic environment for the first time, may heighten the importance of interpersonal relationships and trust for academic motivation and outcomes. Scholars suggest that such life transitions tend to cause unique crises around social identities such as race and gender (Cross & Cross, 2008). Given that so little is known about the impact of teacher trust on academic outcomes, particularly

among African American students, it is integral that future studies build on this knowledge, considering how gender may influence this relation.

Study Limitations

The limitations of this study must be addressed to better understand the applicability of these findings to those outside this sample of students. As research has not explored all of the relations examined in this study, much of this research is exploratory in nature. However, all hypotheses are based on prior findings or a theoretical basis (i.e., attribution theory) and analyses were conducted with the hope that this research would address a serious dearth of research in several areas of African American college student achievement.

Further, the use of Pearson's correlations and multiple regression as the statistical methodology provides limitations, as both types of analysis are dependent on correlations. Thus, significant findings in this study do not imply causal relations. In particular, because GPA and ASC are impacted by a variety of variables (e.g., intrinsic motivation, academic interest, ethnic identity; Dusek and Flaherty 1981; Hurtado, 1994; Hurtado et al., 1989; Maehr, Karabenick, & Urdan, 2008; Pascarella & Terenzini, 1991Yasui et al. 2004; Oyserman et al. 2003), the possibility remains that other factors may influence GPA and the relation between ASC and GPA. For instance, future studies should examine variables such as perceived discrimination and quality of student-faculty interactions that could also conceivably impact the relation between ASC and GPA within the theoretical framework used in this study. Future studies are needed to provide further empirical support for relations found in the study.

Moreover, while this study provided valuable information on the presence of gender differences among psychosocial variables and the moderating role of gender in a highly understudied area of research, it must be noted that such results are largely descriptive in nature. Scholars note that demographic variables such as gender tend to be distal in nature. Thus, an examination of gender differences among variables in this study cannot fully or adequately explain differences in outcome variables (Awad & Cokley, 2010; Cokley & Awad, 2008). While the current study was exploratory in nature given the sparse research in this area, future research should seek to expand on these findings by examining variables such as promotion of mistrust and teacher trust, which are more proximal variables, as mediators. This would allow researchers to more fully understand why such gender differences occur.

Further, several variables in this study are examined using self-report measures. For example, a self-report measure of parental racial-ethnic socialization may be open to student distortion and may not entirely accurately reflect the frequency or exposure to such parental messages. However, student perceptions of parental racial-ethnic socialization, as well as parenting styles such as parental warmth, may be more proximal to academic and psychosocial outcomes than messages parents intend to give their children (Hughes et al., 2006). Further, students' perceptions of their own academic abilities and of the trustworthiness of teachers were the target of this study. Thus, self-report measures are appropriate in these instances.

Methodologically it must be noted that this study uses a cross-sectional design.

As such, causal inferences cannot be made temporally (i.e., about directional relations

occurring due to changes over time), as one could might in a longitudinal study. While this method was chosen due to constraints on time and resources, Cokley (2002) denoted a longitudinal methodology would provide the strongest measurement of the attenuation of the relation between ASC and GPA. Thus, future research would benefit from collecting data when students are in their first-year and recollecting data in the fourth year.

Theoretically, this study uses attribution theory as a lens to understand academic disidentification. However, this study did not utilize methods intended to measure the kinds of attributions students were making. Speculation that attributions of teacher bias contribute to the outcomes of this study is theoretical in nature. As such, future research might benefit from including measures intended to capture academic outcome attributions to better understand how attributions might play a role in academic disidentification.

Further, regarding the instruments used in this study, it should also be noted that academic disidentification was not measured using a single instrument, but rather through the correlation of ASC and GPA. Such measurement is theoretically in line with prior studies (e.g., Cokley, 2002). However, as suggested by Osborne (1997), the use of a well-validated single measure of academic disidentification may be ideal for future research. It should also be noted that relatively few empirical investigations have used the Teacher Trust Scale, particularly among African Americans, as it is a relatively recently developed measure. While studies designed to confirm the measure's adequate reliability and validity have been conducted with samples including a 32% African American sample, future research should seek to confirm internal consistency using

African American samples.

In examining the sample in this study, it must be noted that all participants are recruited from a large, southwestern, predominantly white university. As such, future research must be conducted to determine whether such results can be generalized to students in primary or secondary education, other regions, at historically black colleges/universities, or community colleges. Finally, this sample consisted entirely of African American students. While a strength of this approach is an in-depth examination of academic disidentification in a racial homogenous group, the results of this study may not generalize to students who identify as members of other racial-ethnic groups. Future research should be conducted to better understand how these variables might impact students of other backgrounds who disidentify with academics.

Theoretical and Practical Implications

Knowledge regarding the poorer performance of African American college students is critical to reducing our nation's racial-ethnic achievement gap. Literature addressing gender differences within this population is scarce, but such knowledge is essential to an accurate representation of what contributes to the achievement gap and what interventions might ameliorate this phenomenon. Identifying moderators of the relation between African American college students' ASC and academic outcomes allows scholars to gain insights into variables that impact academic identification in this population.

The finding that promotion of mistrust and teacher trust contribute to the buffering of academic self-concept in the face of poorer academic outcomes has

important practical implications. Such results provide evidence for the importance of parental racial-ethnic socialization during early and mid adolescence for academic outcomes in late adolescence. For African American students, an over-emphasis on promoting the mistrust of other racial-ethnic groups may provide a paradox: messages that intend to be protective in nature may shield students' perceptions of their academic abilities, while simultaneously allowing for poorer academic outcomes. Further, such parental messages appear to be related to students' decreased sense of teacher trust, which also contributes to such paradoxical effects. As teacher trust is a particularly understudied area of research, this study also speaks to the importance of continuing to examine this variable as a predictor of academic outcomes in future research.

