ETHNIC IDENTITY, SELF-ESTEEM, SELF-EFFICACY, AND SATISFACTION WITH LIFE
AS DETERMINANTS OF SEX DIFFERENCES IN ACHIEVEMENT AMONG BLACK
ADOLESCENTS

by

Comel Joyce Belin

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ABSTRACT

Adolescence among Black high school youth is a challenging period of social, emotional and psychological development; particularly as it relates to factors of ethnic identity, academic skill, self-worth and achievement outcomes. Of interest to researchers are measurable sex differences in achievement among this demographic group. Current literature suggests that psychological traits such as ethnic identity, self-esteem, self-efficacy, and life satisfaction, are reliable predictors of achievement among this demographic. Consequently, the current study evaluated whether these particular psychological factors predicted sex differences in achievement. One hundred and forty high school students from Tucson and Phoenix school districts volunteered for the study. Responses were obtained from a demographic questionnaire, the Multi-Ethnic Identity Measure, Rosenberg Self-Esteem Scale, Self-Efficacy Questionnaire for Children, Satisfaction with Life Scale and the Perceived Caring Measure. These widely used measures are found to have adequate reliability and validity with Black adolescents. Multiple regression, correlation, MANOVA, and ANOVA analyzed criterion measures of Fall 2010 standardized achievement scores and grade point averages provided by participating school districts. Consistent with current research literature, findings support current data suggesting relationships between trait variables, achievement scores, and GPA. Further, the findings in this study provide support of current literature regarding the variability of psychological traits and sex among the participants in this study as predictors of achievement. Limitations, implications, and future directions for continued study of this topic are also discussed.
CHAPTER 1
INTRODUCTION

According to Erikson (1968), adolescence is “A process located in the core of the individual and yet also in the core of his communal culture, a process which establishes in fact, the identity of those two identities” (p. 276). Indeed, the processes of which Erikson speaks define a challenging period of rapid physiological and psychological transformation for developing youth. Cognitive changes in executive functioning signal the beginning of higher order thinking, and emotions range from impulsive behaviors (Anokhin, 2000) to intense mood swings (Erikson, 1959; Ocampo, Knight, & Bernal, 1997). Further, as teenagers naturally separate from their caregivers in search of their own identities, focus often shifts to exploration of intimate relationships with significant others.

Of greater importance, are the critical decisions made by youth as they consider relationships with peers based upon in and out-group factors (Tajfel, 2001). Such decisions are also made based upon family and community expectations, traditional norms, ethnicity, and culture (Atlschul, Oyserman, & Bybee, 2006; Phinney, 1989; Phinney, 1992; Phinney, Jacobey and Silva, 2007; Rodriguez, Schwartz, & Whitbourne, 2010; Schwartz, 2008; Swenson & Prelow, 2005; Tajfel, 2004). Adolescence is also a period when self scrutiny of personal attributes, such as physical appearance, self-esteem, domain specific skills, and quality of life intensifies. As such, as indicators of psychological well-being, psychological traits like ethnic identity (Phinney, 1989; Phinney & Ong, 2007; Phinney & Rosenthal, 1992; Ponterotto et al., 2003), self-esteem (Phinney, 1991; Phinney, 1992; Phinney & Chavira, 1992; Rosenberg, 1985; Rosenberg, Schooler, Schoenbach, & Rosenberg, 1995), self-efficacy (Bandura, 1998; Bandura, 2006; Blascovich & Tomaka, 1993; Pajares, 1996; Pajares, 2005; Suldo & Schaffer, 2007; Suldo
and overall life satisfaction (Diener, 1992; Diener et al., 1985; Diener & Diener, 1995; Huebner, 2008) play a significant role in shaping healthy adult development (Burrow, Tubman, & Montgomery, 2006; Cohen & Garcia, 2008; Cokley, 2007; Suldo & Huebner, 2004; Swenson & Prelow, 2005). Because this pattern of development is prominent in school settings understanding the predictive role of these factors as they relate to academic achievement is also important (Proctor & Choi, 1994; Sellers, Chavous, & Cooke, 1998; Suldo & Schaffer, 2007).

Universally, all teenagers undergo these aspects of human development, but this process has been found to be particularly daunting for youth of color (Supple et al., 2006), especially Black adolescents (Chavous et al., 2003; Crocetti, Rubini, Luyckx, & Meeus, 2008; Sellers, Chavous et al., 2003; Chavous et al., 2008; Downey, 2008; French, Seidman, Allen, & Aber, 2000). Previous and recent research suggest healthy psychological development of Black adolescents is directly related to the social contexts of race as it is perceived in American society (Brenman, 1940; Clark, 1939; Clark & Clark, 1939a; Clark & Clark, 1939b; Clark, 1950; Clark, Shein, & Cook, 2004; Smalls, White, Chavous, & Sellers, 2007) and the effects of the environments in which human development occurs (Arroyo & Zigler, 1995; Ashenfelter, Collins, & Yoon, 2005; Branch & Young, 2005; Bronfenbrenner, 1968.

In this regard, Black males have been found to be particularly vulnerable in responses to instruments measuring race and identity in both school and social contexts (Phinney, 1992; Phinney & Ong, 2007; Nasir, McLaughlin, & Jones, 2009; Nguyen, Arganza, Huang, & Liao, 2007; Taylor et al., 2004). For example, empirical research finds that Black males interpret their particular sense of psychological well-being quite differently from their female counterparts, and divergence in their rates of academic achievement have also been consistently observed (Irving,
Within an educational context, empirical links have been found between ethnic identity, self-esteem, self/school efficacy, life satisfaction, and academic achievement (Awad, 2007; Okeke, Howard, Kurtz-Costes, & Rowley, 2009). While findings vary, sparse, but emerging research has begun to explore linkages between psychological traits such as ethnic identity, self-esteem, self-efficacy and satisfaction with life and the achievement rates of Black teenagers (Dejud, 2007; Fuligni & Witkow, 2005; Santos de Barona & Barona, 2006). As such, researchers and theorists in the fields of education and psychology continue to tease apart how the implications of stressors such as discrimination, ethnic identity development and culture, community expectations, economics and declining college enrollment play a role in shaping healthy psychological outcomes and subsequent achievement rates relative to sex among Black youth (Smith et al., 1999; Spencer, Noll, Stolzfus, & Harpalani, 2001).

First, discrimination in the U. S. prevails as an institutional standard where one’s race determines one’s social status (Allport, 1954; Mickelson 1990; Murray, Waas, & Murray, 2008; Ogbu, 2003; Sue, 2003; Warikoo & Carter, 2009). Consequently, as Black youth contend with the challenges of adolescent development, they must also contend with making important choices regarding their preferred ethnic identity and group affiliation (Chavous et al., 2008; Ogbu, 2004; Fuligni, Witkow & Garcia, 2003). Further, because they are often influenced and judged by peers (Ogbu, 2004) and teachers (Murray, Waas, & Murray, 2008), Black youth often make conscious choices regarding their academic success and behaviors associated with learning (Harper & Tuckman, 2009; Oyserman, Ager, & Grant, 1995; Oyserman & Harrison, 1998).
For example, Okagaki (2001) notes that schools, which are evaluative in nature, are structured to reflect norms of the dominant culture. They are also structured within a value system of reward and punishment, where class and race often determines how students are perceived and evaluated by their teachers and school administrators (Charvat & Fienberg, 2005; Dickson, 2008; Murray, Waas, & Murray, 2008; Munford, 1994; Nasir, McLaughlin, & Jones, 2009; Okagaki, 2001). Current literature and related research suggests that in school settings Black youth and Latinos, more so than other youth color, face greater marginalization in school settings where they are disproportionately disciplined, expelled, referred for special education services. Further, they are frequently tracked to lower achieving schools and classrooms (Altschtul, Oyserman, & Bybee, 2006; Bridges, 1995; Bynum, Burton, & Best 2007; Chavous, et al., 2003; Ladson Billings, 2006; Gregory, Skiba, & Noguera, 2010; Harry & Anderson, 1994), and interface with law enforcement and the legal system in greater numbers (Weatherspoon, 2004; Weatherspoon, 2006; Weatherspoon, 2009). Additionally, the research suggests that such treatment is more likely to occur in settings where stereotyped beliefs of low academic performance among Black students prevail among teachers, counselors, psychologists and related school staff who are disproportionately White (Good, Aronson, & Inzlicht, 2005; Goff, Eberart, Williams, & Jackson, 2008; Harry & Anderson, 1994; Irving 2002; Irving & Hudley 2005; Irving & Hudley, 2008; Isom, 2007; Steele and Aronson, 2003; Zhang & Burkhard, 2008; Zhou et al., 2004). Research addressing this topic reveals that Black youth, particularly males, will take one of two paths in order to fit in. They will either underperform in school to avoid appearances of “acting White” (Downey, 2008; Ogbu, 1991; Ogbu, 2003; Ogbu, 2004; Worrell, 2008), or they will assume a social façade of racelessness in attempts to avoid negative social stereotypes often attributed to Blacks (Cross, 1971; Schmader, Major, & Gramzow, 2001; Steele
& Aronson, 1995). These factors have important implications for the psychological well-being of Black students, particularly as it relates to achievement. It is hoped that continued research of how these particular psychological factors contribute to the academic success of Black youth informs current best practices for improving the achievement rates of Black youth, particularly Black males.

Second, it should be noted that ethnic identity develops within the broader context of self, life experience, and group affiliation (Chandler et al., 2003; Tajfel, 1981). As a result, Black adolescents in the U.S. face an additional challenge of formulating a positive sense of self. This personal endeavor follows decades of American history which as a result of slavery, systematically eroded a collective sense of group and racial identity for people of color (Allport, 1954; Altschtul, Oyserman, & Bybee, 2006; Crocetti, Rubini, Lucy, & Meeus, 2008; Cross, 1971; Erikson, 1968; French, Sideman, Allen, & Aber, 2006; Phinney, 1991; Phinney, Jacoby, & Silva; Phinney & Ong, 2007).

Third, family and community expectations of educational attainment play a pivotal role in fostering healthy adult development (Bronfenbrenner, 1968; Morris & Monroe; 2009; Sanders, 1967; Smalls, White, Chavous, & Sellers, 2007). Because equitable access to education remained elusive for decades, academic achievement is revered as a badge of success in Black communities (Warikoo & Carter, 2009). Further, due to empirically established relationships between education and poverty (Ashenfelter, Collins, & Yoon, 2005), academic achievement in Black communities serves as a necessary means for closing the socio-economic gap. Thus school success in Black communities evokes collectively shared expressions of personal accomplishment and psychological satisfaction (Clotfelter, 2004; Ashenfelter, Collins, & Yoon, 2005; Nebbitt, 2009). Thus, it is not unusual for entire communities to celebrate the academic
achievements of their young members. Furthermore, youth are expected to serve as role models for future generations (Bryant & Zimmerman, 2003), therefore the emotional and psychological stakes are often high for Black adolescents (Cunningham, Coprew, & Becker, 2009; Davis, Ajzen, Saunders & Williams, 2002; Davis, 2003; Irving & Hudley, 2008). As a result, high parental and community expectations exacerbate the developmental stressors already experienced by this population as they strive to make achievement gains (Arroyo & Zigler, 1995; Chavous, et al., 2003; Oyserman, Ager, & Grant, 1995; Schmader, Major, & Gramzow, 2001). In a current declining economy, access to higher education in Black communities is a greater challenge, further adding to the stress of expectations for youth of color (Lee, 2002; Lee & Bowen, 2006; Planty et al., 2009; Lee, 2002; Planty et al., 2009).

