Spring 2010

Academic Engagement: The Impact of Personal, Cultural, and School Factors on African American Student Academic Effort

Ruth Alisha Jenkins Hill
Old Dominion University

ACADEMIC ENGAGEMENT: THE IMPACT OF PERSONAL, CULTURAL, AND SCHOOL FACTORS ON AFRICAN AMERICAN STUDENT ACADEMIC EFFORT

by

Ruth Alisha Jenkins Hill
B.A., June 2000, Georgia State University
M.Ed, June 2002, Georgia State University
Ed.S, December 2009, Old Dominion University

Dissertation Submitted to the Faculty of
Old Dominion University in Partial Fulfillment
of the Requirement for the Degree of

DOCTOR OF PHILOSOPHY

EDUCATION

OLD DOMINION UNIVERSITY
April 2010

John Nunnery (Director)

Karen Crum (Member)

William Owings (Member)

ABSTRACT

ACADEMIC ENGAGEMENT: THE IMPACT OF PERSONAL, CULTURAL, AND SCHOOL FACTORS ON AFRICAN AMERICAN STUDENT ACADEMIC EFFORT

Ruth Alisha Jenkins Hill
Old Dominion University, 2010
Director, Dr. John Nunnery

Using the cultural-ecological and the personal perspective theory, this study examined the relationship of sociological and psychological factors on academic effort. This research used multiple linear regression analyses and data from the Educational Longitudinal Study of 2002 to examine the extent to which personal, cultural, and school structural variables predict academic effort among a sample of 10th grade African American students.

African American students' personal perceptions characterizing their belief in the importance of education, their value of schooling, and their desire for higher learning were strongly correlated with academic effort. The results also indicated parental involvement and parental aspirations played a substantial role in predicting student levels of academic effort. After controlling for personal and cultural factors, school factors were found to have no significant relationship with academic effort. For both groups, gender comparisons revealed that personal factors and parental involvement and aspirations were related to levels academic effort, while school factors such as course enrollment, personnel aspirations, and school climate showed no significant relationship with academic effort among African American male and female students. The findings showed personnel aspirations were positive and

significant predictors of academic effort among African American males whereas for females, personnel aspirations were positively associated with academic effort but not significantly influential. Furthermore, course enrollment and school climate were found to have no significant relationship with academic effort among females; however, both measures have a relatively small effect on academic effort among male. In total, the non-significant effect of family SES and family educational resources on academic effort was a surprising finding from this study. Overall, personal and cultural factors were found to be the most important predictors of academic effort among African American students.

Given these results, the study reinforced the need for researchers to take a cultural-ecological approach and the personal perspective when examining academic engagement of African American students. Also, the study implicated that educational policy, programs, and reform efforts aimed at increasing academic success among African American students should consider the effects of personal and cultural factors that influence the students' developing epistemological beliefs, which define academic effort.

Co-Directors of Advisory Committee: Dr. Karen Crum
Dr. William Owings

To my village~

My Family

Arthur, Jackie, Katherine, Charlie, Tasha, and Aunt Lena

Thank you for instilling in me the value of education.

My Friends

Dornita, Calvin, Candra, Gabrielle, Janice, Melanie, and Sharon

Thank you for your support and encouragement.

My Children

Tyler and Channing

Thank you for your unconditional love, understanding, and patience.

May you be inspired to reach your goals and become the person you are meant to be.

ACKNOWLEDGEMENTS

I am thankful for everyone who makes up my support system because without them this dream would not be a reality. First, I must acknowledge and give thanks to God for ordering my steps on this educational journey. I thank God for blessing me in order for me to become the person He wants me to be. Because I truly believe this PhD is aligned with God's purpose for my life, I am passionate about my role in education.

To my committee chair Dr. John Nunnery, thank you for your guidance and sharing your wisdom with me. To my dissertation committee, thank you for your input and support. I am truly grateful for you, Dr. Karen Crum and Dr. William Owings. Additionally, I am thankful for the unwavering assistance and encouragement of other ODU faculty and staff members, Dr. Steve Myran, Dr. Linda Bol, Mrs. Dawn Hall, and President John Broderick.

To my sons, Tyler and Channing, who have sacrificed with me, you have shown extraordinary patience and good spirit, which have made me even more determined to complete this academic endeavor. I love you and I thank God for you.

To my family and friends, thank you for keeping me lifted in prayer, editing my drafts, babysitting my children, and providing me with love and support. Dornita and Calvin Smith, you have been a blessing in my life and my sons' lives. Your unconditional love, support, spiritual guidance, and confidence in me mean more than I can ever explain.

I am thankful for each and every supporter who believes in me. I am blessed to have you all in my life as my "village".

TABLE OF CONTENTS

Page

Page

LIST OF TABLES

LIST OF FIGURES

Figure Page

CHAPTER I

REVIEW OF THE LITERATURE

Overview

This literature review describes research related to the growing efforts to decrease the educational outcome gap between African American student engagement in advanced curricula compared to their peers. More specifically, this literature review describes the need to examine academic engagement in relation to educational achievement, to provide a review of the theoretical frameworks that researchers have used to assess African American student engagement, to identify the personal, cultural, and school factors that influence student engagement, to describe the correlation among influencing factors, and to describe what needs to be learned about racial and gender effects on academic engagement.