It must be noted that while this study provides foundations for understanding variables that impact academic disidentification, this study failed to find that promotion of mistrust or teacher trust had a stronger effect on the relation between ASC and GPA for upperclassmen males, in particular. As academic identification appears to occur over time particularly affecting males, future research should be conducted seeking to gain a better understanding of the ways that these variables impact upperclassmen male students. Longitudinal research may be particularly apt to fill this need. Given the complicated nature of academic disidentification, it might be that a four-way interaction is present (e.g., ASC x teacher trust x sex x class status). However, four-way interactions are very difficult to interpret and would require a large sample size to detect medium effects (Halford, Baker, McCredden, & Bain, 2005). Thus, such analysis was not done in this study.

From a clinical and educational intervention perspective, there are several important points to consider that are relevant to the findings of this study. First, it should not be assumed that African American students who appear apathetic about academics devalue education. Rather, it may be that such students experience heightened levels of teacher mistrust, which impact their current levels of identification with academics. This might be particularly likely for African American male students. For such students at PCWU's, in particular, interventions should focus on acknowledging the presence of racial stress and connecting students with faculty mentors and building trusting, positive relationships among students and faculty. Further, although this study highlights the potential paradoxical influence of certain types of parental messages about race, it is integral not to simply blame parents. Promotion of mistrust tends to be the least frequently used type of racial-ethnic socialization and is likely based on parents or children's experiences with discrimination (Hughes & Chen, 1997, 1999; Hughes & Johnson, 2001). These messages are likely intended to be protective in nature.

For parents who do engage in racial-ethnic socialization that appears to be counterproductive to academic motivation and outcomes, such as higher levels of promotion of mistrust, it is important to highlight the ways that racial-ethnic socialization can have positive effects and provide psychoeducation on the ways in which certain messages can be productive or unproductive. Using Stevenson's (2012) theoretical model RECAST, Bentley-Edwards, Thomas, and Stevenson (2013) highlight that racial socialization can aid in resolving racial stress and conflict by not only seeking to protect and bolster racial identity, but also by providing coping mechanisms to aid youth with

racial stress they experience. Such socialization includes an awareness of racial stress and the socialization messages received by the child, as well as a reappraisal of perceptions that are unproductive (i.e., shifting from perceptions of threats as insurmountable to surmountable challenges). Thus, this theory suggests it is important for parents to provide tools to aid their children in managing not only the external threat of discrimination, but also internal challenges such as the ways that these challenges are interpreted and how youth respond to such challenges.

However, Bentley-Edwards and colleagues indicate the impetus is not entirely on parents to intervene, suggesting that much like parents and youth should work toward using racial socialization to assess, recast, and reduce racial stress, the same must be done by instructors and administrators, who should in turn assist students in learning how to do so. In order to reach such a goal in educational interventions, they suggest it is integral to label and understand racial discrimination in the contexts in which these students are schooled, as well as to understand the ways in which racial stress impacts instructors, administrators, and students of all racial-ethnic backgrounds.

Increasingly, research suggests that small social-psychological interventions can have serious implications in aiding African American student achievement and reducing the achievement gap (for a review, see Yeager & Walton, 2011). Several laboratory experiments have demonstrated the efficacy of such interventions with African American college students (Aronson et al., 2002; Walton & Cohen, 2007, 2011). Scholars suggest that such successful interventions tend to be "stealthy" by being brief, not directly informing students they are being included in an intervention to improve academic

performance, and as such students are not stigmatized as needing special help (Sherman et al., 2009; Yeager & Walton, 2011).

When considering the impact of student trust, educators might wonder how they can gain the trust of racial-ethnic minority students in the face of racial stress and the reality of racial discrimination. Scholars have suggested using "wise" strategies seeking to convey to students that they are not being judged on the basis of stereotypes, but appreciated as capable individuals (Goffman, 1963; Cohen & Steele, 2002; Yeager et al., in press). Yeager and colleagues demonstrated that psychological interventions could show success over time in decreasing the negative impact of mistrust on academic outcomes, as they provided evidence that encouraging students to perceive that they are not being reduced to stereotypes by instructors improved the academic achievement particularly for African American students' with chronically low trust. They distinguish such interventions from instructors who simply over-praise mediocre work or assure students they are not prejudiced, as such behavior does not dispel negative stereotypes and may have a negative impact on academic outcomes (Brophy, 1981; Croft & Schmader, 2012; Harber et al., 2012).

Such interventions that provide "attributional retraining" show great promise for effectively diminishing school mistrust. However, it also seems important to push instructors to actively examine and challenge their racial attitudes (Bentley-Edwards et al., 2013). Thus, providing interventions in universities that challenge both students and instructors to become aware of racial stress in university settings, while also utilizing more "stealthy" psychological interventions to instigate changes in the ways students

make attributions about feedback may be a particularly efficacious method. It is important to acknowledge the unique experience of racial-ethnic minority students at PWCU's and the reality of explicit and implicit racial bias, while seeking ways to provide students with coping methods that are productive to their academic achievement. Professional development seeking to explore topics of race with faculty may help reduce implicit bias (Bentley-Edwards et al., 2013), while also informing instructors on how their academic feedback may impact student attributional styles. Professors should understand the importance of teacher trust and, as such, seek to build trust by serving as allies to students. Interventions should also focus on connecting students with faculty mentors and building trusting, positive relationships among students and faculty.

Conclusion

This study has important implications for understanding the racial-ethnic achievement gap among African American college students and can inform future research and educational and psychological interventions in aiding African American college students. Overall, the findings of this study (1) identify academic disidentification as a phenomenon that is present in college students, particularly impacting African American males, (2) identify parental messages promoting mistrust and, for males in particular, perceptions of teacher trust as psychosocial variables that may weaken identification with academics, (3) identify parental messages of egalitarianism and promotion of mistrust as predictors of students' teacher trust, and (4) identify gender differences among these psychosocial variables that warrant further

examination to better understand the academic underperformance of African American male students.