Finally, adding to these stressors, are the economic challenges that many urban communities presently face despite historical gains (Lee, 2006; U.S. Census, 2004a; U.S. Census, 2005; U.S. Census, 2009). The current recession has been found to contribute to the declining rates of college enrollment among Black students (NCES, 2009). This observation is important because of the critical role that achievement serves in predicting future success and overall life satisfaction. Recent data from the National Center for Education Statistics (NCES) (2009) reports that of the demographic percentage of students in 4,339 public and private not-for-profit and for-profit 2- and 4-year degree granting institutions, 64 percent of college students were White; 13 %, Black; 11 %, Hispanic; 7 %, Asian/Pacific Islander; 1 %, American Indian/Alaska Native, and 3 % nonresident alien students (NCES, 2009). More recent data reveals that for Black youth, transition rates from high school to college stands at 56% compared to 72% for White students, with Black males lagging behind their female classmates in both instances (NCES, 2010). It is noted that declines in college enrollment are evident despite
previous gains between 1970 and 1999 in standardized test scores in reading and math for both Black and White students between 9, 13, and 17 years old (NCES, 2006). Relative to sex, the literature also suggests that Black females graduate from high school, earn their diplomas, pursue post secondary education, and obtain professional employment in greater numbers than their male counterparts (American Council on Education {ACE}, 2006; NCES, 2009; Greene & Winters, 2006; Warikoo & Carter, 2009). Saunders, Davis, Williams, and Williams (2004) further found that Black females graduated from high school at rates of 56% versus 34% for their male counterparts, noting that this trend has persisted for the past two decades. Additionally, Winters and Greene (2006) observed that in 2003, at a national level 59% of Black females versus 48% of Black males graduated with high school diplomas. These achievement patterns are often attributed to dramatic changes in youth culture and behavior (Irving, 2002; Lee, 2002; Noguera, 2003; Ogbu, 2004; Morris & Monroe, 2009). For example, some of the literature suggests that Black males perceive academic success as a feminine attribute. Therefore, their general perception of success differs from their female counterparts. As an alternative to academic pursuit, Black males have been found to value sports and entertainment as indicators of success (Davis, 1997; Davis, 2004). As further opposition to academic pursuit, some males of color develop behaviors overemphasizing perceptions of masculinity, such as those exemplified in hip hop culture (Osborn, 1999; Taylor et al., 2004). Unfortunately, these actions are often self-defeating, and undermine successful academic achievement (McKinnon, 2003; Morris & Monroe, 2009; Ogbu, 2003; Owens, 1994; Smalls et al., 2007; White-Johnson, 2001); severely limiting future career and employment opportunities.
Rationale for the Current Study

These data present at a time in current society where significant historic opportunities and challenges requires a well-educated and technically skilled workforce. For example, Wong, Eccles and Sameroff (2003) noted that in the advent of changing technology, as international global networks increase, so, too does the demand for individuals strongly grounded in the disciplines of science and mathematics. It is, therefore, of great concern that Black youth, particularly males, will remain academically unprepared to meet the mounting challenges of the 21st century (Mizell, 1999; Osborne, 1999; Green & Winters, 2006; NCES, 2009); and, economically, they will be left behind with limited occupational choices (Ogbu, 2003; Wong, Eccles, & Sameroff, 2003; Wong & Nicotera, 2004; Ashenfelter, Collins, & Yoon, 2005). It is noted that sex based achievement gaps between Black males and females will result in incompatible social relationships resulting in fewer generations of educated Black children from Black communities (Wilson, 2007; Woodland, 2008). This observation means that Black youth will be unable to contribute in significant ways to an ever changing global economy. Consequently, because these issues persist across developmental, environmental and psychological domains, study of this topic as it relates to achievement and sex remains a salient issue (Oyserman, Harrison, & Bybee, 2001; Yasui, Dorham, & Dishion, 2004; Ziegler-Hill, 2007).

Purpose and Goals of the Current Study

Given the previously noted achievement gaps among Black adolescents, and inconclusive findings concerning the relationship between psychological traits and sex differences in academic achievement, the present study was undertaken to: 1) examine the degree to which sex based responses to instruments measuring ethnic identity, self-esteem, self-efficacy, and
satisfaction with life predict achievement, and, 2) contribute to the current literature addressing differences in the academic performance of Black male and female high school adolescents. Another important goal of this study was to contribute to the literature that informs the practice of school psychologists and counselors who provide services to students of color in urban public schools.

Salience of the psychological traits selected for this study is adequately supported by theoretical frameworks which include developmental theory (Erikson, 1968; Marcia, 1986), social identity theory (Fuligni, Witkow, & Garcia, 2003; Negy, Shreve, Jensen, & Udine, 2003) and social cognitive theory (Bandura, 1978; Pajares, 2005). It is important to note that the major tenets of these theoretical frameworks emphasize the importance of psychological traits such as ethnic identity (Rodriguez, Schwartz, & Whitbourne, 2010; Sanders, 1967; Saunders, Davis, Williams, & Williams, 2004). Furthermore, theoretical findings suggest that sex accounts for significant variation in the relationship between academic performance and psychological traits of adolescents as it relates to ethnic identity (Erikson, 1968; Marcia, 1986; Mickelson, 1990; Munford, 1994; Phillips et al., 1999; Phinney, 1991; Phinney & Chavira, 1992; Phinney, 1989; Phinney, 1982; Phinney, 1983).

**Definition of Terms**

Black or African American is defined as one who originates from any of the Black racial groups of Africa. This definition refers to individuals who identify themselves as Negro, African or Black, and includes individuals who refer to themselves in writing as African American, Black, Kenyan, Nigerian, or Haitian (U.S. Census, 2009). The terms Black and African American are often used interchangeably, therefore, the term Black was used throughout this paper for consistency.
Ethnic Identity (EI) as measured by the Multiethnic Identity Measure (Phinney, 1992), is defined as one’s sense of belonging, thinking, feelings, perceptions and behaviors due to group membership and shared subjective beliefs about one’s history, common descent, cultural traits such as dress, art, food, language, literature and experiences (Phinney, 1987).

Self-esteem (SE), as measured by the Rosenberg Self-Esteem Scale (Rosenberg, 1985), refers to an individual’s favorable or unfavorable view of one’s self (Rosenberg, 1965). Blascovich and Tomaka (1991) further defined self-esteem as one’s sense of self-worth, and the degree to which one values appreciates, and likes oneself. Harter (1993) defines self-esteem as one’s level of global regard, further noting that one’s sense of competence in specific domains such as group membership (Tajfel & Turner, 1986) and academic achievement (Phinney, 1989; Phinney and Alpuria, 1990; Phinney & Chavira, 1992) lay the foundation for global self-esteem.

Perceived Self-efficacy (SEF), as measured by the Self-Efficacy Scale for Children (Muris, 1991), is defined as, “one’s beliefs about one’s capabilities to produce designated levels of performance that exercise influence over events that affect their lives” (Bandura, 1986). Beliefs of one’s self-efficacy determines one’s thoughts, feelings, motivations and behavior, through four major processes comprised of cognitive, motivational, affective and selection processes.

Life Satisfaction (LS), as measured by the Satisfaction with Life Scale, is a cognitive judgmental process referring to one’s subjective assessment of the degree to which important, needs, goals and wishes are being fulfilled (Frisch, 2000). Life satisfaction, or personal quality of life is expressed in three dimensions of subjective well being. These dimensions are respectively: positive affect, expressed as feelings of joy and pride, negative affect expressed as
feelings of sadness and anger and personal quality of life, or life satisfaction (Diener, et al., 1999; Diener, Emmons, Larsen, & Griffin).

Perceived caring (PC) as measured by the Perceived Caring Measure Perceived Caring Measure (PCM) measures how students perceive the caring attitudes of their teachers in an instructional context (Teven & McCrosky, 1995). Perceived caring consists of three domains relative to student’s perceptions of their teacher. These domains are empathy, the ability to see the perspective of others, understanding, the ability to recognize the importance of information from the perspective of others, and responsiveness, the teacher’s ability to respond to the expressed needs of the student in supportive and constructive ways.
CHAPTER 2
LITERATURE REVIEW

Development and Ethnic Identity; A Theoretical Framework

One of the earliest theories of identity development proposed by Erikson (1968), has remained as the most widely accepted theoretical framework by scholars. From the perspective of *ego identity*, Erikson posited that human development occurred in eight successive stages which could not be successfully achieved until the developing child resolved conflicts inherent within each stage. Erikson (1968) further posited that if conflicts during stages of identity development are not resolved, psychological problems in later life were inevitable. Further emphasizing the importance of healthy psychological development during phases of identity exploration, Erikson protégé James Marcia (1966) identified four additional patterns of development: *identity achievement, foreclosure, moratorium, and identity diffusion*. According to Marcia (1968), identity achievement emerges from one of two stages; *crisis exploration*, a period in which the adolescent makes personal comparisons between parental desires and personal choices, and *commitment*, a period in which the adolescent forms allegiance to values, belief systems, occupation, religion political affiliations. Evident in both theories is the goal oriented nature of identity formation in which adolescents determine where and how they fit in the world, and evaluate how their personal beliefs, values and occupational choices that contribute to healthy identity development (Erikson, 1968; Quintana, 2007).

Erikson (1968) posited that due to historical discrimination that obscured racial and ethnic identity among Blacks, this developmental period presents as a significant challenge for Black adolescents. Consequently, racial and ethnic identity plays a significant role for
adolescents of color (Altschtul, Oyserman, & Bybee, 2006; Chavez & Guido-DiBrito, 1999; Fuligni, Witkow, & Garcia, 2003).

**Ethnic Identity versus Racial Identity: Laying the Foundation**

Derived from the Greek term *ethnikos*, the term ethnic refers to a people or a nation (Smith et al., 1999). In contrast the term race refers to genetic or biological factors such as skin color, hair texture and physical characteristics common to a specific group (Burrow Tubman, & Montgomery, 2006; Helms, 2007; Worell & Gardner-Kitt, 2006). Thus, as a within group representation of shared traits, racial identity refers to the commitment made by an individual to a specific race or people (Helms, 2007). Phinney (1989) defines racial identity as a shared common racial heritage within a particular group, and Helms (1990) defines racial identity as “a sense of group or collective identity based upon one’s perception that he or she shares a common racial heritage with a particular group”. Chavous et al., (2008) define racial identity as “cognitions and attitudes related to an individual’s attempt to integrate their status as Blacks into their self-concepts.” (pp.639). Similarly, ethnic identity refers to one’s commitment to a cultural group, and engagement in that specific group’s customs, language, values, and religious practices (Helms, 2007).

Within the context of social identity theory which examines in-group preferences and relationships with out-group members, Tajfel (1981) similarly defined ethnic identity as one’s self-concept related to the individual’s sense of belonging to a social group, and the importance placed on one’s membership in a particular group. Tajfel (1981) further posited that one’s ethnic identity within a social group is bound by common experiences, traditions, attitudes, and feelings of belonging (Phinney, DuPont, Espinosa, Revill & Sanders (1994). Phinney (1987) defines ethnic identity as one’s sense of belonging, thinking, feelings, perceptions and behaviors that are
due to group membership who share and maintain subjective beliefs about their shared history, common heritage, and cultural traits such as dress, art, food, language, literature and experiences. While these terms are separate and distinct, they are often used interchangeably because of strong associations between one’s feelings regarding their racial/ethnic background, and underlying cognitive factors that affect one’s overall sense of psychological well-being (Clark, 1939; Arroyo & Zigler, 1995; Helms, 2007; Smith et al., 1999; Vertuyken & Lay, 1998; Wakefield & Hudley, 2007; Woodland, 2008). In educational settings, Black adolescents frequently assess and make choices regarding racial and ethnic preferences on the basis of social and environmental factors. It follows that for Black adolescents, healthy identity development is facilitated in ways that enhance their academic achievement (Chavez & Guido-Di Brito, 1999; Clark, Chein, & Cook, 2004; Cohen, Garcia, Apfel, & Master; Connell, Halpern-Felsher, 1995; Ogbu, 2002; Schmader, Major, & Gramzow, 2001). Consequently, because psychological factors such as the ones selected for this study are frequently associated with ethnic identity (Spencer, Sellers, Chavous, & Cook, 1998; Irving & Hudley, 2008), Black adolescents often make deliberate cultural and ethnic choices which either limit or enhance school achievement and related goals (Ogbu, 2003; Stolzfus, & Harpalani, 2001; Supple et al., 2006). For example, Ogbu (2003) notes that students may choose Black identity over achievement to avoid appearances of “acting White”. Conversely, Black adolescents may reject their Black identity and assume a persona of “racelessness” in pursuit of achievement. Thus, in assessing relationships between ethnic identity, relevant psychological traits, and achievement among Black adolescents in the U.S., it is important to understand how Black history in the U.S. contributes to underlying theories of ethnic identity development for this particular group.
Identity, Self Appraisal and Academic Performance

As noted in earlier discussion, adolescent development signals a period of intense self-scrutiny. Within this context, Black adolescents, as do most adolescents, engage in critical self-appraisal where comparisons are made between themselves and their peers. It is further posited that as sociocognitive transitions take place, heightened awareness of one’s skills, competencies and physical attributes in comparison to others within their social groups also increases (Campbell, Pungello, & Miller-Johnson, 2002; Chavous et al., 2003; Crocetti, Rubini, Luyckx, & Meeus, 2008). As a result, developing youth tend to develop more of an abstract sense of their group membership with eventual gravitation toward groups with similar characteristics such as race, sex, and social class (Oyserman, Ager, & Yoon, 2003). For Black youth, these relationships represent their specific interpretations of ethnic identity (Oyserman, Ager, & Gant, 1995). Oyserman, Ager and Gant (1995) further posit that as youth examine their competencies relative to achievement, they will also examine the role that race and ethnicity play in defining their academic competencies (Herndon, 2002).