Academic Engagement and Achievement

Academic engagement plays a substantial role in student academic achievement (Ogbu, 2003; Stewart, 2007). To summarize the definitions provided in the literature, academic engagement can be described as the level of commitment and involvement or the amount of time, energy and effort that students put into their educational learning activities (Green, Marti, & McClenney, 2008; Stewart, 2007). Research studies show that student effort has a significant effect on academic achievement (Carbonaro, 2005; Johnson, Crosnoe, & Elder, 2001). In a study of individual-level predictors of achievement, Stewart (2007) found that student effort increases student achievement. In particular, the study concludes that students with increased levels of attachment and commitment to their schoolwork also have increased grade point averages. Considering

the nationwide effort to narrow the achievement gap and to recruit minority students into academically rigorous courses and programs, it is important to ensure that African American students are academically engaged.

As demonstrated by the expanding achievement gap, African American students are not academically involved in their schoolwork at the same level as their peers. The present state of academic engagement for African American students is often depicted specifically by the Black-White achievement gap, which is most commonly defined by the academic achievement levels on national and state administered standardized tests (Haycock, 2001). In relation to standardized tests, African American students have traditionally performed much lower than White students. Despite the findings of the Sandia Report (Stedman, 1994) that suggests a steady improvement in public school education results, the reading and vocabulary achievement gaps between African American and White students continue to expand (Education Trust, 2004). In this same manner, minority students lag behind their peers in math and science (Johnson and Kritsonis, 2006). Further research demonstrates that academic failure perpetuates low-levels of attainment in other areas. African American students have higher dropout rates (Kaufman, Kwon, Klein, & Chapman, 2000), they are more likely to be suspended from school (Jackson, 2001), and they are more likely to delay college enrollment (Rowan-Kenyon, 2007). In order to improve academic achievement, policymakers and researchers must began to focus on what influences students to become engaged in their schooling and thereby put forth the effort needed to attain increased educational outcomes.

The primary goal of the No Child Left Behind Act of 2001 (NCLB) and other curricular reform efforts is to narrow the achievement gaps by ensuring that all students are academically prepared for college. Accordingly, many states are responding to NCLB by increasing minority student access to rigorous coursework; however, College Board (2007) reports that equitable representation of African American students has not been achieved by any states. In the same way, for the 2006-2007 school year, the U.S. Department of Education (2007) reports that only 4% of high school students from low-income backgrounds complete academically challenging courses. More specifically, research indicates the achievement and learning gaps are a result of low minority enrollment in high school honors and Advanced Placement (AP) classes (Darity, Castellino, Tyson, Cobb, & McMillen, 2001). Conclusively, enrollment into advanced courses and programs describes the level of student commitment to rigorous schoolwork.

Low minority-student engagement in advanced classes has a major impact on the achievement gap as well as the social and cultural economy. The research speaks to the ability of advanced curricula programs to help disenfranchised students overcome systematic and cultural structures that may otherwise prevent them from attaining a college education (Klopfenstein & Thomas, 2005). Dougherty, Mellor and Jian (2006) studied the relationship between taking AP classes in high school and graduating from college, and they found that even low-income students who failed an AP exam had higher graduation rates of about 20% more than their peers who had no AP experience. The researchers' findings also indicate that students who earn a "3" or higher on an AP exam will graduate college within five years or less. Despite the attempts to increase minority

access to Advanced Placement, racial disparities still exist when it comes to course enrollment.

In its present state, AP programs have been extended to any student who is capable and willing to do the work (College Board, 2007). Performance gaps between African American and White students are narrowed when comparing students who have taken advanced classes (Aldeman, 2006). Moreover, Brown (2000) found that African American students who enrolled in higher-level science and math courses felt more prepared to pursue a college degree. Therefore, if students are not academically prepared for college, they are less likely to attain postsecondary education and successful work (Adelman, 2006). Because of academic gains due to Advanced Placement programs, the federal, state, and local government officials encourage schools to increase access to AP courses and generate participant diversity that reflects the growing population of American schools.

Investments in Academic Engagement

Taking into consideration the expected national and international demographic shifts, the consequences of low African American student engagement not only affects the individual students but our society as a whole. Based on increasing diversity, a national report depicts the importance of investing in educational engagement and achievement for minority students (The National Center for Public Policy and Higher Education, 2005). This report projects by the year 2020 the workforce will undergo transformation as the working population of whites will decline to 63% while the working population of African Americans will double and Hispanics will triple. Like other research, this report highlights the negative social and economic losses associated

with the lack of educational achievement. The importance of identifying the factors that influence African American student academic engagement manifests into political and economic sovereignty, which is beneficial to not only the individual but the American society.

Professional literature continues to demonstrate that improving academic engagement and achievement provides increased benefits for America's social, cultural, and economic future. Owings and Kaplan (2006) show that commitment to education increases social networks such as voting, volunteering, making charitable contributions, and participating in cultural and leisure activities. As demonstrated by Lin (2001), this type of social networking produces social capital, which generates access to other resources that all the participants can use to their advantage. The literature makes clear there is a positive increase in social relations with each increase in educational involvement.