Few studies exist that examine academic disidentification or the impact of parental racial-ethnic socialization and teacher trust on academic outcomes among African American college students. This study provides a basis for the continued study of these topics, which may inform interventions seeking to reduce the racial-ethnic and gender achievement gap. As we work toward reducing such disparities, it is clear that increasing enrollment of African American students in college is not enough. We must also seek to achieve the end goal of graduating African American students.

Table 1 Demographics of Participants

Race	Frequency	Percent
African American/Black	286	89.7
Biracial (African American/Other race)	32	10.0
Other (e.g., Nigerian American)	1	0.3
Sex		
Male	120	37.6
Female	199	62.4
Classification		
Freshman	81	25.4
Sophomore	74	23.2
Junior	71	223
Senior	93	29.2
Socioeconomic Status		
Working Class	119	37.3
Middle Class	162	50.8
Upper Middle Class	36	11.3
Upper Class	2	0.6
Parental Education (Mother/Father)		
Middle School	5/9	1.6/2.8
High School	84/105	24.6/32.9
Vocational/Technical School	14/18	4.4/5.6
Community College/Associate's Degree	65/35	20.4/11.0
College/Bachelor's Degree	105/99	32.9/31.0
Advanced Degree (e.g., MD, MA, JD, PhD)	45/47	14.1/14.7

Table 2 Descriptive Statistics for Main Analysis Variables

	Minimum	Maximum	Mean	Std. Deviation
Grade Point Average	1.0	4.0	2.87	0.60
Academic Self Concept	1.50	3.93	2.70	0.39
Preparation for Bias	1.44	5.00	3.35	0.79
Promotion of Mistrust	1.00	5.00	2.23	0.87
Egalitarianism	1.00	5.00	3.21	0.76
Cultural Socialization	1.00	5.00	3.30	0.91
Parental Warmth	1.00	4.00	3.52	0.59
Teacher Trust	1.23	4.00	2.76	0.47
Family Income	1	8	3.79	1.79
Mother's Education	1	6	3.99	1.47
Father's Education	1	6	3.80	1.60

Table 3 Skewness and Kurtosis of Main Analysis Variables

	GPA	ASC	Prep bias	Promo Mistrust	Cultural Social- ization	Egalitar ianism	Parental Warmth	Teacher Trust	Fam. Income	Maternal Educat.	Paternal Educat.
Skewness	831	.268	053	.565	133	420	-1.645	438	.539	347	121
Std. Error of Skewness	.137	.137	.137	.137	.137	.137	.139	.137	.137	.137	.138
Kurtosis	.989	.339	412	293	416	028	2.856	.364	189	-1.227	-1.529
Std. Error of Kurtosis	.272	.276	.276	.276	.276	.276	.279	.277	.277	.276	.279

Table 4 Correlations Among Variables of Interest

	1	2	3	4	5	6	7	8	9	10	11	12	13
Grade Point Average	-												
2. Academic Self Concept	.43**	-											
3. Preparation for Bias	03	04	-										
4. Promotion of Mistrust	.00	20***	.42**	-									
5. Egalitarianism	02	.15*	.29** *	15**	-								
6. Cultural Socialization	03	.10	.51**	.15**	.53**	-							
7. Parental Warmth	.03	.33**	.11	31***	.30**	.23**	-						
8. Teacher Trust	.43**	.36***	09	22***	.17**	.02	.22**	-					
9. Sex	.18**	.04	02	18**	.07	.09	.14*	.18*	-				
10. Class Status	18**	05	.03	.07	05	03	.00	01	.03	-			
11. Family Income	.13*	.13*	.08	.00	.10	.06	.08	.05	.02	09	-		
12. Maternal Education	.12*	.12*	.05	05	.14*	.14*	.06	.01	.05	09	.40** *	-	
13. Paternal Education	.18**	.12*	02	07	.09	.09	.02	.08	.06	07	.46** *	.49** *	-

Table 5 Correlations Between ASC and GPA by Gender

	Underclassmen	Upperclassmen
Males $(n = 60/60)$.50***	.24
Females (n = 93/106)	.38***	.61***

^{***}p < .001

Table 6 Hypothesis 5—Hierarchical Regression Predicting GPA

		Standard Error		Adjusted R ²
Variable	В	В	β	
Step 1				.05
Class Status	20	.07	16**	
Father's Education	.06	.02	.17**	
Step 2				.23
Class Status	20	.06	17***	
Father's Education	.05	.02	.13**	
Sex	.13	.06	.11*	
Teacher Trust	.51	.07	.40***	
Step 3				.27
Class Status	20	.06	16***	
Father's Education	.04	.02	.11*	
Sex	.11	.06	.09	
Teacher Trust	.51	.06	.40***	
Sex x Teacher Trust	58	.13	22***	

Table 7 Hypothesis 6a—Hierarchical Regression Predicting Teacher Trust

Variable	В	Standard Error B	β	Adjusted R ²
Step 1				.03
Sex	.17	.05	.18***	
Step 2				.09
Sex	.13	.05	.13*	
Egalitarianism	.06	.04	.10	
Promotion of Mistrust	08	.03	15**	
Parental Warmth	.10	.05	.13*	

Table 8 Hypothesis 6b, Model 1—Hierarchical Regression Predicting Teacher Trust

Variable	В	Standard Error B	β	Adjusted R ²
Step 1				.03
Sex	.17	.05	.18***	
Step 2				.08
Sex	.13	.05	.14*	
Parental Warmth	.12	.05	.15**	
Promotion of Mistrust	08	.03	15**	
Step 3				.08
Sex	.13	.05	.14*	
Parental Warmth	.14	.05	.17**	
Promotion of Mistrust	09	.03	16**	
Parental Warmth x Promotion of Mistrust	05	.05	06	