Central to self examination, and academic achievement, are the roles that ethnic bias and equal access to education play in shaping beliefs and values of academic success among Black youth (Carter, 2007; Chavous et al., 2008). Carter (2007) points out that for Blacks, racial discrimination is endemic and engrained in “all aspects of life; in customs, laws and traditions” (pp.13). Consequently, institutionalized barriers that occur across Black communities in everyday life result in significant levels of psychological distress. These stressors translate to difficulties in academic environments. Chavous et al. (2008) notes that because Black adolescents, as do adolescents in general, function at higher levels of cognitive sensitivity, they are acutely aware of discrimination; particularly in school settings. Chavous et al. (2008) contend
that in school settings, Black students, in particular males, experience harsher treatment and
discipline, earn poor grades, and more so than other ethnic groups in academic and social
settings, are subject to peer based discrimination and group exclusion (Davis, 2004). Further,
Black adolescents report higher levels of psychological distress and low self-esteem (Fisher,
2000; Scott, 2003). Chavous et al. (2008) attributes these factors to limited numbers of teachers
of color in school who possess limited cultural competency. Consequently, ethnic identity plays
both a central and supportive role in successful academic attainment (Chavous et al., 2003). The
following sections in this chapter will discuss prevailing theories and relevant research as it
relates to ethnic identity and achievement.

**Cross’ Theory of Nigrescence**

Nigrescence, is a French term which means, “the process of becoming Black” (Cross, 1971). Nigresence theory which was formulated by Cross (1971) emerged during the early years
of the Civil Rights and Black Consciousness movements of the early sixties. Coupled with
Clark’s (1939) empirical research on the socio-emotionally adverse effects of discrimination and
segregated education on the self-esteem of Black children (Brown v. Board, 1954; Clark, 1940),
Cross (1971) postulated that Blacks in the U.S. evolved from stages of self hatred and denial to
self acceptance and commitment to one’s Black racial heritage. Nigrescence Theory, according
to Cross (1971) progresses through five developmental stages: *Pre-Encounter, Encounter, Immersion-Emersion, Internalization and Internalization-Commitments*.

Pre-Encounter: During this initial phase, Cross (1978) contends that one is unaware of
their racial and ethnic salience and, therefore, identifies closely with the dominant culture.
Relative to adolescence, Black youth may desire for her or his appearance to be less ethnic and
prefer that physical features such as hair and skin color to be more reflective of the dominant white culture.

**Encounter:** Negative experiences such as prejudice, discrimination and rejection are personalized, causing the individual to re-evaluate her or his racial and ethnic status within the social context of the dominant culture. Cross (1971) posits that during this stage, feelings of confusion, anger, depression and low self-esteem emerge. For Black adolescents, these feelings reflect initial realization of social assignment on the basis of race (Tajfel & Turner, 1986). Similarly expressed in Erikson’s (1968) and Marcia’s (1986) operationalized stages of identity achievement, the individual experiences internal conflict and undergoes a stage of racial identity crisis.

**Immersion-Emersion.** This stage is characterized by two transitions: *immersion* where the dominant culture is rejected, initiating the individual’s quest for knowledge of their racial and ethnic identity; and, *emersion*, a stage at which the individual adapts the behaviors, speech, and dress believed to typify Black culture. Cross (1978) characterizes this stage as a period of superficial transition where, from the psychological perspective, the individual has not yet fully processed and internalized core aspects of Black identity.

**Internalization.** At this stage, the individual attains a sense of serenity, security and acceptance of Black identity. Here, Cross (1971) posits that the individual has thoroughly processed and examined all aspects of her or his racial and ethnic heritage. Internal conflicts of beliefs about self relative to the dominant culture are also resolved as the individual settles into their newly established Black identity.

**Internalization-Commitments.** This final stage of Nigrescence represents a fully achieved stage of psychological commitment to Black identity in which the individual fully commits to an
internalized sense of self and community. The individual also reaches a stage of compromise with the mores and values of the dominant culture. Subsequently, the individual is better able to adapt to dual cultural frameworks and navigate freely and comfortably between both Black and White cultures.

The theoretical underpinnings of theorists such as Erikson (1968), James (1868), Marcia (1986) and Cross (1971) would suggest that the final stage of Nigrescence cannot be achieved until inherent conflicts of the previous four stages have been resolved. It is important to note that Cross’s (1971) Nigrescence Theory has been widely applied to adolescent development among Black youth because it reflects so vividly, the dual conflicts faced by Black adolescents; development of self in the context of approaching adulthood, and development of the Black self in the context of socio environmental factors such as discrimination, poverty and social stratification. Further, because adolescent development occurs along continuums of home, community and school environments, Cross’ (1971) Nigrescence theory provides a framework for understanding how psychological factors such as self-esteem, self-efficacy and overall life satisfaction influences achievement among Black adolescents (Irving & Hudley, 2008).

**Cultural Ecology and Minority Status**

The account of historical discrimination and racial oppression in the U.S. has been explained by the Cultural Ecological Theory developed by John Ogbu (1978) suggesting that that individuals of involuntary, subordinate minority status are classified into specific caste systems which are subject to two environmental forces. These forces are referred to as: *systemic forces*, the institutional nature of discrimination and the way that individuals of color are treated, and *community forces*, the manner in which individuals interpret and respond to treatment based upon their unique history and status in the U.S. Ogbu’s (1978) theory subsequently classifies
individuals of color into three distinct categories: a) autonomous minorities, (b), voluntary minorities, and, (c) involuntary minorities.

Involuntary Minorities. Ogbu (1978) posits that involuntary minorities include Blacks, Native Americans and Hawaiians; all of whom have been enslaved and dominated by White, or European cultures. Involuntary minorities report higher experiences of discrimination and perceive themselves to be targeted for alienation from education, employment and economic success. Involuntary minorities are found to be less engaged in school, experience higher rates of social disenfranchisement in school settings and attain lower levels of educational and professional achievement.

Voluntary Minorities. This group moves selectively to their respective host country seeking religious and political freedom, and better education and employment opportunities. Individuals of Caribbean, African, and Asian descent typify voluntary minorities, who distinguish themselves from Blacks, because they arrive in the U.S. free of the stigma associated with slavery and oppression. While they do experience discrimination, voluntary minorities assimilate and engage the norms and of the dominant culture, however, they retain their respective culture and identity. More so than Blacks, voluntary minorities attain higher levels of educational and professional accomplishments (Ogbu, 2003), and possess stronger values and belief systems regarding identity and achievement (Phinney & Mukosolu, 1996).

Autonomous Minorities. This group comprises smaller minority groups of differing races, ethnicities, national origins, languages, and religions; however, unlike involuntary and voluntary minorities are not subject to oppression, domination and exclusion from employment and educational opportunities. Autonomous minorities often function as isolated groups in order to
meet the social, religious and academic needs of their community members. Achievement rates within this group have been found to be equal to that of the dominant White culture.

Ogbu (1971) contends that social assignment implied by this caste system exemplifies the challenges faced by Black youth in the U.S.. Ogbu (1971) argues that within the context of education, social categorization largely influences how Black adolescents interpret their feelings about education, beliefs about their academic skills, learning behaviors, and school/teacher relationships, and their subsequent strategies for educational achievement.

The models presented by Cross (1971) and Ogbu (1978) specifically address the experiences of Blacks as they relate to the challenges of negotiating stratified social and academic structures. The authors contend that navigating through these structures bear psychological consequences that sometimes inhibit academic achievement. A contrasting argument by Phinney (1992) posits that the experiences of Black youth mirrors similar experiences of all youth of color. Phinney further posits that for youth of color, one’s culture and sense of cultural affinity is as important to overall psychological development as identity development. Thus, Phinney’s (1992) multiethnic model of ethnic identity includes the universal facets of culture, and ethnic identity.

**Phinney’s Model of Ethnic Identity**

Phinney posits that all students of color exhibit stages similar to Erikson’s (1959) theory of ego identity formation, Marcia’s (1968) identity exploration/achievement model, and social identity processes as defined by Tajfel (1986). Phinney’s (1992) model of ethnic identity suggests that all adolescents of color attain adulthood through three stages comprised of: (a) *an unexamined ethnic identity* (b) *ethnic identity exploration*, and, (c) *achieved identity*. 
Unexamined Ethnic Identity: Phinney (1989) contends that this stage is characterized by lack of identity exploration. Similar to Cross’s (1978) first stage, the developing adolescent internalizes the negative views of his/her group which are held by the dominant culture.

Ethnic Identity Search/Moratorium: During this stage, the adolescent experiences some type of encounter which serves as a catalyst of her or his search for ethnic identity.

Ethnic Identity Achievement: This stage represents ideal identity achievement where the adolescent presents with a confident and clear sense of one’s ethnicity. Similar to theories proposed by Cross (1971) and Ogbu (1968), Phinney (1992) posits that ethnic identity is a multifaceted and complex construct engaging numerous facets that represent social, psychological and culturally relevant factors of *self identification, ethnic behaviors and practices, and affirmation and belonging* (Phinney, 1992). These three constructs comprise the scales of the Multi-group Ethnic Identity Measure (MEIM) (Phinney, 1989), an instrument to be utilized in this study.

**Ethnic Identity and Academic Achievement**

Oyserman, Harrison and Bybee (2001) contend that the relationship between ethnic identity and achievement is a significant construct for youth of color due to the social consequences of in-group identification, and awareness of negative out-group perceptions. For example, in a study of beliefs of racial identity and achievement, Harper and Tuckman (2006) examined the degree to which one’s sense of racial identity differed with respect to achievement. Following administration of the Multidimensional Model of Racial Identity (MMRI) to a sample of 289 Black 9th to 12th grade high school students in an urban Midwestern school district, they found that ethnically and racially idealized students attained higher rates of academic achievement. They also found higher achievement rates among students in higher grades versus
students in lower grades, suggesting that throughout their academic careers, Black adolescents “construct qualitatively different views of Black racial identity” (pp.386).

Chavous, et al. (2003) in another study, found that in addition to racial beliefs, high ethnic identity was found to be related to positive academic outcomes for Black students. Conversely, Okeke, Howard, Kurtz-Costes and Rowley (2009) hypothesized that systemic forces such as racial stereotypes (Steele & Aronson, 1995) negatively affected academic performance despite high racial centrality, or strength of ethnic identity. For example, in a study of 7th and 8th grade adolescents, those who presented with high racial centrality, but endorsed Black stereotypes, presented with lower academic performance. These studies suggest that age difference and levels of maturity may also play a role in how ethnic identity and academic achievement converge (Awad, 2009; Quintana, 2007). These findings are somewhat consistent with previously mentioned theories of individual (Erikson, 1959; Marcia; 1968), and ethnic identity development (Cross, 1971; Phinney, 1992) that allude to maturity as an important factor in rates of academic achievement. Of greater importance is the role which sex plays as a determinant of academic achievement.

A recent examination of ethnic identity as a potential determinant of sex differences in achievement was conducted by Chavous et al., (2008) using a sample of 204 Black male and female adolescents in grades 8-11. The findings of the study revealed that racial centrality, the extent to which one’s racial group defines self-concept (Chavous et al., 2008) increased school importance and academic achievement despite peer discrimination. However, across grade levels, 8th grade boys who reported experiences of discrimination by teachers were less likely to demonstrate higher levels of strong academic investment. Chavous et al., (2008) further noted that Black male students across grades from lower socio-economic backgrounds with parents of
limited education were more likely to present with low achievement rates despite high racial centrality. Such findings suggest that socioeconomic factors in conjunction with school, teacher and peer relationships play a significant role in how well Black students, particularly males, progress in school.

As noted, peer relationships have also been found to exert a strong influence on the academic behaviors of Black adolescents. Through peer relationships adolescents are cognizant of the function of race and ethnicity in American society (Zirkel, 2008); however, racial ideology relative to achievement is often conflicted (Yasui, Dorham, & Dishion, 2004). For example, Ogbu’s (1971) and Ogbu’s (1978) as well as Ogbus’ (2003) seminal studies of ethnic identity and achievement have found that Black students frequently under-achieve in order to minimize teasing and accusations of “acting white” by their peers. Such rejection is based upon research findings from a number of studies reveal that at an early age, students of color are aware of race, discrimination and its consequences before transition from elementary to middle school (Atlschul, Oyserman, & Bybee, 2006; Brenman, 1939; Bynum, Burton, & Best, 2007; Clark, 1940; Davis, Ajzen, Saunders, & Williams, 2002; Davis, 2003; Downey, 2008; Warikoo & Carter, 2009). This observation has been found to be particularly true for Black males (Greene & Winters, 2006; Jordan & Robert, 2003; Ladson-Billings, 2006; Marks et al., 2004).

**Self-Esteem, Ethnic Identity and Achievement**

Self-esteem is an evaluative component of self concept which includes cognitive, behavioral, evaluative and affective aspects of self-assessment (Blasovich & Tomaka, 1991). Consequently, one’s favorable or unfavorable self view, determines the degree to which one performs with self-confidence on domain specific activities (Rosenberg, 1965; Rosenberg, 1985; Rosenberg, 1979; Rosenberg, Schooler, Schoenbach, & Rosenberg, 1995).
Early studies conducted by Kenneth B. Clark (Clark, 1939) found a direct relationship between race, discrimination and self-esteem in school settings. Further, over a decade of research has found direct relationships between self-esteem and successful academic performance among Black adolescents. For example, Smith et al., (1999) found that one’s positive sense of ethnic identity along with high self-esteem, contributed to a youth’s perceptions of self, academic ability and future goal achievement.