Nonetheless, students who lack cultural capital unintentionally do not invest their time and energy into their education as first demonstrated in a research study conducted by Bourdieu & Passeron (1977). Further supporting the cultural capitalist theory that values can be passed on from one generation to the next (Bourdieu & Passeron, 1977), Owings and Kaplan (2006) present evidence for the cultural benefits of investing in education. Citizens who have more education are less likely to continue negative social and educational trends associated with culture. Similarly, they propose higher levels of education result in decreased achievement gaps. For African Americans, this means as they invest more effort towards advancing their education, they will develop and pass on a stronger culture of achievement.

Nonetheless, the growing body of literature indicates that investments in education directly impact the economy and quality of life (Owings & Kaplan, 2006; Schweke, 2004). According to (Schweke, 2004), high-quality education programs lead to higher gains in economic and social achievement that benefits not only the individual but also society at large. Disenfranchised students who are committed to receiving at least an associate's degree earn almost 23% more than their peers who do not receive a degree (Schweke, 2004). In the same manner, other research shows the economic value of investing in programs that prepare students to obtain a college education. Compared to workers who only graduated from high school, workers who receive a college degree earn about 60% of the median income in the U.S. (Baum & Payea, 2005). A study from the U.S. Department of Commerce found that African American workers with less than a high school diploma would earn less than a million dollars in their life time, while those with a high school diploma will earn close to a million and those with advanced degrees earn from $1.7 to $2.5 million (2002). As demonstrated in similar studies, as the level of educational investment increases so does economic success. Specifically, the literature speaks to the need to provide minority students with high-quality educational involvement in order to improve our society's financial power and way of living.

Influencing Factors of Academic Engagement

The research suggests that structural inequalities and cultural characteristics are major influences of low levels of African American student engagement (Krei, 1998; Peske & Haycock, 2006; Skiba, Simmones, Ritter, Kohler, Henderson, & Wu, 2006). More specifically, "within-school" system structures in terms of funding, staffing, tracking and ability grouping limit student engagement (Smith-Maddox, 1999; Saddler,

2005). On the other hand, cultural associations such as social identity and self-efficacy, cause African American students to academically disengage by putting forth minimal effort (Whiting, 2006).

School Structural Inequities and Academic Engagement

Because school funding is not equally dispersed, urban schools, comprised of majority African American students with low student engagement, are inferior to suburban schools, majority White students. According to the Education Trust's *Funding Gap 2005* report,

> 28 states, high-minority districts receive less state and local money for each child than low-minority districts.... Across the country, $908 less per student is spent on students in the districts educating the most students of color, as compared to the districts educating the fewest students of color (p. 6).

Because serious consequences result from failing to adequately and equitably fund poverty stricken minority schools, funding disparities appear to have a negative effect on a school's ability to provide African American students with academically engaging programs and resources. Consequently, funding disparities are also linked to staffing inequities that circumvent African American student academic engagement and achievement. Well-funded schools receive high quality teachers while poorly funded districts receive majority inexperienced teachers (Krei, 1998). A more recent empirical study conducted by Peske & Haycock (2006) found there is a large number of teachers with less experience, education, and skills teaching in schools that serve a large number of poor and minority students. According to their study, minority students from low income backgrounds who are already unequipped with advance knowledge and skills are

limited because they lack opportunity to have highly qualified teachers. Skiba et al. (2006) found that a lack of resources contributes to the overrepresentation of minority students in special education The research suggests that structural inequalities are major influences in the low performance of African American students.

Tracking, which is known among educators as a structural inequality that limits academic engagement, continues to exist as common practice in our contemporary schools. Tracking manifests as a form of "within-school segregation" that creates a clear racial divide between students enrolled in the lower tracks versus those enrolled in accelerated tracks. Students enrolled in lower track programs receive a separate educational experience from those enrolled advanced level programs. Most commonly, African American students are over represented in lower, more general vocational tracks (Burris & Welner, 2005). In addition to tracking, ability grouping poses a challenge to the education of African American students. Ability grouping is the systematic process of labeling students based on their genetic or intellectual weaknesses. Ability grouping has made way for African American students to be disproportionately placed into special education programs (Green, McIntosh, Cook-Morales, & Robinson-Zanartu, 2005).

Cultural Characteristics and Academic Engagement

Prominent researchers have shown that African American students themselves also play a part in their own mis-education or academic disengagement (Ogbu, 2003; Gayles, 2005). Based on thorough research of affluent African American students, Ogbu (2003) asserted African American students in general possess a "norm of minimum effort" that binds them to low academic achievement. He found high-achieving African American students put forth only enough effort to pass their classes so they could avoid

the demands of workloads with high expectations. Based on his research, Ogbu concluded African American students themselves create the racial barriers that block their educational achievement. While minority students share a common belief that education is an important component of success, most of them demonstrate a lack of academic effort (Ford, Grantham, Whiting, 2008; Ogbu, 2003).