Table 9 Hypothesis 6b, Model 2—Hierarchical Regression Predicting Teacher Trust

Variable	В	Standard Error B	β	Adjusted R ²
Step 1				.03
Sex	.17	.05	.18***	
Step 2				.07
Sex	.15	.05	.15**	
Parental Warmth	.13	.05	.17**	
Egalitarianism	.07	.04	.11	
Step 3				.08
Sex	.15	.05	.16**	
Parental Warmth	.09	.05	.12	
Egalitarianism	.07	.04	.11	
Parental Warmth x Egalitarianism	10	.05	11	

Table 10 Hypothesis 7a, Model 1—Hierarchical Regression Predicting GPA

		Standard		Adjusted R ²
Variable	В	Error B	β	rrajasooa 22
Step 1				.06
Class Status	21	.07	17**	
Father's Education	.06	.02	.15**	
Sex	.22	.07	.17**	
Step 2				.23
Class Status	18	.06	15**	
Father's Education	.04	.02	.11*	
Sex	.20	.06	.16**	
ASC	.62	.08	.40***	
Preparation for Bias	01	.04	01	
Step 3				.24
Class Status	19	.06	16**	
Father's Education	.04	.02	.11*	
Sex	.20	.06	.16*	
ASC	.63	.08	.40***	
Preparation for Bias	01	.04	02	
ASC x Preparation for Bias	12	.10	06	

Table 11 Hypothesis 7a, Model 2—Hierarchical Regression Predicting GPA

		Standard		Adjusted R ²
Variable	В	Error B	β	Aujusteu K
Step 1				.08
Class Status	21	.10	17**	
Father's Education	.06	.07	.15**	
Sex	.22	.07	.18**	
Step 2				.25
Class Status	19	.06	16**	
Father's Education	.04	.02	.11*	
Sex	.23	.06	.19***	
ASC	.66	.08	.43***	
Promotion of Mistrust	.09	.04	.14**	
Step 3				.26
Class Status	20	.06	16**	
Father's Education	.04	.02	.11*	
Sex	.24	.06	.19***	
ASC	.65	.08	.42***	
Promotion of Mistrust	.09	.04	.12*	
ASC x Promotion of Mistrust	18	.09	10*	

Table 12 Hypothesis 7a, Model 3—Hierarchical Regression Predicting GPA

		Standard		Adjusted R ²
Variable	В	Error B	β	
Step 1				.08
Class Status	21	.07	17**	
Father's Education	.06	.02	.15**	
Sex	.22	.07	.18***	
Step 2				.25
Class Status	19	.06	16**	
Father's Education	.04	.02	.12*	
Sex	.21	.06	.17***	
ASC	.64	.08	.41***	
Egalitarianism	09	.04	11*	
Step 3				.25
Class Status	18	.06	15**	
Father's Education	.04	.02	.11*	
Sex	.20	.06	.16***	
ASC	.66	.08	.42***	
Egalitarianism	08	.04	10*	
ASC x Egalitarianism	18	.10	.09	

Table 13 Hypothesis 7b, Model 1—Hierarchical Regression Predicting GPA

				Adjusted R ²
Variable	В	Standard Error B	β	o .
Step 1				.05
Class Status	20	.07	16**	
Father's Education	.06	.02	.17**	
Step 2				.24
Class Status	18	.06	15**	
Father's Education	.04	.02	.11*	
ASC	.62	.08	.40***	
Sex	.20	.06	.16***	
Step 3				.24
Class Status	18	.06	15**	
Father's Education	.04	.02	.12*	
ASC	.63	.08	.41***	
Sex	.20	.06	.16***	
Sex x ASC	03	.17	01	
ASC x Preparation for Bias	12	.10	06	
Sex x Preparation for Bias	.17	.08	.11*	
Step 4				.24
Class Status	18	.06	15**	
Father's Education	.04	.02	.12*	
ASC	.63	.08	.41***	
Sex	.20	.06	.16***	
Sex x ASC	03	.17	01	
ASC x Preparation for Bias	12	.10	06	
Sex x Preparation for Bias	.17	.08	.11*	
ASC x Sex x Preparation for Bias	.02	.19	.01	

Table 14 Hypothesis 7b, Model 2—Hierarchical Regression Predicting GPA

		a		
Variable	В	Standard Error B	β	Adjusted R ²
Step 1			•	.05
Class Status	20	.07	16**	.00
Father's Education	.06	.02	.17**	
Step 2			.1,	.24
Class Status	18	.06	15**	.2 .
Father's Education	.04	.02	.11*	
ASC	.62	.08	.40***	
Sex	.20	.06	.16***	
Step 3			.10	.24
Class Status	19	.06	15**	.24
Father's Education	.04	.02	.10*	
ASC	.62	.08	.40***	
Sex	.21	.06	.17***	
Sex x ASC	13	.18	04	
ASC x Promotion of Mistrust	24	.10	13*	
Sex x Preparation for Bias	.05	.07	.04	
Step 4			.01	.24
Class Status	19	.06	15**	.24
Father's Education	.04	.02	.10*	
ASC	.64	.08	.41***	
Sex	.22	.06	.17***	
Sex x ASC	14	.18	04	
ASC x Promotion of Mistrust	24	10	13**	
Sex x Preparation for Bias	.05	.07	.04	
ASC x Sex x Preparation for Bias	.11	.20	.03	