In order to understand the underlying structural components of ethnic identity, they hypothesized that ethnic identity and self-esteem were two distinct but essential constructs. Additionally, they hypothesized that individual self perception and perception of one’s ethnic group also contributed to positive feelings of self and achievement. They further hypothesized that positive perceptions of ethnic identity favorably influenced self-esteem, self-efficacy and goal attainment. The Bronstein-Cruz Child/Adolescent Self Concept and Adjustment Scale (BC-Scale, Bronstein et al., 1987), Multi-group Ethnic Identity Measure (MEIM, Phinney (1992)), Perceived Academic and Career Efficacy Measure (PACE) were administered to a sample of 100 male and female adolescents ranging from 11-13 years of age. Confirmatory factor modeling confirmed the empirical viability of the subscales used to measure underlying factors of personal identity, ethnic group identity and perceived efficacy. Path model analysis and analysis of variance revealed that both ethnic identity and self-esteem were separate and distinct constructs that strongly influenced perceptions by students of their ability to engage in prosocial behavior, goal selection and high academic achievement. Conversely, in a similar study, Lockett & Harrell (2003) found in a hierarchical linear regression study of 128 Black students from a Historically Black College, that as a distinct construct, self-esteem rather than ethnic identity predicted achievement.
Self-Efficacy, Ethnic Identity and Academic Achievement

A looming threat to academic potential among Black students is the common stereotype that Blacks do not do as well in school, due to out-group perceptions of perceived intellectual inferiority (Steele, & Aronson, 1992; Good, Aronson & Inzlicht, 2003; Warikoo & Carter, 2009). Self-efficacy posits that one’s perceptions of one’s abilities are equally affected by the perceptions of significant others; parents and teachers for example (Orellana & Bowman, 2003). Consequently, an examination of the nexus between self-efficacy and achievement among Black students is a critical element to consider within the schematic of race and school success (Lockett & Harrell, 2003; Morris & Monroe, 2009).

As example, Oyserman, Harrison and Bybee (2001) hypothesized that positive racial identity promoted academic efficacy, and, further served as a buffer against racism. In examining three components of racial identity, feeling connected to the Black community, sensitivity to awareness of out-group barriers and racism, and believing that achievement is part of being Black, they hypothesized that sex differently predicted academic outcomes. The School Efficacy Scale (Eccles, 1993) and Oyserman et al.’s (1995) Racial Identity Scale (RIS) were administered to a sample of 91 Black eighth graders. Self reported grades were used to control for the influences of achievement on the academic efficacy scale. Measures and grades were obtained in the fall and spring. Hierarchical regression analysis revealed that racial identity significantly predicted academic efficacy and that viewing academic achievement as part of being Black increased feelings of academic efficacy for both males and females. They also found that for females, academic efficacy declined when they were aware of negative feelings toward the group to which they were connected. For males, no significant effect was found. They concluded that aspects of self-efficacy, racial identity and academic achievement may be sex specific.
Conversely, Davis (1994) contends that due to discrimination, Black males often fall short of the primary functions of school which are to promote socialization, intellectual development, and prepare youth for their societal responsibilities. In illustration of this observation, Saunders, Davis, Williams, & Williams (2004) found that among a sample of 243 Black high school sophomores, females were found to be more acclimated to school completion, and presented with higher grade point averages than Black males. Research also reveals that higher rates of achievement among Black females were strongly associated with stronger self-efficacy (Zirkel, 2005).

**Satisfaction with Life, Ethnic Identity and Achievement**

Socioeconomic factors in conjunction with ethnic identity, family and community also play a role in predicting academic outcomes. These observations are highly correlated with findings that life satisfaction, or subjective well-being which is defined as the appraisal of one’s life (Diener & Diener, 1995), is dependent upon how well one’s basic needs are met (Huebner, Suldo, Smith, & McKnight, 2004; Verkuyten & Lay, 1998; Siyez & Kaya, 2008). McCullough, Huebner and Laughlin (2000) further noted that life events play a critical role in determining life satisfaction, and that life satisfaction is critical to environmental adaptation (Diener & Diener, 1996). It follows that lower levels of life satisfaction predict academic achievement in the face of environmental challenges (Oyserman, Ager, & Yoon, 2003). For example, in a multiethnic sample of 1201 high school students, Haranin, Huebner and Suldo (2007) found positive correlations between measures of domain specific factors such as family, friends, school, living environment and life satisfaction.

Culture has also been found to play an important role in individual interpretations of life satisfaction by adolescents (Verkuyten & Lay, 1998; Wakefield & Hudley, 2007). For example,
in a cross cultural study of life satisfaction among 698 high school students, Suldo and Huebner (2006) found similar results as those previously noted, however, they noted that life satisfaction was culturally mediated by collective identities which are more common among individuals of color, versus individual identities which are strongly associated with the dominant culture.

Relative to ethnic identity and life satisfaction, Oyserman and Yoon (2009) found that growing up in a segregated high poverty community did not undermine identity, nor was it found to affect achievement. Rather, they found that high ethnic saliency, but negative effects of community influences, determined lower rates of academic outcomes. In other words, without support from the environment and significant others, higher salience of ethnic identity did not wholly contribute to academic outcomes. Indicators of life satisfaction were found to be of greater significance (Oyserman & Yoon, 2009). With regard to sex, Huebner, Suldo, Smith and McKnight (2004) found that contingent upon life events and family environments, Black adolescents reported lower levels of life satisfaction.

**Summary**

This section discussed the research relevant to the psychological factors presented for this current study; ethnic identity, self-esteem, self-efficacy and life satisfaction. Also discussed were the concomitant effects of race, sex and achievement in school environments as they relate to these psychological traits; further reviewed as they relate to issues of culture, identity, sex and achievement. A review of the research on this topic reveals that each of these factors play a significant role in predicting achievement among Black adolescents. Also noted were the contrasted findings of the research regarding this topic. Consistent with the purpose of this study, which was conducted to further examine the role of psychological factors, sex, and culture
as they relate to achievement among Black youth, the following section will discuss the methodologies undertaken for this study.
CHAPTER 3

METHODOLOGY

As previously stated in chapter 1, the goal of this study was to test the hypotheses related to whether sex responses to specific psychological measures of ethnic identity, self-esteem, self-efficacy, and life satisfaction, predicted achievement among Black male and female high school students. Five separate survey instruments were utilized to measure responses by sex. This chapter, which is organized into four sections, discusses following: (a) hypotheses (b) study participants, (c) instruments utilized for the study, (d) data collection, and (3) data analysis.

Hypotheses

The hypotheses to be tested for this study were as follows:

1. There will be no significant relationships among ethnic identity, self-esteem, self-efficacy, life satisfaction and academic achievement for Black male and female subjects.
2. There will be no significant sex differences in the predictability of achievement among the independent variables of ethnic identity, self-esteem, self-efficacy, and life satisfaction for the sampled subjects.
3. African-American male and female adolescents will have no significant differences in ethnic identity, self-esteem, self-efficacy, and life satisfaction measures.
4. High and low achieving male and female subjects will have no significant differences in their scores on the four selected measures of psychological traits.
5. Male and female subjects with different levels of satisfaction with life and ethnic identity will not have significant differences in their academic achievement.
Study Participants

One hundred and forty participants volunteered for the study and completed the questionnaires. Of the 140 participants, participating school districts provided 34 data sets for three measures of standardized scores for AIMS reading, writing and math. Within the full sample, participating school districts provided GPA’s for 95 of the participants. 140 surveys were completed by the participants. Participants met the following inclusionary criteria in that they: (a) self identified as Black, (b) identified with the ethnic and cultural values consistent with the target population, (c) were enrolled in a public high school in grades 9-12, (d) were able to independently read and comprehend the information provided to them in the study. The samples for this study consisted of high school students enrolled in five urban high schools in the Tucson area and 1 high school from Phoenix. The sample was comprised of 59 Black males and 81 Black females with a mean age of 16 for both sexes, and a mean grade of 10.8. The median grade for the entire sample was grade 11. Fifty five percent of the subjects self identified as Black American, and 30% self-identified as Black African. Subjects self-identifying as Black African were representative the growing population of African immigrants who have lived in the U.S. for a period of five or more years, are proficient in English, and are American citizens or are pending American citizenship. Subjects had the option of writing in their ethnicity and further identified as Asian, .7%, Hispanic,1.4%, Native American, .7%, Biracial, 3.6%, Black, Mexican American and Native American 2.9%, and Biracial (Black/White) 2.9%. For post graduate plans, 21% planned to enroll in a two year technical college, and 68% planned to enroll in a four year institution. Additional demographic data can be found in Appendix E.
Data Collection Procedures

Permission to conduct the study and to obtain grade point averages and AIMS scores was secured from the respective Research and Evaluation departments of participating school districts. Prior to recruitment of participants, approval was obtained from the University of Arizona’s Human Subjects Protection Program. Before commencement of the study, the primary investigator (PI) met with and obtained the support and collaboration from each high school’s primary school administrator. Through the school administrators, further support for the project was provided by each participating school’s ethnic studies departments and high school counselors. Before commencement of data collection, and consistent with the Federal Education Right to Privacy Act (FERPA), students were given fliers and letters of informed consent by designated school personnel. The documents provided students and parents with information about the purpose and goals of the study, the voluntary nature of the study, privacy and confidentiality, withdrawal rights, and contact information for the PI, research assistant and supervisor. Written permission was obtained from the participants and parents. Consent forms were collected by designated school administrators and returned to the PI. Following completion and return of permission forms, participants met with either the PI, or the PI’s research assistant at specific times and locations designated by school administrators to complete survey packets. Survey packets contained the following: a brief demographic survey, the Multiethnic Identity Measure, Rosenberg’s Self-Esteem Scale, Self-Efficacy Scale for Children and the Satisfaction with Life Scale. To protect confidentiality, student names and identification numbers were not used. Each survey packet and respective instruments were pre-coded by the PI with assigned research numbers prior to distribution.
Participants completing permission forms were called at predetermined times to a designated site on school grounds by the school administrator. Students were called in groups of 10 to 20, and were seated at designated tables where they were seated with one empty chair between them to ensure confidentiality. Packets were distributed to students by the PI or research assistant. Participants were again informed by PI or research assistant that their participation was strictly voluntary, that the data obtained from the study was strictly confidential, and that they were free to withdraw at any time. Participants were reminded that their grade point averages and AIMS scores would be obtained from their school districts and reviewed as part of the study. They were also informed that their names would be replaced with assigned numerical codes prior to review of achievement scores by the PI. Instructions for packet completion were read aloud to the participants by the PI or the PI’s research assistant. The PI or research assistant was available to answer any questions. Once the packets were returned and collected by the PI and research assistant, student’s names with pre-assigned number codes were given to the respective Research and Evaluation Departments of participating school districts for retrieval of GPA and AIMS scores. The Departments provided grade point averages and standardized test scores in reading, writing and math from the Fall 2010 Arizona Instrument to Measure Standards (AIMS) for each respective student. Before returning the data to the PI, students’ names were replaced with the pre-assigned numerical codes.

**Instruments**

Consistent with the purposes of the study, five instruments and students’ district reported grade point averages and AIMS scores were collected from each participating school. A brief demographic questionnaire, the Multi-Ethnic Identity Measure (MEIM), Rosenberg Self-Esteem
Scale (RSES), Self-Efficacy Questionnaire for Children, Revised (SECQ-C), Satisfaction with Life Scale (SLWS), and the Perceived Caring Measure (PCM) were used for this study.

**Demographic Survey**

The demographic questionnaire which was anonymous was used to gather generic information about the participants. The questionnaire contained nine questions regarding the participant’s sex, ethnicity, grade, age, school, and city and basic academic information.

**Arizona Instruments to Measure Standards (AIMS)**

Arizona’s Instrument to Measure Standards (AIMS) is a standardized criterion referenced test (math, reading, writing and science) administered by the state of Arizona. AIMS is required for students in grades 3 through 8 and 10 through 12, and is administered to high school students in the spring of their sophomore year. Cumulative scores of at least 500 on each section indicate passing performance. Pass and failure scores based on performance standards are rated on continuous scores ranging from a scale of 1-4 as follows: “falls far below the standard,” (fail – score of 1) “approaches the standard,” (fail – score of 2) “meets the standard,” (pass – score of 3) and “exceeds the standard.” (pass – score of 4).