Although current education reform movements focus on recruiting and retaining minority enrollment in accelerated programs, a large number of African American students elect not to participate in what they perceive as academically-challenging courses. Researchers hypothesize the low-participation results from a fear of "acting white" or "selling out their social and ethnic identity for an academically successful identity of their white counterparts" (Alexander, 2004; Fordman & Ogbu, 1986). Consistent with Ogbu's findings, Ford et al. (2008) found that gifted African American students perform poorly in school because they exert little effort and do not engage in academically rigorous activities and hobbies. Further research attempts to explain low academic effort among African American students by examining two themes: 1) distanced and diminished achievement and 2) utilitarian achievement (Gayles, 2005). Accordingly, Gayles (2005) found high achieving African American students tend to reduce or diminish the importance of their own academic achievement as not to be distinguished socially from the culture, yet at the same time, those students consciously behave in a manner that does not distance them from academic achievement. Too add, high achieving African American students have a utilitarian value of achievement, which means to separate one's academic achievement from one's social status within ones culture in order to avoid negative social consequences. In examining the effort towards

academic success, the literature suggests, in general, African American students intentionally put forth little to no effort in resistance to a scholarly identity.

Drawing from the review of the literature, the study of academic engagement is the first step toward a better understanding of the factors that influence academic achievement. To address the complex effects of the social and academic achievement gaps in order to create social, cultural, and economic capital, researchers and policy makers must consider the factors influencing the restricting confines of student academic effort.

Theoretical Frameworks

Researchers have used a number of theories and developed varying perspectives to explain academic engagement (effort). This section will critically review the personal perspective, the ecological theory, and the cultural-ecological theory used to investigate factors that influence students' academic effort.

Personal Perspective

The most widely shared explanation for academic disengagement pinpoints the unique characteristics of the individual students. Individual characteristics reflect the students' educational values and determine their motivation for completing classroom assignments. According to espistemological research, students' self-identity and social relationships make them into passive or active receivers of knowledge (Schommer-Aikins, 2004). The personal perspective of learning focuses on factors that describe students' personal behaviors, beliefs, and attitudes toward schooling.

As cited in an empirical study by Hardre□, Crowson, Debacker, and White (2007), a student's self-perception of his/her ability has an impact on the time and effort

spent on learning and completing coursework. Accordingly, the researchers conclude school engagement is positively predicted by self-perception measures that control performance-approach goals. Derived from the ideas of the personal perspective, this study attributes the students' sense of self as the predicting variable of student success.

Moreover, research across time consistently finds that feelings of efficacy have a positive impact on students' efforts to study (Duckworth, 1986). In particular, Johnson et al. (2001) found the more students feel vested in their school, the more effort they put towards school. On the other hand, the research shows students exhibit low effort when they do not understand how schoolwork relates to their lives (Damico, Fradd, Roth, & Hankins, 1990). Students put forth varying amounts of academic effort based on their own personal feelings towards the school work in terms of its meaningfulness, relevancy, and ability to be transformative.

While the personal perspective provides useful insight into the personal characteristics influencing student engagement, this theory does not consider the complex relationships of human development and the surrounding environment. In order to critically examine student academic engagement, the internal and external influences must be considered simultaneously.

Ecological Theory

Researchers looking to explore the individual and the social contexts of the environment draw on Bronfenbrenner's (1979) ecological theory. The central idea of this theory is that human developmental behavior is affected by the environment. The ecological theory is a developmental model of social structures and processes that impacts an individual's behavior.

Specifically, Bronfenbrenner's structural environment is categorized by several interacting levels: the microsytem, the mesosystem, the exosystem, and the macrosystem. The microsystem consists of structures in which an individual has direct contact (i.e., peers and family) and the mesosystem refers to the interaction between the individual and the structures of the microsystem. Similarly, the exosystem consists of the larger social environment of which indirectly affects an individual (i.e., school and neighborhood) while the macrosystem (i.e., cultural values, beliefs, societal norms, and laws) influences all layers of the individual's environment. Similar to the personal perspective, the ecological theory targets internal influences of the individual on external constructs (Stewart, 2007).

By examining the social contexts of the ecological theory, researchers are able to understand the complex relationships between the individual, the family, and school level characteristics. Stewart (2007) used the ecological theory to examine the interactions between the individual, family, and school level variables to determine the predictors of academic achievement. Stewart found that student effort, parent-child discussion, and positive peer associations significantly increased student achievement. In addition, she supports her finding by citing other research studies that show a link between African American students' individual characteristics and social contexts that impacts African American student achievement. Those research findings suggest that African American students living in impoverished inner-city neighborhoods are negatively impacted in regards to achievement (Stewart, 2007).

Although the ecological theory presumably can be used to explain the broad aspects of academic engagement, it cannot explain the specific aspects of African

American student culture in relation to student effort. In terms of assessing the cultural aspect of academic effort, a different theoretical framework is needed. The cultural-ecological model is advantageous because it investigates multi-factor characteristics (i.e. race, individual development, and relationships) related to student engagement.

Cultural-Ecological Theory

Highly criticized yet theoretically sound in that the framework captures the social impact of race in education, John Ogbu's (2003) cultural-ecological (CE) theoretical model addresses two race-related factors that influence minority student performance. According to this theory, minority students respond to schooling based on the way society and its institutions treat or have treated the minorities (the system) and how minorities themselves interpret and respond to their treatments; that is, their adaptations to the U. S. society and to their minority status (community forces). (Ogbu, 2003, p. 45) The first theme of CE calls attention to racism as institutionalized or ingrained into the systematic structure of education. The second theme challenges the cultural experience of African American students that prevents them from taking on a responsible role for their own academic attainment.