Table 15 Hypothesis 8a—Hierarchical Regression Predicting GPA

Variable	В	Standard Error B	β	Adjusted R ²
Step 1				.08
Class Status	21	.07	19***	
Father's Education	.06	.02	.12*	
Sex	.22	.07	.12*	
Step 2				.31
Class Status	19	.05	15***	
Father's Education	.04	.02	.10*	
Sex	.15	.06	.12*	
ASC	.46	.08	.30***	
Teacher Trust	.38	.07	.29***	
Step 3				.31
Class Status	19	.06	16***	
Father's Education	.04	.02	.10*	
Sex	.14	.06	.11*	
ASC	.44	.08	.29***	
Teacher Trust	.39	.07	.30***	
ASC x Teacher Trust	.20	.16	.06	

Table 16 Hypothesis 8b—Hierarchical Regression Predicting GPA

	n	Standard Error	0	A 1
Variable Step 1	В	В	β	Adjusted R ²
Class Status				.05
	20	.07	16**	
Father's Education	.06	.02	.17**	
Step 2				.24
Class Status	18	.06	14**	
Father's Education	.04	.02	.11*	
ASC	.62	.08	.40***	
Sex	.20	.06	.16***	
Step 3				.28
Class Status	17	.06	14**	
Father's Education	.03	.02	.09	
ASC	.61	.08	.39***	
Sex	.18	.06	.14**	
Sex x ASC	.28	.18	.09	
ASC x Teacher Trust	.06	.17	.02	
Sex x Teacher Trust	70	.14	26***	
Step 4				.29
Class Status	17	.06	14**	
Father's Education	.04	.02	.09	
ASC	.56	.08	.36***	
Sex	.14	.06	.11*	
Sex x ASC	.31	.18	.09	
ASC x Teacher Trust	02	.17	01	
Sex x Teacher Trust	65	.14	24***	
ASC x Sex x Teacher Trust	.73	.38	.11*	

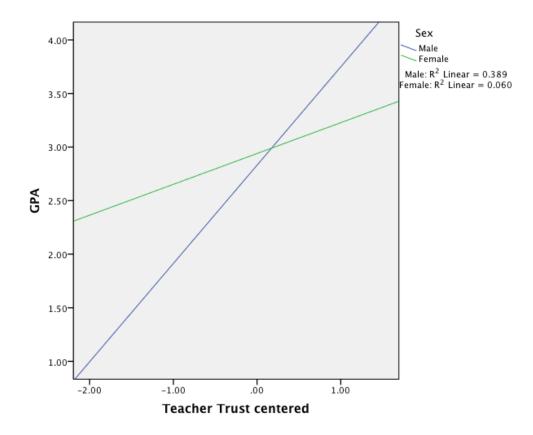


Figure 1. Plotted interaction: sex as moderator of relation between teacher trust and GPA

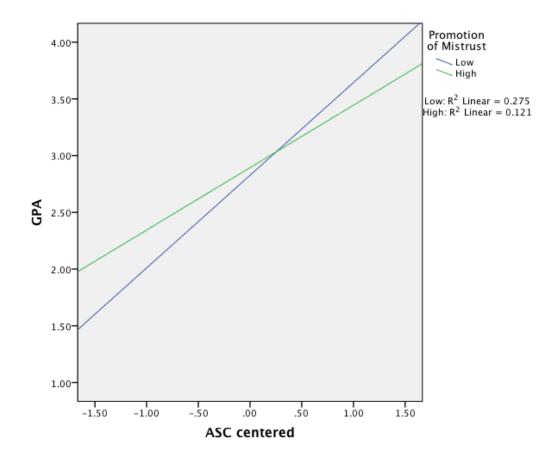


Figure 2. Plotted interaction: promotion of mistrust as moderator of relation between ASC and GPA

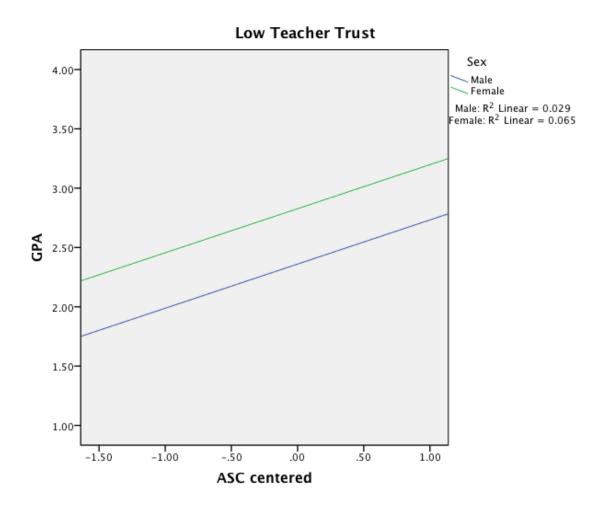


Figure 3. Plotted three-way interaction (ASC x Sex x Teacher Trust): Participants low in teacher trust

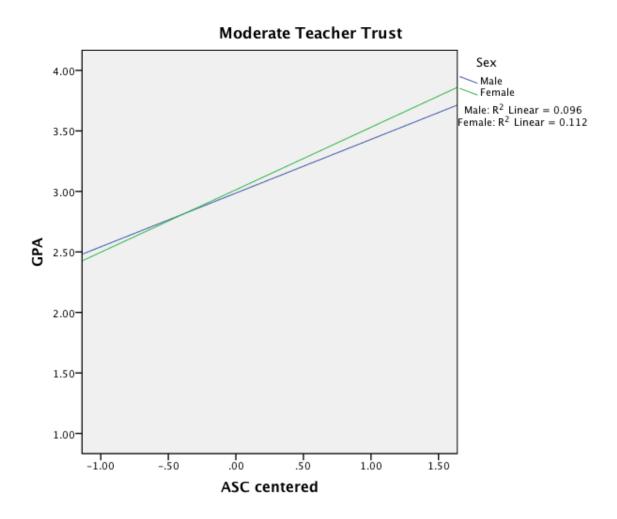


Figure 4. Plotted three-way interaction (ASC x Sex x Teacher Trust): Participants moderate in teacher trust