**Multi-Group Ethnic Identity Measure (MEIM)**

The Multi-group Ethnic Identity Measure (MEIM) was developed by Phinney in 1992. It is designed to measure the degree to which an individual affirms and identifies with his or her particular ethnic group (Black, Native American, Asian American, etc.). The 14-item Likert scale is comprised of three subscales which assess: (1) Affirmation and Belonging, one’s feelings of pride, attachment and belonging toward one’s ethnic group; (2) Ethnic Identity Achievement, one’s level of engagement in learning about their particular ethnic identity, and, (3) Ethnic Behavior, one’s involvement in behaviors characteristic of their particular ethnic group. Sample items consist of
statements such as, “I am happy that I am a member of the ethnic group that I belong to”, and, “I have a strong sense of belonging to my own ethnic group”. Subjects are presented with statements on a 4-point scale requiring responses ranging from strongly disagree (1) to strongly agree (4). The higher score represents the strength of the respondent’s attachment to his or her ethnicity. The overall score is obtained by averaging the item scores. The MEIM was normed with 407 high school adolescents and 136 college-aged students (Phinney, 1992). Phinney reported a Cronbach’s alpha of .81 for high school students and .90 for college students. The factor structure of the MEIM was confirmed in a study with 2,184 adolescents in whom two factors were identified: Identification and Exploration (Spencer, Icard, Harachi, Catalano, & Oxford, 2000). Internal reliability for the two factors was respectively .84 and .76.

The Rosenberg Self-Esteem Scale (RSES)

The Rosenberg Self-Esteem Scale (Rosenberg, 1965) is a 10-item Likert type scale that measures a person’s global self-concept. The 10-items represent two dimensions of either positive self-esteem or negative self-esteem (Owens, 1993). Examples of positive and negative items from each dimension are, “I feel that I have a number of good qualities” and “I feel that I do not have much to be proud of”. Responses on the scale range from strongly disagree (0) to strongly agree (3). The scale ranges from 0-30, with 30 representing the highest obtained score. The original sample of the scale conducted 1965 with 5,024 high school juniors from randomly selected high schools yielded test retest correlations of .82 to .88 (Rosenberg, 1965). Since then, the RSES has been widely used in research with ethnically diverse groups, and has a test-retest reliability of .85. A six item version of the RSES is also available with well demonstrated internal consistency (Cronbach’s alpha equaling 0.78.) when used with ethnically and culturally diverse adolescents (McCreary et al., 1996).
Self-Efficacy Questionnaire for Children (SEQ-C)

The SEQ-C is a 21 item Likert type scale designed to measure children’s perceptions of their Social Self-efficacy, the ability to get along with other peers, Emotional Self-efficacy, the ability to regulate unpleasant emotions, and Academic Self-efficacy, the ability to succeed in school and display appropriate learning behaviors (Muris, 2001; Shannon, Suldo, & Shaffer, 2007). Each of the three subscales contain seven items in which participants indicate perceived competency levels on a 5-point scale (1= not at all to 5= very well). Summed scores provide a measure of self-efficacy for each domain. Two validity studies of the SEQ-C were conducted in Europe (Muris, 2001). Exploratory factor analysis revealed Cronbach’s alphas of .82 for social self-efficacy, .84 for academic self-efficacy and .86 for emotional self-efficacy. A third study conducted in the U.S. of 697 predominantly Black early and late adolescents yielded a Cronbach’s alpha of .73 for social self-efficacy, .82 for academic self-efficacy, and .79 for emotional self-efficacy (Suldo & Shaffer, 2007).

The Satisfaction with Life Scale (SWLS)

The Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985) is a five item Likert type scale designed to measure global life satisfaction. Subjects express their general degree of satisfaction with aspects of their lives. Diener et al., (1985) established the psychometric properties of the SWLS in his administration to a sample of 176 undergraduates at the University of Illinois. He found consistent reliability coefficients of .80 and higher for short-term (two weeks and four years) administration of this scale. Test-retest results revealed a correlation coefficient of .82, with a coefficient alpha of .87 (Diener et al., 1985). The SWLS item and factor loadings are as follows: Item1) In most ways my life is close to my ideal (Factor loadings, .84) (Item Total correlations, .75); The conditions of my life are excellent (Factor loadings, .77) (Item Total
Correlations, .69); I am satisfied with life (Factor loadings, .83) (Item Total Correlations, .75); So
far I have forgotten the important things I want in life (Factor loadings, .72) (Item Total Correlations, .67); If I could live my life over, I would change almost nothing (Factor loadings, .61) (Item Total Correlations, .57. Diener, Colvin, and SanDisk (1991) compared
the SWLS to other related scales and found it to be valid and reliable for use with a variety of age
groups and applications. Pivot et al., (1991) also found a high level of convergence on self and peer
reported measures of subjective well-being and life satisfaction.

**Perceived Caring Measure (PCM)**

The PCM measures how students perceive the caring attitudes of their teachers in an instructional context (Teven & McCrosky, 1995). The ten items of the PCM were part of a 22 item bipolar scale used in the original study (McCrosky & Young, 1981), and was adapted for African American students in a study by Barnett (2009). The PCM measures three domains of perceived teacher caring: empathy, the capacity to view the perspectives of others, understanding, the ability to comprehend the feelings and needs of others, and responsiveness, the degree to which the teacher responds or reacts to a student’s concerns. Questions reflective of these domains include questions such as, “my teacher cares about me as an African American student, and, “ my teacher has my interest at heart as an African American”. Participants respond by circling responses ranging from Strongly Agree to Strongly Disagree. Teven & McCrosky (1995) report good face validity, and an alpha reliability of .95.

**Debriefing**

At completion of data collection from participating schools, the PI debriefed school administrators, participating personnel and each respective research and planning departments
within each school district verbally and in writing. The PI’s contact information was made available to each student via survey packets and instruction pages for participants.

**Data Analysis**

One hundred and forty subjects volunteered to participate in the study. From the overall sample, participating school districts provided grade point averages for 95 of the subjects, and 34 scores for Fall, 2010 AIMS in reading, writing and math. Three sample sizes were created to analyze the data released by schools for this study. The sample break down is provided in Figure

Sample 1 consisted of 140 observations for completed surveys only. Sample 2 consisted of 95 observations with completed surveys and GPA’s only. Sample 3 comprised 34 observations consisting of completed surveys and standardized test scores for reading, writing and math. Analyses were subsequently conducted run separately for each sample. In his study of the role of racial identity and psychological traits as predictors of achievement, Awad (2007) utilized this procedure with favorable results.

Five null hypotheses were presented to evaluate relationship, predictability, effect sizes, and interaction and mean differences for participants. The Statistical Package for Social Sciences (SPSS) for Windows 18.0 was utilized to analyze all data.

To test hypothesis one, Pearson’s r, was employed to determine the strength of linear relations between the independent variables (ethnic identity, self-esteem, self-efficacy, life satisfaction and perceived caring) and one dependent variable (achievement). This analysis resulted in an n x n (all variables x all variables) correlation matrix.

For hypothesis two standard multiple regression was used to predict values of the dependent variable (achievement). Two separate multiple regression analyses were performed to determine which independent variables (ethnic identity, self-concept, self-efficacy, and life
satisfaction) predicted achievement among the sampled subjects. For hypotheses three and four, both MANOVA and ANOVA were utilized to test for significant differences between males and females and four of the independent variables. Sex was entered as the independent variable, and four psychological traits (ethnic identity, self-concept, self-efficacy, and life satisfaction) were entered as dependent variables. In this case, use of the MANOVA was considered to be appropriate because of multiple dependent variables that are correlated. Additionally, due to the difficulty of obtaining one good measure from a single trait variable, the use of several criterion measures permitted more of a holistic picture.

To examine hypothesis five, an ANOVA was conducted to examine the differences between differing levels of life satisfaction and GPA as a measure of achievement among Black male and female high school students. A 2 x 2 ANOVA provided the two levels of life satisfaction and two sex categories. Life satisfaction was used as the dependent variable for this analysis. All of the data were analyzed to obtain measures of central tendency and variability. Descriptive statistical information was used to interpret and explain findings. Appropriate procedures were used to analyze the statistical power of obtained F and lambda values obtained from the ANOVA and MANOVA procedures.

**Summary**

This chapter restated the purpose of the study, then discussed and described the participants, data collection procedures, and analysis. The demographic characteristics of the sample were described, and data collection procedures were discussed in detail. Statistical procedures for data analysis was discussed, specifically, the types of analyses to be utilized to test the five null hypotheses. Also discussed were the methods undertaken to address

The following chapter will discuss the results and findings of the study.
CHAPTER 4
RESULTS OF THE STUDY

This chapter discusses the research findings based upon the five null hypotheses presented Chapter 3. To test the hypotheses, four specific sets of statistical analyses procedures were conducted with SPSS 18 for Windows at alpha levels of .05. In describing the findings, each hypothesis has been restated, followed by the description of obtained findings.

Hypothesis 1

The first hypothesis stated that the psychological traits of ethnic identity (EI), self-esteem (SE), life satisfaction (LS) and perceived caring (PC) will have no significant relationship with the academic achievement of sampled high school students. In order to test this hypothesis, a Pearson Product Moment Correlation Coefficient was used to analyze relationships between two measures.

Table 1
Correlations for Psychological Traits and GPA by for Males and Females

<table>
<thead>
<tr>
<th>Measures</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ethnic Identity</td>
<td>.34*</td>
<td>.07</td>
</tr>
<tr>
<td>2. Self-Esteem</td>
<td>.25</td>
<td>.03</td>
</tr>
<tr>
<td>4. Life Satisfaction</td>
<td>.52**</td>
<td>.17</td>
</tr>
<tr>
<td>5. Perceived Caring</td>
<td>-.10</td>
<td>-.33*</td>
</tr>
</tbody>
</table>

* p < .05
**p < .01
sets of achievement measures (AIMS scores in the areas of reading, writing and math, as well as grade point average (GPA)) and psychological trait measures: EI, SE, SEF, LS and PC.

Individual correlations were conducted for Sample 2 consisting of 95 observations with GPA only, and sub-sample 3, consisting of 34 observations with three sets of AIMS scores for reading, writing and math. Table 1 presents correlation results for Sample 2.

Among Black males, statistically significant relationships were observed between EI and GPA, \( r = .34^* \) \( (r^2 = .11, p < .05) \), and LS and GPA, \( r = .52^{**} \) \( (r^2 = .27, p < .01) \). These findings suggest that for Black males, higher levels of ethnic identity are strongly correlated with a higher GPA; and similarly, that higher levels of life satisfaction are strongly correlated with a higher GPA. In contrast, for Black females, correlation results reveal a statistically significant inverse relationship between PC and GPA, \( r = -.33^* \) \( (r^2 = .11, p < .05) \). For Black females, these findings suggest that negative perceptions of their teacher’s levels of empathy,

Table 2

<table>
<thead>
<tr>
<th>Measures</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ethnic Identity</td>
<td>.08</td>
<td>-.21</td>
</tr>
<tr>
<td>2. Self-Esteem</td>
<td>.30</td>
<td>-.06</td>
</tr>
<tr>
<td>3. Self-Efficacy</td>
<td>.31</td>
<td>-.17</td>
</tr>
<tr>
<td>4. Life Satisfaction</td>
<td>.43</td>
<td>-.21</td>
</tr>
<tr>
<td>5. Perceived Caring</td>
<td>.26</td>
<td>-.01</td>
</tr>
</tbody>
</table>

\* \( p < .05 \) \** \( p < .01 \)
understanding and responsiveness are significantly but negatively correlated with GPA. No other relationships were noted to be significant for Black females.

The second correlation was conducted to evaluate relationships among AIMS scores for reading, writing, math and psychological measures for EI, SE, SEF, LS, and PC. Results are presented in Tables 2 - 4.

Table 3

Correlations for Psychological Traits and Writing by Sex

<table>
<thead>
<tr>
<th>Measures</th>
<th>Writing</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ethnic Identity</td>
<td>- .07</td>
<td></td>
<td>- .19</td>
</tr>
<tr>
<td>2. Self-Esteem</td>
<td>.21</td>
<td></td>
<td>.02</td>
</tr>
<tr>
<td>3. Self-Efficacy</td>
<td>.49*</td>
<td></td>
<td>.10</td>
</tr>
<tr>
<td>4. Life Satisfaction</td>
<td>.22</td>
<td></td>
<td>.10</td>
</tr>
<tr>
<td>5. Perceived Caring</td>
<td>.26</td>
<td></td>
<td>.07</td>
</tr>
</tbody>
</table>

Note. Sample 3 N=34
* p < .05

On measures of AIMS reading for males and females, no significant relationships were observed among psychological traits and this particular measure. However, Table 3 reveals a statistically significant relationship between SEF and writing for Black males, r = .49* (r^2 = .24, p < .05). No significant correlations were noted for either sample by sex for AIMS math. The null hypothesis was rejected with the conclusion that significant relationships did exist between psychological traits among this group of participants.
Table 4

Correlations for Psychological Traits and Math by Sex

<table>
<thead>
<tr>
<th>Measures</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethnic Identity</td>
<td>-.01</td>
<td>-.28</td>
</tr>
<tr>
<td>Self-Esteem</td>
<td>.36</td>
<td>.08</td>
</tr>
<tr>
<td>Self-Efficacy</td>
<td>-.14</td>
<td>-.06</td>
</tr>
<tr>
<td>Life Satisfaction</td>
<td>.40</td>
<td>-.11</td>
</tr>
<tr>
<td>Perceived Caring</td>
<td>.34</td>
<td>-.21</td>
</tr>
</tbody>
</table>

Hypothesis 2

The second hypothesis stated that ethnic identity, self-esteem, self-efficacy, life satisfaction and perceived caring, as predictor variables, would not significantly predict achievement among Black male and female high school students. Standard multiple regression analyses were run for Sample 2, with GPA only, and Sample 3 consisting of three sets of standardized scores for reading, writing and math. Predictor variables were entered in the regression equation. Regression analyses were run separately for males and females.