To further explain, the impact of *the system* is based on three types of treatment of minorities in education that influence their adjustment to school and their academic performance. The aspects of the system that have the strongest influence on minority students' education: 1) educational policies and practices (school segregation and unequal funding), 2) school climate and culture (low expectations and tracking), and 3) achievement rewards (recognition and salary). These three components attempt to explain the collective discrimination faced by minorities, particularly African Americans.

Accordingly, African American students respond to education based on how they are treated within the schools. This theme is consistent with the findings of other empirical studies that pinpoint school factors such as exclusionary practices, faculty and staff low expectations, and unequal opportunity as the leading cause of low minority student participation in rigorous course-taking (Ferguson, 2003; Darity, Castellino, Tyson, Cobb & McMillen, 2001).

Equally important to racial factors within the system, *community forces*, the psychological and social background of minority students influence their motivation and academic engagement. The cultural-ecological theory, sometimes referred to as oppositional culture theory posits that African American students' cultural frame of reference has a significant influence on their resistance to schooling and academic achievement. The influencing aspects of culture include 1) frame of reference (race and socioeconomic status), 2) educational beliefs and behaviors (effort), 3) relationship with the educational system (treatment and representation), 4) collective identity ("acting white" v. "acting black") , and 5) educational strategies (course-taking and accountability). According to this theory, Ogbu makes a clear distinction between African American students' voluntary and involuntary minority status as a factor of their disengagement. He posits that immigrants of color whose families willingly come to America for better opportunities tend to engage more in school than involuntary minorities who are descendants of slaves. Consequently, involuntary minorities disengage from school because of deep rooted oppression and discriminatory practices they have had to endure. However, from a critical perspective, this idea of voluntary and involuntary minority status is more stereotypical than it is absolute because it does not

take into consideration individuality and circumstance. Nonetheless, related research findings demonstrate that cultural factors play a key role in minority students' persistence (or lack thereof) towards academic achievement (Borman, Stringfield, Rachuba, 2000; Fryer & Torelli, 2005).

Ogbu's cultural-ecological framework helps explore the interlocking factors that researchers find to have the most impact on African American student engagement and achievement. Figure 1 is a synopsis of these factors, which demonstrates their relationships to one another and their ability to interact and consequently, mold the educational engagement and achievement of African American students. The figure illustrates the links between equivalent concepts of the system and within-school factors as well as the relationships between synonymous concepts of community forces and within-culture factors.