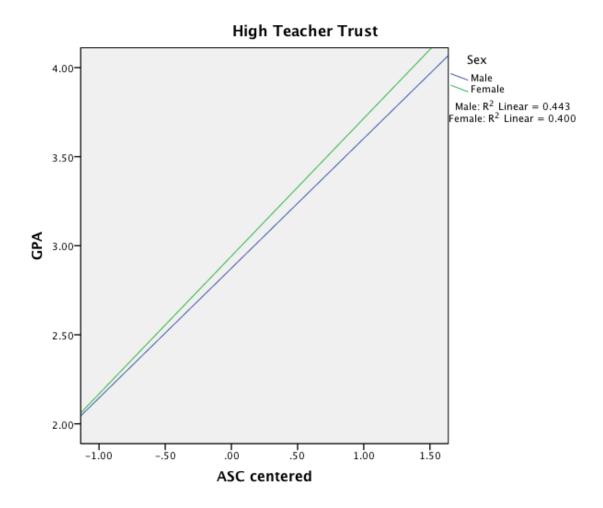


Figure 5. Plotted three-way interaction (ASC x Sex x Teacher Trust): Participants high in teacher trust

Appendices

Appendix A:

Study Cover Letter

You are invited to participate in a survey, entitled "Academic Disidentification in African American College Students: An Exploratory Investigation of the Role of Teacher Trust, Parental Racial Socialization, and Gender." The study is being conducted by Shannon McClain, Counseling Psychology, Department of Educational Psychology of The University of Texas at Austin, 1 University Station D5800, Austin, TX 78712, (314) 974-1030, mcclainse@utexas.edu.

The purpose of this study is to provide further clarification of how academic disidentification impacts the academic achievement of college students in order to better understand how educators may intervene to help improve the academic outcomes of students who underachieve.

I estimate that it will take approximately 30 minutes of your time to complete the questionnaire. You are free to contact the investigator at the above address and phone number to discuss the survey.

Risks to participants are considered minimal. There will be no costs for participating, nor will you benefit from participating. Identification numbers associated with email addresses will be kept during the data collection phase for tracking purposes only. The primary investigator will be the only individual with access to the data during data collection. This information will be stripped from the final dataset.

Participants participating in the Educational Psychology subject pool will receive course credit for their participation. For students enrolled in such classes who choose not to participate in this study, a 4-pg paper on any topic may be submitted as an alternate assignment.

Your participation in this survey is voluntary. You may decline to answer any question and you have the right to withdraw from participation at any time without penalty. If you wish to withdraw from the study or have any questions, contact the investigator listed above.

If you have any questions or would like me to email another person for your institution or update your email address, please call Shannon McClain at 314-974-1030 or send an email to mcclainse@utexas.edu. You may also request a hard copy of the survey from the contact information above.

To complete the survey, click on the link below: https://qtrial.qualtrics.com/SE/?SID=SV_bJl4wmLnZFlTVUU

If you do not want to receive any more reminders, you may email me at mcclainse@utexas.edu.

This study has been reviewed and approved by The University of Texas at Austin Institutional Review Board. If you have questions about your rights as a study participant, or are dissatisfied at any time with any aspect of this study, you may contact - anonymously, if you wish - the Institutional Review Board by phone at (512) 471-8871 or email at orsc@uts.cc.utexas.edu.

IRB Approval Number: 2012-08-0082

If you agree to participate please press the arrow button at the bottom right of the screen otherwise use the X at the upper right corner to close this window and disconnect.

Thank you.

Appendix B:

Recruitment Statement

Academic Disidentification

The academic achievement of Black students remains one of the most discussed and studied phenomena in education. Black students have a range of attitudes and experiences that impact their academic achievement and their level of identification with academics. I am asking for your help in recruiting Black undergraduate students to participate in a research study. Interested participants should go to the following web site to read more about the study:

https://qtrial.qualtrics.com/SE/?SID=SV_bJl4wmLnZFlTVUU

This study will take approximately 30 minutes. I hope to provide further clarification of how academic disidentification impacts the academic achievement of African American college students in order to better understand how educators may intervene to help improve the academic outcomes of students who underachieve. All participants are eligible to receive a summary of the study results by e-mail once the study is complete.

Thank you for your help in identifying potential participants in this study.

Principal Investigator:

Shannon McClain
Department of Educational Psychology, Counseling Psychology
University of Texas at Austin
Phone: (314) 974-1030
mcclainse@utexas.edu

Appendix C:

Debriefing Form

You have just participated in a study designed to better understand the role of parental racial socialization, teacher mistrust, and gender in the academic disidentification of African American college students.

It is my hypothesis that messages students receive from their parents related to race and ethnicity and students' attitudes of trust toward their instructors will impact their level of identification with academics. This study aims to gather empirical data to test this hypothesis.

To receive course credit for this study, email Shannon McClain at mcclainse@utexas.edu and include your name and UT EID. If you are interested in learning more about this research study, feel free to contact Ms. McClain at the above email address.

I understand that you may want to take extra precautions to ensure no one else can access your responses to the survey. Below are two methods that will help keep anyone else from accessing your survey answers.

Suggestions on how to further PROTECT YOUR CONFIDENTIALITY:

- 1. After completing the survey, be sure to close the browser window. This will ensure that other individuals will not have access to your survey responses by pressing the "back" button.
- 2. Be sure to delete temporary internet files. This will ensure that other individuals will not be able to access your survey responses if subsequent participants were to open the webpage (using the same computer) to complete the survey.

Thank you for your participation in this important research.