Regression results for Sample 2 indicate an overall model that significantly predicted GPA for Black males $R = .55$, $R^2_{adj} = .20$, $F(5,39) = 3.32$, $p < .01$.

The summary of correlation coefficients in Table 7 indicate that only one of the five variables (life satisfaction) significantly contributed to the model ($\beta = .52$, $t (5, 39) = 2.946$, $p =$
For females, regression results indicate an overall model that significantly predicts GPA, $R = .46$, $R^2_{adj} = .21$, $F(5, 44) = 2.387$, $p = .05$. For Sample 3, consisting of standardized tests for reading, writing and math, multiple regression analysis was again conducted to predict achievement with EI, SE, SEF, LS and PC entered as predictor variables. AIMS scores were entered as dependent variables, and the predictor variables were entered simultaneously.

Analyses were run separately for each measure of achievement. The following model summary provides regression results for males and females in Table 8. The obtained results revealed that for Black males, none of the variables significantly predicted reading, $R = .58$, $R^2_{adj} = .06$, $F(5,12) = 1.22$, $p = .36$. For writing, similarly, the model did not predict the criterion of writing achievement for males, $R = .61$, $R^2_{adj} = .11$, $F(5,12) = 1.44$, $p < .27$.

Table 5

*Model Summary for Sample 2 and GPA*

<table>
<thead>
<tr>
<th>Sex</th>
<th>Model</th>
<th>$R$</th>
<th>$R^2$</th>
<th>$R^2_{adj}$</th>
<th>SE</th>
<th>F</th>
<th>df 1</th>
<th>df 2</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>1</td>
<td>.546</td>
<td>.299</td>
<td>.209</td>
<td>.718</td>
<td>3.32</td>
<td>5</td>
<td>39</td>
<td>.014</td>
</tr>
<tr>
<td>Female</td>
<td>1</td>
<td>.462</td>
<td>.213</td>
<td>.124</td>
<td>.753</td>
<td>2.38</td>
<td>5</td>
<td>44</td>
<td>.053</td>
</tr>
</tbody>
</table>
Table 6

*ANOVA Summary for Sample 2 and GPA*

<table>
<thead>
<tr>
<th>Sex</th>
<th>Model</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>Regression</td>
<td>8.65</td>
<td>5</td>
<td>1.173</td>
<td>3.320</td>
<td>.014</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>20.124</td>
<td>39</td>
<td>.516</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>28.689</td>
<td>44</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>Regression</td>
<td>6.768</td>
<td>5</td>
<td>1.354</td>
<td>2.387</td>
<td>.053</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>29.948</td>
<td>44</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>31.717</td>
<td>49</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 7

*Coefficients for Sample 2: GPA and Traits*

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
</tr>
<tr>
<td>EI</td>
<td>.371</td>
<td>.382</td>
</tr>
<tr>
<td>SE</td>
<td>-.071</td>
<td>.248</td>
</tr>
<tr>
<td>SEF</td>
<td>-.207</td>
<td>.300</td>
</tr>
<tr>
<td>LS</td>
<td>.525</td>
<td>.178</td>
</tr>
<tr>
<td>PC</td>
<td>-.018</td>
<td>.201</td>
</tr>
</tbody>
</table>
For math, however, a very moderate prediction was noted ($R = .71$, $R^2_{adj} = .30$, $F(5,12) = 2.50$, $p < .09$). A review of Beta weights revealed that LS contributed to 51% of the overall coefficient model for math among Black males, ($\beta = .51$, $t (5,12) = 1.95$, $p = .07$).

Results for Black females indicated that none of the regression models significantly predicted the criterion of reading, $R = .34$, $R^2_{adj} = .31$, $F(5,10) = .27$, $p = .91$, writing, $R = .21$, $R^2_{adj} = .42$, $F(5,10) = .10$, $p = .1$, or math. $R = .16$, $R^2_{adj} = .25$, $F(5,10) = .39$, $p = .84$.

**Hypothesis 3**

The third hypothesis stated that there were no significant differences between males and females on measures of ethnic identity, self-esteem, self-efficacy and life satisfaction.

A multivariate analysis of variance (MANOVA) was conducted with Sample 2 to analyze the presence of sex differences among four of the psychological traits (EI, SE, SEF, LS). Traits were entered as dependent variables, and sex was entered as a fixed factor. Descriptive statistics for means and standard deviations are presented in Table 9.

---

Table 8

*Model Summary for AIMS Reading*

<table>
<thead>
<tr>
<th>Sex</th>
<th>Model</th>
<th>$R$</th>
<th>$R^2$</th>
<th>$R^2_{adj}$</th>
<th>SE</th>
<th>$R^2$ Change</th>
<th>df 1</th>
<th>df 2</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>1</td>
<td>.581</td>
<td>.338</td>
<td>.062</td>
<td>41.4783</td>
<td>.338</td>
<td>5</td>
<td>12</td>
<td>.356</td>
</tr>
<tr>
<td>Female</td>
<td>1</td>
<td>.348</td>
<td>.121</td>
<td>-.318</td>
<td>46.8815</td>
<td>.121</td>
<td>5</td>
<td>10</td>
<td>.916</td>
</tr>
</tbody>
</table>
Table 9

Means and Standard Deviations Describing Sex Differences among Psychological Traits

<table>
<thead>
<tr>
<th>Measures</th>
<th>Male M</th>
<th>Male SD</th>
<th>Female M</th>
<th>Female SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethnic Identity</td>
<td>3.07</td>
<td>.35</td>
<td>3.15</td>
<td>.52</td>
</tr>
<tr>
<td>Self Esteem</td>
<td>2.34</td>
<td>.54</td>
<td>2.10</td>
<td>.59</td>
</tr>
<tr>
<td>Self Efficacy</td>
<td>3.92</td>
<td>.45</td>
<td>3.66</td>
<td>.51</td>
</tr>
<tr>
<td>Life Satisfaction</td>
<td>3.69</td>
<td>.80</td>
<td>3.70</td>
<td>.72</td>
</tr>
</tbody>
</table>

Note. 1  Wilks’ A = .862, F (4, 90) = 3.58, p = .009, $\eta^2 = .138$.

Manova results indicate that sex, Wilks’ A = .862, F (4, 90) = 3.58, p = .009, $\eta^2 = .138$

significantly affects the combined dependent variables of EI, SE, SEF, and LS.

Table 10

ANOVA: Between Subjects Effects For Sex and Psychological Traits

<table>
<thead>
<tr>
<th>Source</th>
<th>DV</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
<th>$\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>Ethnic Identity</td>
<td>.161</td>
<td>1</td>
<td>.161</td>
<td>.787</td>
<td>.377</td>
<td>.008</td>
</tr>
<tr>
<td></td>
<td>Self- Esteem</td>
<td>1.404</td>
<td>1</td>
<td>1.404</td>
<td>4.316</td>
<td>.041</td>
<td>.044</td>
</tr>
<tr>
<td></td>
<td>Self-Efficacy</td>
<td>1.642</td>
<td>1</td>
<td>1.642</td>
<td>6.883</td>
<td>.010</td>
<td>.069</td>
</tr>
<tr>
<td></td>
<td>Life Satisfaction</td>
<td>.009</td>
<td>1</td>
<td>.009</td>
<td>.016</td>
<td>.901</td>
<td>.000</td>
</tr>
</tbody>
</table>

Note: N = 140 participants
Follow up tests with a univariate ANOVA indicate that self-esteem (F(1, 93) = 4.31, p = 0.041, $n^2 = 0.044$), and self-efficacy (F (1, 93) = 6.883, p = 0.010, $n^2 = 0.069$) differ significantly by sex suggesting that there are significant differences among male and female participants with regard to self-esteem and self efficacy (Table 10).

**Hypothesis 4**

Hypothesis four stated that there would be no significant differences for high and low achieving subjects in the areas of AIMS reading, writing, math as well as for GPA with regard to the four selected psychological traits of EI, SE, SEF, and LS. The AIMS scores on the reading, writing and math as well as GPA were used to divide male and female subjects into high and low achieving groups. For AIMS reading, scores above the median score of 674 represented high achieving, whereas scores falling below 674 were used as low achieving scores. For AIMS writing, scores above the median score of 678 were considered as high achieving scores, and scores falling below the median of 678 were used as low achieving scores. For AIMS math, scores above the median score of 487 were recoded as high achieving, and scores below the median of 2.9 were used as low achieving.

Grade point average (GPA) was recoded for high and low grade point averages at the median GPA of 2.9. Grade point averages above the median grade point average of 2.9 were used as high achieving, and grades falling below the median of 2.9 were used as low achieving. Achievement scores and GPA were entered in as dependent variables, whereas psychological trait variables were entered as dependent variables. Analyses were conducted individually for Sample 2, consisting of GPA only, and Sample 3 (AIMS reading, writing and math).
ANOVA results for Sample 2 revealed moderate main effects for SEF, F(20,31) = 1.666, p = .07, $n^2 = .688$. For Sample 3, MANOVA results revealed no significant main effects for high and low achieving subjects for the three AIMS scores and selected traits. Follow-up ANOVA revealed no significant effects.

**Hypothesis 5**

The fifth hypothesis stated that male and female subjects with differing levels of life satisfaction and ethnic identity would have no significant differences in their levels of achievement. An ANOVA was conducted with Sample 2 to test for main effects among two levels of life satisfaction (LSATHL) and two levels of ethnic identity (EIDHL) on the dependent variable, GPA. ANOVA results revealed significant main effects for ethnic identity, F(1, 91) = 1.69, p = .19, $n^2 = .01$, and life satisfaction, F(1, 91) = 2.30, p = .09, $n^2 = .03$. Further analysis was conducted with multiple linear regression to evaluate the predictive value of these particular independent variables on achievement by sex. Regression results revealed that for Black males, differing levels of life satisfaction and ethnic identity significantly predicted achievement as measured by GPA, $R = .390$, $R^2_{adj} = .152$, $t(2,42) = 3.770$, $p < .03$. 

<table>
<thead>
<tr>
<th>Sex</th>
<th>Model</th>
<th>R</th>
<th>$R^2$</th>
<th>$R^2_{adj}$</th>
<th>SE</th>
<th>F</th>
<th>df 1</th>
<th>df 2</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>1</td>
<td>.390</td>
<td>.152</td>
<td>.112</td>
<td>.76099</td>
<td>3.770</td>
<td>2</td>
<td>42</td>
<td>.031</td>
</tr>
<tr>
<td>Female</td>
<td>1</td>
<td>.178</td>
<td>.032</td>
<td>-.010</td>
<td>.81568</td>
<td>.754</td>
<td>2</td>
<td>46</td>
<td>.476</td>
</tr>
</tbody>
</table>

*Note* Predictors: (Constant), Ethnic Identity High low, Life Satisfaction High / Low
Dependent Variable: GPA
Table 12

ANOVA Summary

<table>
<thead>
<tr>
<th></th>
<th>Model</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
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<td>Male</td>
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<td>.031</td>
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ANOVA Summary

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<th>df</th>
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<td>Female</td>
<td>Regression</td>
<td>1.004</td>
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<td>.502</td>
<td>.754</td>
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<td>Residual</td>
<td>30.606</td>
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<td>Total</td>
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Note: Predictors: (Constant), Ethnic Identity High low, Life Satisfaction High / Low
Dependent Variable: GPA

Table 13

Coefficients for Sample 2: GPA and Traits

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th></th>
<th>Females</th>
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</tr>
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<tr>
<td></td>
<td>B</td>
<td>SE</td>
<td>β</td>
<td>t</td>
</tr>
<tr>
<td>EI</td>
<td>-.441</td>
<td>.282</td>
<td>-.244</td>
<td>-1.564</td>
</tr>
<tr>
<td>LS</td>
<td>-.350</td>
<td>.249</td>
<td>-.219</td>
<td>-1.403</td>
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</tbody>
</table>

Note: EI = Ethnic Identity, LS = Life Satisfaction
Dependent Variable: GPA
CHAPTER 5
DISCUSSION AND IMPLICATIONS

The present study examined the extent to which ethnic identity, self-esteem, self-efficacy, and life satisfaction on the academic achievement of Black male and female adolescents. Responses for the study were elicited from a demographic questionnaire. Measure also included the Multi-Ethnic Identity Measure, Rosenberg Self-Esteem Scale, Self-Efficacy Questionnaire for Children, Satisfaction with Life Scale and the Perceived Caring Measure; all considered to be reliable and valid measures for Black adolescents.