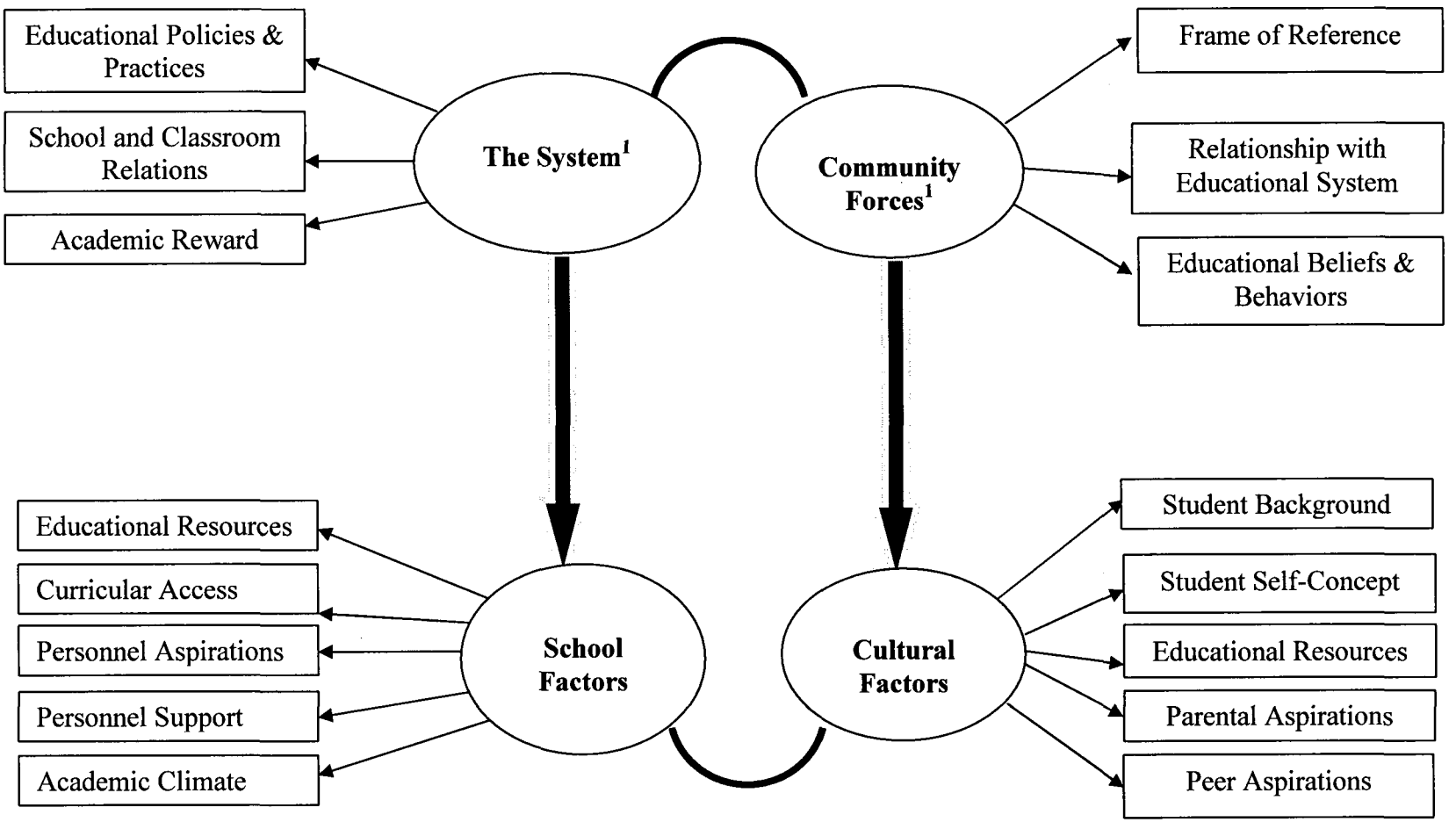

Figure 1. Conceptual model of the factors that impact student engagement and academic achievement

[1] Indicates the two major factors of Ogbu's cultural-ecological theory. SOURCE: Ogbu, J. U. (2003). *Black students in an affluent suburb: A study of academic disengagement*. New York: Lawrence Erlbaum.

Role of Personal Factors

This section focuses on the role of a student's individuality or personal characteristics that ultimately impact whether or not he or she will choose to engage in school. In particular, this section describes the individual traits surrounding African American students' sense of self-efficacy as it relates to their beliefs, behaviors, and aspirations that impact student engagement or academic effort.

Student Beliefs

As documented by the personal perspective, the amount of time and effort that students put towards schooling depends on how they perceive themselves academically. Negative perceptions of high academic achievement, sometimes referred to as anti-intellectual attitudes, lead African American students to disengage in rigorous coursework. Hofstadter (1963) used the term "anti-intellectualism" to describe the American culture's disrespect toward intellectual thought and academics. According to the original definition, anti-intellectuals prefer an educational experience that is vocational and based on routine knowledge. As cited by Elias (2008), the causes of anti-intellectualism in the American culture can be attributed to how negative portrayal of intellectuals are in movies, the dominance of economic capital over cultural capital, and instability of a degree to guarantee a job. Based on this empirical study investigating self-efficacy and anti-intellectual attitudes, students who possess high academic self-efficacy are less likely to have anti-intellectual attitudes.

Rooted in historical norms of segregation, the ideas of anti-intellectualism, which require that African American students put on a show of ignorance and

inadequacy (Clift, Anderson, Hullfish, 1962) exist among African American students even today. Although there is very little empirical research regarding the impact of anti-intellectualism, critical race theorists and other scholars identify anti-intellectual beliefs as a major factor impacting African American students' disinterest in academic school work and concentration on learning more economically beneficial vocational skills (McWhorter, 2000; Cross, 1990). A common but controversial belief among scholars, African American students become victims of anti-intellectualism, which causes them to question themselves in regards to their own ability to succeed as intellectuals. African Americans who choose to become intellectuals do so based on their personal pleasure, sense of self-worth, or sense of personal duty (West, 1994). Accordingly, the anti-intellectual belief is so ingrained into the African American community that black intellectuals are not trusted or held in high regard within their own culture. This anti-intellectual identity permeates students' self-perceived ability to use academics as a means to success.

Accordingly, Hardre□ et al. (2007) conducted an empirical study, which investigated whether or not perceived ability among other factors predicted engagement and effort in school. The researchers found that students' self-perception of their academic ability influences their performance-approach to academics. In fact, their research suggests that students who believe they can learn the content and complete challenging tasks engage in academic competition with their peers but those students who do not tend to avoid even putting forth the effort.

To further explain how students' personal beliefs influence their behavior, researchers postulate that African American students disengage because they do not believe that academics is the key to success (Ogbu, 2003). However, as cited by

Hawkins and Mulkey (2005), other studies find a positive correlation between participation in sports and enrolment in academic coursework among African American students. Taking these two points into consideration, the connecting thread is that generally African American students do believe academic achievement is a key to success; they just may not believe academic achievement alone is the key to success.

Student Behaviors

Ogbu (2003) asserts that African American students in general possess a "norm of minimum effort" that binds them to low academic achievement. He found high-achieving African American students put forth only enough effort to pass their classes so they could avoid the demands of workloads with high expectations. Ogbu's findings led him to conclude that minority students resist academics. Based on his research, Ogbu argued that African American students themselves create the racial barriers that block their educational achievement. Consistent with Ogbu's findings, Ford, Grantham, and Whiting (2008) found that gifted African American students perform poorly in school because they also lack effort and they lack academically rigorous activities and hobbies.