Appendix D:

Demographic Form

Instructions: Read the items below and (a) circle the letter that best describes you, or (b) write in the information that reflects you.

 a. African American/Black b. European American/White c. Asian American (Specify ethnic group:) d. Hispanic/Latino/a American (Specify ethnic group:) e. Biracial (Specify:) 	
 c. Asian American (Specify ethnic group:) d. Hispanic/Latino/a American (Specify ethnic group:) e. Biracial (Specify:) 	
d. Hispanic/Latino/a American (Specify ethnic group:	
e. Biracial (Specify:)	
e. Biracial (Specify:))
` .	
f. American Indian (Specify tribal affiliation:)	
g. International (Specify:)	
g. International (Specify:) h. Other (Specify:)	
2. Sex:	
a. Male	
b. Female	
c. Transsexual	
3. Age:	
4. Classification	
a. Freshman	
b. Sophomore	
c. Junior	
d. Senior	
e. Graduate Student	
5. Based on a 4.0 scale, what is your cumulative grade point average in	n college?
a. Lower than 2.0 (mostly D's)	
b. 2.00 - 2.49 (Mostly C's, a few D's)	
c. 2.50 - 2.74 (Mostly C's)	
d. 2.75 - 2.99 (Mostly B's & a few C's)	
e. 3.00 - 3.24 (Mostly B's)	
f. 3.25 - 3.49 (Mostly B's, a few A's)	
g. 3.50 - 3.74 (A's & B's)	
h. 3.75 - 3.99 (Mostly A's)	
11. 3.13 3.77 (1110011) 11 0)	

- 6. College cumulative grade point average:_____
- 7. What is your family's estimate income?
 - a. \$0 \$15,000
 - b. \$15,001 \$25,000
 - c. \$25,001 \$50,000
 - d. \$50,001 \$75,000
 - e. \$75,001 \$100,000
 - f. \$100,001 \$125,000
 - g. \$125,001 \$200,000
 - h. \$200,001 above
- 8. What do you consider your socioeconomic status to be?
 - a. Working Class
 - b. Middle Class
 - c. Upper Middle Class
 - d. Upper Class
- 9. What is the highest level of education that your *mother* (or guardian) completed?
 - a. Middle School
 - b. High School
 - c. Vocational/Technical School
 - d. Community college / Associate's degree
 - e. College / Bachelor's Degree
 - f. Advanced degree (e.g., MD, MA, JD, PhD)
- 10. What is the highest level of education that your *father* (or guardian) completed?
 - g. Middle School
 - h. High School
 - i. Vocational/Technical School
 - j. Community college / Associate's degree
 - k. College / Bachelor's Degree
 - 1. Advanced degree (e.g., MD, MA, JD, PhD)

Appendix E:

Academic Self-Concept Scale (ASC)

DIRECTIONS: On the following statements indicate the number that corresponds to your attitude. INDICATE YOUR RESPONSE BY SELECTING THE APPROPRIATE NUMBER. Be sure to answer **ALL** items. Use the scale below to best represent your answers.

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

	1			
	SD	D	A	SA
1. Being a student is a very rewarding experience.	1	2	3	4
2. If I try hard enough, I will be able to get good grades.	1	2	3	4
3. Most of the time my efforts in school are rewarded.	1	2	3	4
4. No matter how hard I try I don't do well in school.	1	2	3	4
5. I often expect to do poorly on exams.	1	2	3	4
6. All in all, I feel I am a capable student.	1	2	3	4
7. I do well in my courses given the amount of time I	1	2	3	4
dedicate to my studying.				
8. My parents are not satisfied with my grades in college.	1	2	3	4
9. Others view me as intelligent.	1	2	3	4
10. Most courses are very easy for me.	1	2	3	4
11. I sometimes feel like dropping out of school.	1	2	3	4
12. Most of my classmates do better in school than I do.	1	2	3	4
13. Most of my instructors think that I am a good student.	1	2	3	4
14. At times I feel college is too difficult for me.	1	2	3	4
15. All in all, I am proud of my grades in college.	1	2	3	4
16. Most of the time while taking a test I feel confident.	1	2	3	4
17. I feel capable of helping others with their classwork.	1	2	3	4
18. I feel teachers' standards are too high for me.	1	2	3	4
19. It's hard for me to keep up with my classwork.	1	2	3	4
20. I am satisfied with the class assignments that I turn in.	1	2	3	4
21. At times I feel like a failure.	1	2	3	4
22. I feel I don't study enough before a test.	1	2	3	4
23. Most exams are easy for me.	1	2	3	4
24. I have doubts that I will do well in my major.	1	2	3	4
25. For me, studying hard pays off.	1	2	3	4
26. I have a hard time getting through school.	1	2	3	4
27. I am good at scheduling my study time.	1	2	3	4
28. I have a fairly clear sense of my academic goals.	1	2	3	4
29. I'd like to be a much better student than I am now.	1	2	3	4

30. I often get discouraged about school.	1	2	3	4
31. I enjoy doing my schoolwork.	1	2	3	4
32. I consider myself a very good student.	1	2	3	4
33. I usually get the grades I deserve in my courses.	1	2	3	4
34. I do not study as much as I should.	1	2	3	4
35. I usually feel on top of my work by finals week.	1	2	3	4
36. Others consider me a good student.	1	2	3	4
37. I feel that I am better than the average college student.	1	2	3	4
38. In most of the courses, I feel that my classmates are	1	2	3	4
better prepared than I am.				
39. I feel that I don't have the necessary abilities for	1	2	3	4
certain courses in my major.				
40. I have poor study habits.	1	2	3	4

Appendix F:

Parental Racial-Ethnic Socialization

Directions: About how often did your parent(s) or grandparent(s) say or do the following things during your childhood and adolescence? Circle the number that best corresponds to your answer.