Summary of Findings

The findings of this present study supported four contentions and previously addressed research discussed in this paper: (1) relationships do exist between psychological traits such as the ones utilized in this study, and academic achievement of Black students, (2) ethnic identity is by itself, an important consideration when assessing how the measures utilized in this study differently predict achievement outcomes by sex (Chavous et. al, 2008; Nasir, McLaughlin & Jones, 2009; Nguyen et al., 2007; Saunders, Davis, Williams & Williams, 2004; Oyserman & Yoon, 2009; Phinney, Jacoby & Silva, 2007; Phinney & Ong, 2007); (3) for Black males, ethnic identity and life satisfaction are salient factors to consider in school environments (Atlschylul, Oyserman & Bybee, 2006; Davis, Ajzen, Saunders, & Williams, 2002; Noguera, 2003; Siyez & Kaya, 2008; Stinson, 2006; Suldo & Huebner, 2004; Warikoo & Carter, 2009), and (4) perceptions by both sexes of teacher/student relationships play an important role in self-concept, ability and perceptions of achievement (Okagaki, 2001; Oyserman, Harrison & Bybee, 2009; Okeke, Howard, Kurtz-Costes & Rowley, 2009).

Correlation and regression findings are largely supported by Awad’s (2007) findings that strong self-concept predicted achievement, particularly for Black males. However, Awad (2007)
also found that aspects of self-concept versus racial identity was a more reliable measure of achievement. In contrast, Chavous et al. (2001) and Oyserman, Harrison and Bybee (2001), found that high racial identity and self-efficacy were more salient predictors of achievement as measured by grades. It is important to note by these authors that for Black males, ethnic identity serves as a buffer for social and environmental stressors, serving as an achievement boosting catalyst (Nasir, McLaughlin, & Jones, 2009; Noguera, 2003). Findings are further supported by studies of self efficacy and self-esteem by Nebbit (2010) who found that among Black males, self-efficacy and self esteem are significantly suppressed due to cultural/ecological factors. This has been found to be particularly true for Black males who reside in urban communities where school, family, neighborhood and community have significant influence on their overall daily life events and psychological well being. Given these observations and findings, the null hypothesis was rejected with the conclusion that among some of the traits, particularly self-esteem and self efficacy, males and females do present with significant differences.

Conversely, however, results of some analysis are consistent with the literature presented in this study, in that the findings are inconclusive and varied. For example, consistent with observations by Oyserman, et al. (2001), racial identity and perceived self-efficacy do play a role in outcome related measures of achievement. Similarly, Chavous et al. (2008), found that for males, higher racial centrality reduced academic risk. These results are contrary to Awad’s (2007) findings that racial identity was not related to achievement. These findings appear to vary by demographic and community suggesting that geographical location may be a factor.

In this case, the study was conducted in a Southwestern community where Black communities are sparse and diffuse.
Findings also suggest that sex differences do exist among these measures as no relationships were observed for females across the selected traits and measures of achievement. These findings suggest that specific traits by sex gain some prominence in achievement, and, that traits relative to academic may be, as the literature suggests, sex specific.

For example, in this study, findings suggest that for Black males, relationships do exist between reading, writing and GPA, and the psychological traits, life satisfaction and ethnic identity. As noted in Chapter 2, life satisfaction plays a critical role in overall healthy outcomes of daily living and academic outcomes (Antaramian & Huebner, 2009; Huebner, Suldo, Smith, & McKnight, 2004; Huebner, 2010; Verkuyten & Lay, 1998; Siyez & Kaya, 2008). Additionally, life satisfaction has been found to be an important factor as it relates to environmental adaptation (Bronfenbrenner, 1968; Diener & Diener, 1996; Oyserman, Ager, & Yoon, 2003). As previously noted, growing research has found positive correlations between domain specific factors such as family, friends, school, living environment and life satisfaction for Black urban males. Specifically, that environmental and community factors as either risks or protective factors serve as a basis for predicting satisfactory views of life circumstances, and as a consequence, favorable achievement outcomes for Black males (Awad, 2007; Chavous et. al., 2008; Haranin, Huebner & Suldo, 2007; Russell, Skiba & Noguera, 2010).

It is however, important to consider the relationships among Black females between life satisfaction, self-efficacy and perceived caring. The findings and supporting literature, suggest that perceptions of how others perceive them is of greater importance in a group context (Oyserman, 2008). This observation may provide some perspective as to why Black females perform much higher than males on measures of achievement in classroom settings. Of particular interest noted in this study is the observation of the strong relationship between life satisfaction
and measures of achievement for Black males. Of additional consideration are studies of research addressing developmental differences suggesting that males and females mature along uneven biological trajectories, with females far outpacing males (Anokhin, 2000; Lenroot, 2007). These observations provide opportunities for more study of how achievement differs among this particular demographic.

**Limitations of The Study**

The first limitation of this study was the sample size consisting of all achievement data provided by participating school districts. As a consequence, findings must be reviewed with some measure of caution because the sample size substantially reduced the statistical power.

An additional limitation of this study was the availability of Black participants. Blacks in Arizona comprise roughly 210,000, or 4% of the entire population in Arizona (U.S. Census, 2009). As a consequence, access to a larger number of Black students for study in this particular region of the southwest was challenging. Further, even though parental education of participants was noted only as background characteristics, future studies should consider socio-economic data for examining psychological traits and achievement among this demographic.

A benefit from this study is the observation of the increased diversity of racial and backgrounds in the U.S.. As noted in the demographic data collected for this study, individuals of bi-racial backgrounds may now select categories other than Black (U.S. Census, 2009). This observation provides for exploration of adolescent however, consistent with developmental literature which suggests that adolescents engage in a period of uncertain identity and identity exploration (Cross, 1971; Erikson, 1959; Marcia, 1968; Ogbu, 2003).

**Implications for Research**

The limitations of this study posed by the absence of critical academic data for the enrolled sample size provides a basis for an evaluation of why this data is absent in the first
place. Consequently collaborative research between key stakeholders and school districts addressing how school districts can improve upon tracking achievement among this group of students is strongly recommended.

Regarding academic achievement, future research should address current approaches undertaken by school districts to monitor the progress of students in core academic areas. For Monitoring should address how Black males, and males in general, fare over time with additional academic supports through targeted intervention. Consequently, research should also address current measures of teacher accountability in classroom practices considered critical to overall student achievement. For example, research should focus on implementation of best practices in curriculum bases measurement and progress monitoring in the academic areas of reading and writing at established intervals prior to districtwide assessments, particularly for youth of color. Future studies should also maintain focus on classroom factors that affect achievement. For example, research must continue to address the psychological implications of teacher-student and student-school relationships that hinder learning (Okagaki, 2001). Additionally, research should focus on strategies that foster healthy psychological relationships between teachers, students, school administrators, and the community (Bronfenbrenner, 1979; Okagaki, 2001).

**Implications For School Psychologists**

School psychologists play a key role in helping teachers, schools and families understand how the psychological factors discussed in this study, shape student achievement at two primary levels. The first level which is that of self reference. For example, the school psychologist’s sensitivity to cultural and ethnic differences among students of color, and the role of adolescence in formulating individual impressions of self-worth, ability and life satisfaction in school
contexts is essential (Huebner, 2010). Further, it is important that at the self-reference level, school psychologists acquire adequate knowledge of an historical context of issues that affect Black students and Black males in particular in school settings. This basic acquisition of knowledge informs the practice of school psychology at the most fundamental stage when addressing issues of achievement as they relate to Black students. The second level is systemic in nature, incorporating the referral process, review of data, collaborative consultation, professional development, and accountability as a means of consolidating psychological and academic success for Black students and those similarly situated.

Review of referral processes. School psychologists are often the critical point for referral of students prior to suspension, expulsion, or evaluation for special education. Here we play a vital role in examining how students, particularly students of color are referred and classroom dynamics which may hinder academic progress. In this regard, school psychologists who provide services in urban schools where must differentiate referrals of Black males and other students of color. We should consider whether or not a disproportionality of referrals exist, and proactively work with teachers and school administrators to address and reduce disproportionality.

Review of data within cultural environmental contexts. As abundant reasearch suggests, school psychologists are central to building collaborative cultural bridges between students, their families, and school administrators. Abundant literature identifies comprehensive review of data as the primary step in resolving psychological and academic challenges for students, particularly for those of color and low SES.

Collaborative consultation. School psychologists can proactively address issues such as academic performance, related issues of school self-efficacy and self-esteem by engaging in more direct observation of student teacher relationships and identification of how certain aspects
of the relationship may psychologically enhance or inhibit student performance. Collaborative consultation processes between the school psychologist, teachers and school administrators provide a means for examination and resolution of difficulties in the psychological engagement of students of color from classroom learning.

*Professional Development.* School psychologists should be prepared to participate in district and site based trainings that address underlying factors relevant to student achievement. From sex and cultural perspectives, collaborative professional development provides an essential avenue for sharing with teachers and administrators the role of and relationships of teachers in enhancing psychological factors to enhance achievement.

*Accountability support on standardized testing.* A recent article in NASP’s Communique (2011) examined the growing facilitative role of the school psychologist and student performance on standardized tests. As noted in this study, school psychologists serve a key role in ensuring that students in potential academic distress are identified and provided with academic support before they substantially fail or cannot be accounted for on important districtwide assessments.

**Conclusion**

This study evaluated ethnic identity, self-esteem, self-efficacy, and life satisfaction as predictors of sex differences in achievement among black adolescents. While it is important to review findings with caution to the sample size, larger samples of data from previous studies, findings of this study support two contentions. The first contention, as previously noted is that findings are inconsistent with current literature. However, the current study supports to some degree, the contention that sex does play an integral role in predicting achievement. The finding further provides credence to the argument that sex differences among psychological traits serve
specific but unique functions in school environments, particularly for males. Second, findings suggest that, consistent with literature from noted researchers in the field, Black males require greater psychological support than Black females in academic environments (Davis, 1995; Davis, 2003; Steele and Aronson, 2003; Greene & Winters, 2006; Noguera, 2003). As a consequence, the topic remains ripe for continued investigation as schools across the U.S. explore tools and strategies to improve opportunities for Black youth in pursuit of academic excellence.
APPENDIX A
PERMISSIONS
April 23, 2010

Comel Belin, M.Ed., MBA
4095 West Granite Dells Court
Tucson, AZ 85745

**Project Title: Ethnic Identity, Self-Esteem, Self-efficacy and Satisfaction with Life as Determinants of Sex Differences in Achievement among Black Adolescents**

Dear Ms. Belin,

I am pleased to inform you that your request to conduct research in the Tucson Unified School District has been approved for the 2009-2010 school year. We require that you:

- Provide the principal with an overview of the study and ask him to sign a copy of the attached consent form. I need to keep a copy of the form in your file so please mail the form to me.

- Obtain signed parental/guardian consent for each student and then forward the consent forms (originals or a copy) to the Principal before you begin your study.

- When you complete your study please forward a report to me (an electronic file is preferred).

If your study is a multi-year project you must re-apply annually. Please call me if you have any questions.

Sincerely,

Dynah Oviedo-Lim, M.A.
Research Project Manager
Site Authorization Letter (for study conduct and/or access to administrative records)

(Phoenix Union High School District)

September 20, 2010

Comel J. Belin
4095 West Granite Dells Court
Tucson, AZ 85745

Dear Comel:

We have reviewed your request and are pleased to support your research project entitled “Ethnic Identity, Self-Esteem, Self-efficacy, and Satisfaction with Life as Determinants of Sex Differences in Achievement.” This means that you may proceed with your study if it is acceptable to the Principals at the high schools selected for the study. Please discuss the logistics of this study with the Principals of the participating schools.

It is our understanding that all participation will be voluntary and participants may choose to remove themselves from the study at any time. It is also our understanding that a parental consent and student consent forms which indicate approval of student participation will be obtained.

also, none of the participants, the schools or the school district will be named in any reports that result from this study.

This approval is for the 2010-2011 school year.

Sincerely,

Dave Malin-signature.jpg

Dave Malin
Research Analyst/Team Leader
Phone: 602-764-1224
Email: malin@phxhs.k12.az.us
APPENDIX B

HUMAN SUBJECTS APPROVAL
## ISPP Correspondence Form

**Date:** 11/10/10  
**Investigator:** Cornel Belin, M.Ed, MBA, Ph.D. Candidate  
**Advisor:** Shinobu Mikiya, Ph.D.  
**Project No./Title:** 10-0816-02 Ethnic Identity, Self-Esteem, Self Efficacy, and Satisfaction With Life as Determinants of Gender Differences in Achievement Among Black Adolescents  
**Current Period of Approval:** 11/10/10 – 11/09/11  
Submit the "FORM: Continuing Review Program Report" no later than 45 days prior to the end of the approval period listed above.