Nevertheless, some research supports a culture of resilience among high achieving African American students (Borman et al., 2000; Gayles, 2005; Whiting, 2006). In an attempt to explain why minority students lack confidence in school, Whiting (2006) found that African American and Hispanic males who possessed a scholarly identity had a strong sense of self-efficacy. Because of their intelligence, those students refused to succumb to negative stereotypes and held a strong need for achievement. To further explain the behavior of high achieving minority students,

Gayles (2005) examined the way resilient African American males defined academic achievement. In spite of the threat to generalizability, the study found that the three students strategically behaved well socially so they would not be ostracized by their peers. They wanted to show they could "act black" and be intelligent at the same time. Accordingly, those high achieving African American students believe academic achievement is a means to positive educational outcomes. As discussed, in regards to African American student beliefs and behaviors, identity is a major influencing factor on academic engagement and achievement.

Student Aspirations

In order to explore academic effort, it is essential to examine students' educational aspirations. In general, aspirations are defined as one's personal view of the extent he or she will succeed in life. When examining African American student aspirations, researchers discovered conflicting findings of low-levels of performance and high-levels of aspirations. Existing research pinpoints teachers, counselors, parents, and peers (Flowers, Milner, and Moore, 2003; Smith-Maddox, 1999) as major influences of an African American students' aspiration.

An extensive amount of research focuses on the development of student aspirations; however, the link between student effort and aspirations is rarely explored. Because of contradictory findings of low performance but high self-perceptions of ability among African American students, Flowers et al. (2008) examined the impact of locus of control on student aspirations. Controlling for internal and external factors that impact student performance, the researchers investigated how students perceive what happens to them in life. The researchers found African American students who believe they have control over their life have

higher aspirations. Having controlled for student, family, and school characteristics, the researchers concluded that internal attributions for success significantly effects educational aspirations.

In agreement with existing research, a student's personal ambition impacts his or her level of academic commitment and involvement. Cooper (2006) found minority students, including African Americans, were more likely than Whites to have plans on receiving at least a bachelor's degree. In the same study, she found compared to students enrolled in lower-vocational tracks, students in higher-level tracks were more likely to aspire to attain a bachelor's degree. Similarly, Smith-Maddox (1999) found that students in low-ability groups were less likely to have high aspirations. This line of research suggests students' educational aspirations are linked to students' academic engagement (effort).

In conclusion, the connecting themes in the literature demonstrate how a student's personal characteristics play a part in their academic engagement. What a student believes, the way he or she behaves, and what he or she aspires to be clearly has a connection to how much effort he or she will put forth in school.

The Role of Cultural Factors

The purpose of this section is to describe the role of cultural background or community forces that perpetuate African American engagement and participation in advanced curricula. This section identifies the social characteristics surrounding the peer and family associations and socioeconomic status (SES) that impact African American student engagement and achievement.

Peer and Family Associations

Peers

The social characteristics of peer pressure greatly influence the academic goals and development of African American students (Gibson, Gandara, and Koyama, 2005; Smith-Maddox, 1999). In general, African American students value their collective identity more than they value being racially segregated in rigorous classroom settings. Research identifies negative peer pressure as a reason African American students resist academic achievement (Saunders & Maloney, 2004). Minority students, African Americans in particular, limit their own academic achievement because they fear being chastised for "acting White" (Fordham and Ogbu, 1986; Ford et al., 2008). Andrew Sokatch (2006) examined the roles that peers play in minority student willingness to go to college. He found that minority student graduates are ten times more likely to enroll in college if their friends plan on attending college as well. Accordingly, minority students base their educational attainment on their friends' plans and desires. In this manner, high achieving minority students who associate with other high-achieving peers have higher aspirations (Borman et al. 2000). Conclusively, social status impacts academic engagement and achievement among African American students.

Family

Similar to peer effects, parental expectations or family support are cultural factors that impact student engagement. Jacobs and Harvey (2005) found that students achieve according to their parental expectations. Contrary to assumptions inherent in conventional thinking that African American students underachieve

because their parents are apathetic toward schooling, the historical and contemporary fight to gain access to education demonstrates the African American culture values educational opportunity. Indicative of this cultural capital, research shows that minority students' academic resilience and persistence are motivated by parental expectations (Brown, 2000). More specifically, the researchers found students who were academically successful had parents with high academic standards and career expectations for their children. Consistent with those findings, students with parents who take an active role in their homework, extracurricular activities, and schooling in general have a propensity of higher levels of success (Anguiano, 2004). As presented in Jacobs and Harvey's study (2005), parents of students at low achieving schools valued school as an opportunity to aid in their children's personal growth and moral character. The literature speaks to the common belief that the more academic support students have at home the more likely they are to do better in school.

Socioeconomic Status (SES)

Minority students' socioeconomic background has a direct impact on their levels of achievement (Burris and Welner, 2005; Howells, 2001; Rowan-Kenyon, 2007). Logically, students from low-income families are more likely to have fewer educational resources in the home to support their academic engagement. Therefore, when taking into account factors that may influence student academic engagement, it is only logical to consider the students background in terms of SES.

As cited by Burris and Welner (2005) academically-able minority students from low-income families have about a "50-50 chance" of being tracked into advanced courses. In fact, research shows that high achieving poor African American students disengage from school as early as the first grade (Borman et al., 2000).