		Never	Rarely	Some- times	Often	Very Often
1.	Told you that people are equal, regardless of their race or ethnic background.	1	2	3	4	5
2.	Told you that people might try to limit you because of your race or ethnicity.	1	2	3	4	5
3.	Celebrated cultural holidays of your ethnic or racial group.	1	2	3	4	5
4.	Done or said things to keep you from trusting kids from other racial or ethnic groups.	1	2	3	4	5
5.	Encouraged you to read books about the history or traditions of different ethnic and racial groups, other than your own?	1	2	3	4	5
6.	Explained to you something he/she saw on T.V. that showed poor treatment of your ethnic or racial group.	1	2	3	4	5
7.	Talked to you about important people in the history of your ethnic or racial group.	1	2	3	4	5
8.	Done or said things to get you to keep your distance from kids of other ethnicities or races.	1	2	3	4	5
9.	Done or said things to show you that all people are the same, regardless of ethnicity or race.	1	2	3	4	5
10.	Talked with you about the possibility that some people might treat you badly or unfairly because of your race or ethnicity.	1	2	3	4	5
11.	Talked to you about important events in the history of your ethnic or racial group.	1	2	3	4	5
12.	Told you that Whites/Anglos are just as trustworthy as people of your own ethnic or racial group.	1	2	3	4	5
13.	Told you that people of all races have an equal chance in life.	1	2	3	4	5

	Never	Rarely	Some- times	Often	Very Often
14. Told you that you must be better than other kids to get the same rewards because of your race or ethnicity.	1	2	3	4	5
15. Taken you to places or events that reflect your racial or ethnic heritage.	1	2	3	4	5
16. Warned you to not reveal your true self to Whites or Anglos.	1	2	3	4	5
17. Told you that you should try to make friends with people of all races and ethnic backgrounds.	1	2	3	4	5
18. Talked to you about discrimination or prejudice against your ethnic or racial group.	1	2	3	4	5
19. Taken you to celebrations that reflect your racial or ethnic heritage.	1	2	3	4	5
20. Explained to you that Whites/Anglos may say one thing to your face but say something different behind your back.	1	2	3	4	5
21. Told you that it is important to appreciate people of all racial and ethnic backgrounds.	1	2	3	4	5
22. Explained to you that something unfair that you witnessed in public was due to racial or ethnic discrimination.	1	2	3	4	5
23. Encouraged you to read books concerning the history or traditions of your ethnic or racial group.	1	2	3	4	5
24. Told you to be careful what you say in front of Whites/Anglos.	1	2	3	4	5
25. Told you that it is best to have friends who are the same race or ethnic group as you are.	1	2	3	4	5
26. Told you that people might try to exclude you from activities because of your race or ethnicity.	1	2	3	4	5
27. Talked to you about the importance of getting along with people of all races and ethnicities.	1	2	3	4	5
28. Done or said other things to encourage you to learn about the history or traditions of your ethnic or racial group.	1	2	3	4	5

	Never	Rarely	Some- times	Often	Very Often
29. Told you that a White friend can be just as loyal as a friend from your own ethnic or racial group.	1	2	3	4	5
30. Told you that American society is fair to all races and ethnicities.	1	2	3	4	5
31. Talked to someone else about discrimination or prejudice against your racial or ethnic group when you were around and could hear.	1	2	3	4	5
32. Told you that people of your race or ethnic group have better opportunities than people of other racial or ethnic groups.	1	2	3	4	5
33. Explained to you that people of different races and ethnicities have different values and beliefs.	1	2	3	4	5

Appendix G:

Parental Warmth Subscale, Egna Minnen Beträffande Uppfostran

Questionnaire for Children (EMBU-C)

DIRECTIONS: Read each of the following questions and think about how often or how much it was true for you when you were growing up? Complete the questions thinking about your primary parental figure or guardian and choose the corresponding number to the right of the question.

		No, Never	Rarely		Yes, most of the time
1.	When you are unhappy, your parent consoles you and cheers you up.	1	2	3	4
2.	Your parent likes you just the way you are.	1	2	3	4
3.	Your parent is interested in your hobbies.	1	2	3	4
4.	Your parent listens to you and considers your opinion.	1	2	3	4
5.	Your parent wants to be with you.	1	2	3	4
6.	Your parent shows you that he or she loves you.	1	2	3	4
7.	Your parent and you like each other.	1	2	3	4
8.	When you have done something wrong, you can make it up to your parent.	1	2	3	4
9.	Your parent says nice things about you.	1	2	3	4
10.	Your parent helps you when you have something difficult.	1	2	3	4

I answered the above questions about my:

a. Birth father	
b. Stepfather	
c. Grandfather	
d. Birth mother	
e. Stepmother	
f. Grandmother	
g. Other (please indicate)	

Appendix H:

Teacher Trust Scale

DIRECTIONS: Answer the following questions based on your *overall experience* or *typical experience* with professors at your university. INDICATE YOUR RESPONSE BY SELECTING THE APPROPRIATE NUMBER. Be sure to answer ALL items. Use the scale below to best represent your answers.

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

	SD	D	A	SA
1. Instructors are always ready to help at this	1	2	3	4
university.				
2. Instructors at this university are easy to talk to.	1	2	3	4
3. Students are well cared for at this university.	1	2	3	4
4. Instructors at this university always do what they are supposed to do	1	2	3	4
5. Instructors at this university really listen to students.	1	2	3	4
6. Instructors at this university are always honest with	1	2	3	4
me.				
7. Instructors at this university do a terrific job.	1	2	3	4
8. Instructors at this university are good at teaching.	1	2	3	4
9. Instructors at this university have high expectations for all students.	1	2	3	4
10. Instructors at this university <i>do not</i> care about students.	1	2	3	4
11. Students at this university can believe what instructors tell them.	1	2	3	4
12. Students learn a lot from instructors at this university.	1	2	3	4
13. Students at this school can depend on instructors for help.	1	2	3	4

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