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<th>Date</th>
<th>Status</th>
<th>Decision</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
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<td>11/10/10</td>
<td></td>
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### Initial Approval

- **Document Reviewed/Ended:** Consent Form - Social/Behavioral (version 11/01/10)  
- **Consenting Instruments:**  
  - Parental Permission Form (version 11/01/10)  
  - Subject’s Disclosure Form (version 11/01/10)  
  - Subject’s Disclosure Form - Age of Majority (version 11/01/10)  
  - VOTF (version 11/01/10)  
- **Site Authorizations:** From TUSD (dated 04/23/10)  
- **Other (define):** Survey Packet Checklist  
- **Data Collection Instruments:** Student Surveys  
- **Confirmation Email of NDI Submission:**  

### Decision Notice  
Approved as submitted effective 11/10/10

### Comments
- PHI Authorization Form not required. No Protected Health Information (PHI) is being collected in this study.
- Attached are stamped approved consent documents; please use to document consent.

### Criteria for Approval has been met (45 CFR 46.111): The criteria for approval listed in 45 CFR 46.111 have been met (or if previously met, have not changed) in that (1) Risks to subjects are minimized; (2) Risks to subjects are reasonable in relation to anticipated benefits, if any, to subjects, and the importance of the knowledge that may reasonably be expected to result. In evaluating risks and benefits, the IRB should consider only those risks and benefits that may result from the research (as distinguished from risks and benefits of therapy subjects would receive even if not participating in the research). The IRB should not consider possible long-range effects of applying knowledge gained in the research (for example, the possible effects of the research on public policy) as among those research risks that fall within the purview of its responsibility. (3) Selection of subjects is equitable. In making this assessment the IRB should take into account the purposes of the research and the setting in which the research will be conducted and should be particularly cognizant of the special problems of research involving vulnerable populations, such as children, prisoners, pregnant women, mentally disabled persons or economically or educationally disadvantaged persons. (4) Informed consent will be sought from each prospective subject or the subject’s legally authorized representative, in accordance with, and to the extent required by 46.116. (5) Informed consent will be appropriately documented,

**Risks/Information:** No changes to a project may be made prior to IRB approval except to eliminate apparent immediate hazards to subjects.
in accordance with, and to the extent required by 46.117. (6) When appropriate, the research plan makes adequate provision for monitoring the data collected to ensure the safety of subjects. (7) When appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of data. (8) When some or all of the subjects are likely to be vulnerable to coercion or undue influence, such as children, prisoners, pregnant women, mentally disabled persons, or economically or educationally disadvantaged persons, additional safeguards have been included in the study to protect the rights and welfare of those subjects.

- **Expedite Approval (45 CFR 46.110 Category 5):** Research involving materials (data, documents, records, or specimens) that have been collected, or will be collected solely for nonresearch purposes (such as medical treatment or diagnosis).

- **Expedite Approval (45 CFR 46.110 Category 7):** Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

- **Vulnerable Population – Children (45 CFR 46.404):** Research involving not greater than minimal risk (Research involving only a De-identified survey) and adequate provisions are made for soliciting the assent of the children and permission of their parents or guardians, as set forth in 45 CFR 46.408 (Parental permission is required in order for a subject to participate in research. Assent signature is not necessary, however students are told explicitly that their participation is voluntary and they do not have to participate if they do not want to).

- **Waiver of One Parental Signature (45 CFR 46.408(b)):** permission of one parent is sufficient as it is research involving not greater than minimal risk as defined in 45 CFR 46.404.

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Elaine G. Jones, Ph.D., RN  
Chair, IRB2 Committee  
UA Institutional Review Board  
EGJdeg

cc: Unit Reviewer

---

- No changes to a project may be made prior to IRB approval except to eliminate apparent immediate hazard to subjects.
APPENDIX C
SURVEYS
1. My Sex is: [ ] Male  [ ] Female

2. My Ethnicity is (Please write in your ethnicity):
   [ ] Black African (Write in your Country of Origin ___________)  
   [ ] Black American  
   [ ] Asian or Asian America, including Chinese, Japanese, and other  
   [ ] Hispanic or Latino, including Mexican American, Central American, and others  
   [ ] White, Caucasian, Anglo, European American; not Hispanic  
   [ ] American Indian/Native American  
   [ ] Biracial; parents are from two different groups ________________  
   [ ] Other (write in): _________________________________

3. My Current Age is: ___________


5. My High School is: ________________________________  City: ______________________

6. Father’s Education:  [ ] Less Than High School  [ ] High School  
   [ ] 2 year Technical/College  [ ] 4 year University  [ ] Grad/Prof

7. Mother’s Education:  
   [ ] Less Than High School  [ ] High School  [ ] 2 year Technical/College  
   [ ] 4 year University  [ ] Grad/Prof

8. What are your plans after you graduate from high school?  
   [ ] Enroll in 2 Year/Technical College  [ ] Enroll in 4 Year University  [ ] Look for a job  
   [ ] Don’t Know
Multi-Ethnic Identity Measure (MEIM: AA)

There are many ways to describe the different, cultures and ethnic groups that people come from. For example, Hispanic, Latino, Native American, African American, etc. These questions ask about your ethnicity and how you feel about it.

**Instructions:** Please read each of the following statements. Circle only **one of the responses in every row** to indicate how much you agree or disagree with each statement. **Please circle a response for every statement.**

<table>
<thead>
<tr>
<th>Statements</th>
<th>Strongly Disagree (SD)</th>
<th>Disagree (D)</th>
<th>Agree (A)</th>
<th>Strongly Agree (SA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I have spent time trying to find out more about my ethnic group, such</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>as its history, traditions, and customs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I am active in organizations or social groups that include mostly</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>members of my own ethnic group.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I have a clear sense of my ethnic background and what it means for me.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>4. I think a lot about how my life will be affected by my ethnic group</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>membership.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. I am happy that I am a member of the ethnic group that I belong to.</td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
</tr>
</tbody>
</table>
6. I have a strong sense of belonging to my own ethnic group.  

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

8. In order to learn more about my ethnic background, I have often talked to other people about my ethnic group.  

9. I have a lot of pride in my ethnic group.  

10. I participate in cultural practices in my own group, such as specific food, music, or customs.  

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

12. I feel good about my cultural/ethnic background.
Self-efficacy Questionnaire for Children (SEQ-C) (Pg. 1)

Instructions: Below is a list of questions about you and your feelings in a school setting. Circle one of the five answers below that best describes how you feel.

1. How well can you express your opinions when other classmates disagree with you?
   1 = Not well at all  2 = A little  3 = Somewhat  4 = Mostly  5 = Very well

2. How well do you succeed in cheering yourself up when an unpleasant event has happened?
   1 = Not well at all  2 = A little  3 = Somewhat  4 = Mostly  5 = Very well

3. How well can you study when there are other interesting things to do?
   1 = Not well at all  2 = A little  3 = Somewhat  4 = Mostly  5 = Very well

4. How well do you succeed in becoming calm again when you are very scared?
   1 = Not well at all  2 = A little  3 = Somewhat  4 = Mostly  5 = Very well

5. How well can you become friends with other young people?
   1 = Not well at all  2 = A little  3 = Somewhat  4 = Mostly  5 = Very well

6. How well can you study a chapter for a test?
   1 = Not well at all  2 = A little  3 = Somewhat  4 = Mostly  5 = Very well

7. How well can you have a chat with an unfamiliar person?
   1 = Not well at all  2 = A little  3 = Somewhat  4 = Mostly  5 = Very well

8. How well can you prevent yourself from becoming nervous?
   1 = Not well at all  2 = A little  3 = Somewhat  4 = Mostly  5 = Very well

9. How well do you succeed in finishing all your homework every day?
   1 = Not well at all  2 = A little  3 = Somewhat  4 = Mostly  5 = Very well

10. How well can you get along with your classmates while working together?
    1 = Not well at all  2 = A little  3 = Somewhat  4 = Mostly  5 = Very well
11. **How well can you control your feelings?**
   1 = Not well at all  2 = A little  3 = Somewhat  4 = Mostly  5 = Very well

12. **How well can you pay attention during every class?**
   1 = Not well at all  2 = A little  3 = Somewhat  4 = Mostly  5 = Very well

13. **How well can you tell other young people they’re doing something you don’t like?**
   1 = Not well at all  2 = A little  3 = Somewhat  4 = Mostly  5 = Very well

14. **How well can you give yourself a pep talk when you feel low?**
   1 = Not well at all  2 = A little  3 = Somewhat  4 = Mostly  5 = Very well

15. **How well do you succeed in passing all school subjects?**
   1 = Not well at all  2 = A little  3 = Somewhat  4 = Mostly  5 = Very well

16. **How well can you tell a funny story to a group of young people?**
   1 = Not well at all  2 = A little  3 = Somewhat  4 = Mostly  5 = Very well

17. **How well do you succeed in satisfying your parents with your schoolwork?**
   1 = Not well at all  2 = A little  3 = Somewhat  4 = Mostly  5 = Very well

18. **How well are you able to remain friends with other young people?**
   1 = Not well at all  2 = A little  3 = Somewhat  4 = Mostly  5 = Very well

19. **How well do you succeed in holding back unpleasant thoughts?**
   1 = Not well at all  2 = A little  3 = Somewhat  4 = Mostly  5 = Very well

20. **How well do you succeed in passing a test?**
   1 = Not well at all  2 = A little  3 = Somewhat  4 = Mostly  5 = Very well

21. **How well do you succeed in not worrying about things that might happen?**
   1 = Not well at all  2 = A little  3 = Somewhat  4 = Mostly  5 = Very well
DO NOT WRITE YOUR NAME OR BIRTHDATE ON THIS FORM!!

Rosenberg Self-Esteem Scale (RS-ES)

Instructions: Below is a list of statements dealing with your general feelings about yourself. If you strongly agree, circle SA. If you agree with the statement, circle A. If you disagree, circle D. If you strongly disagree, circle SD.

1. On the whole, I am satisfied with myself. SA A D SD
2. At times, I think I am no good at all. SA A D SD
3. I feel that I have a number of good qualities. SA A D SD
4. I am able to do things as well as most other people. SA A D SD
5. I feel I do not have much to be proud of. SA A D SD
6. I certainly feel useless at times. SA A D SD
7. I feel that I’m a person of worth, at least on an equal plane with others. SA A D SD
8. I wish I could have more respect for myself. SA A D SD
9. All in all, I am inclined to feel that I am a failure. SA A D SD
10. I take a positive attitude toward myself. SA A D SD
### Satisfaction With Life Questionnaire (SWL Q)

**INSTRUCTIONS:** Please indicate how much you agree or disagree with each statement below.

<table>
<thead>
<tr>
<th>Statements</th>
<th>Not at All</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In most ways my life is close to my ideal.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. The conditions of my life are excellent.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. I am satisfied with my life.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. So far I have gotten the important things that I want in life.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. If I could live my life over, I would change almost nothing.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
DO NOT WRITE YOUR NAME OR BIRTHDATE ON THIS FORM!!

Perceived Caring Measure (PCM)

Instructions: Below is a list of statements dealing with your general feelings about how you as an African American learner perceive how much your non-African American teacher cares about you as an African American student. If you strongly agree, circle SA. If you agree with the statement, circle A. If you disagree, circle D. If you strongly disagree, circle SD.

1. My teacher cares about me as an African American Student. SA A D SD

2. My teacher has my interest at heart as an African American Student. SA A D SD

3. My teacher is self-centered about cultural diversity. SA A D SD

4. My teacher is concerned with me and my African American culture. SA A D SD

5. My teacher is sensitive to my needs as an African American student. SA A D SD

6. My teacher is understanding of my ideas, feelings, and needs as an African American student. SA A D SD

7. My teacher is responsive to me in that he/she reacts to my needs quickly, is attentive to my needs, and listens to what I say as an African American student. SA A D SD

8. My teacher understands how I feel about discrimination as an African American student. SA A D SD

9. My teacher is empathetic toward me as an African American student in that he/she can see situations from my point of view and feel how I feel about it. SA A D SD

10. My teacher understands how I think as an African American student. SA A D SD
APPENDIX D
FLOWCHART
Flow of Study Participants

140 participants meet eligibility criteria to participate in study through school contacts, outreach, fliers, letters, presentations.

140 submit informed consent to participate

Sample 1
140 Surveys
N = 89 Females
N= 51 Males

Sample 2
GPA Only
N=50 Males
N = 45 Females

Sample 3
AIMS R,W,M
N=18 Males
N=16 Females

95 GPA’S released by districts

34 comprise test scores released by districts

95 GPA’S released by districts

34 comprise test scores released by districts
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