Consequently, minority students from low SES backgrounds are less likely than middle class minorities to be identified as high achievers (Howells, 2001). More recent research suggests that SES is a predictor of college enrollment. Even though the researchers were unable to account for family size and set clear parameters for low family income, Rowan-Kenyon (2007) examined data from the National Educational Longitudinal Study: 1988-2000 and found that middle class students were more likely to enroll in college upon graduating from high school. In addition, the data showed that as SES increases so does the likelihood of enrolling in college. As for the literature, researchers consistently include SES as a predictor variable because poor students are less likely to be recommended for and prepared for challenging courses.

In conclusion, minority students' cultural background greatly impacts their educational perceptions and consequently their performance in school. According to the literature, minority students do not perform well in school because their own cultural frame of reference makes it difficult for them to connect education with success (Ogbu, 2003).

The Role of School Factors

This section focuses on the role of school factors that present risks for student academic disengagement. More specifically, this section addresses discriminatory system structures, in terms of curricular access, personnel aspirations, and school climate.

Curricular Access

Academic tracking

According to the U.S. Department of Education one of the major issues impacting postsecondary achievement is that very few students from low socioeconomic backgrounds are given the encouragement and opportunity to take courses that prepare them for college. Having been tracked into lower-level coursework, most African American students are excluded from engaging in advanced curricula. Tracking, the process by which schools assign students to a graduation plan, prescribes for them (or limits them to) the amount of effort they will need to put towards schooling. The graduation plan is hypothetically based on the students' intellectual ability and academic interests. Aligned with the conclusions of most recent educational discussions describing school climate and culture, Saddler (2005) suggests public schools have taken on a "school-within-a-school" model where students of color attend school with white students but within that school most African American students learn from a separate curriculum using separate resources. Tracking practices are influential in sustaining inequity and underachievement among minority students (Smith-Maddox, 1999).

Prominent research further supports the idea that tracking practices exclude students from taking rigorous courses in high school (Oakes, 1990). While some critical race theorists presume the relationship between tracking and culture, Lucas and Berends (2002) link tracking directly to race and social class status. They found that race, ethnicity, and socioeconomic status are positively linked to de facto tracking, which is maintained by school demographics. More often than Whites, minority students are placed in low track courses that do not adequately prepare them

for college (Burris & Welner, 2005; Russell, 2005). While vocational track programs have their place, the general education provided in these classes restrict students to limited occupational functions that are linked to minimum wage and little mobility. African American students likely disengage with school because of the discriminatory treatment as it relates to curricula access.

Ability grouping

In addition to tracking, ability grouping limits African American students from being academically involved in advanced courses. In theory, ability grouping maximizes the opportunity for learners to receive instruction at their own pace and according to their intellectual needs. However, ability grouping lowers the level of instruction and in turn lowers the level of achievement for students who are not found to be academically-able. Ability grouping reinforces the common misconception that minority students are genetically less intelligent than their peers.

Academically, ability grouping has not stimulated African American student engagement. Despite ability grouping advocates' claim that students perform better when they are grouped with peers of similar ability, Dash (2005) found that students in lower ability groups had a significantly lower participation rate in school than students in higher ability groups. African American students, especially African American males, are often grouped in low ability classrooms, and contribute to the overrepresentation of minority students in special education programs (Skiba, Simmones, Ritter, Kohler, Henderson, & Wu, 2006). Based on ability grouping practices, research consistently demonstrates that African American students are less likely to be identified as gifted but more likely to be placed in vocational tracks and referred for special education services (Darity et al., 2001; Skiba et al., 2006). Such

practices further stigmatize and restrict students of color to low expectations and poor academic achievement.

Tracking and ability grouping both limit minority participation in advanced classes. In an attempt to sort and stratify, these exclusionary practices hinder high levels of African American student academic engagement and integration into high quality instructional programs.

Personnel Aspirations

T*eachers*

The behavior and practices of teachers greatly impact African American student effort. Most schools still rely on the traditional practices of teacher recommendation. Given the ability to recommend college preparatory courses or general and vocational courses, teachers can limit student access to academic achievement. Ferguson (1998) found that teacher expectations correlate with ethnicity. A number of research studies indicated that teacher expectations are directly linked to the academic involvement of African American students. As presented by House (2005), low teacher expectations result in low student achievement. Related research focusing on enrollment gaps in higher level math find that teachers are less likely to recommend African American students because typically teachers believe those students do not have the ability or interest (Walker, 2007). While teachers set high expectations of White students, they have very low expectations of African American students and thereby recommend low-level courses for them (Irvine, 1990).

Culturally, African American students are mismatched with teachers who do not share the same experiences socially, politically, economically or culturally

(Villegas & Lucas, 2002). Nevertheless, the instructional practices of teachers in high-poverty districts need to be both competent and culturally responsive in order to gain positive learning outcomes with minority students. Researchers recognizing cultural implications of learning suggest that culturally responsive teachers have a positive impact on minority students' intellectual skills and self-efficacy (Ford, Moore, and Milner, 2005; Gay 2000). Nonetheless, an educator's lack of cultural competence can lead to academic disengagement among minority students. Burton et al. (2002) found that African American students do not benefit from teachers that cannot relate to minority culture. Moreover, minority students' learning outcomes are limited when they are taught by teachers who have little or no experience and a lack of cultural competencies to instruct them (Peske & Haycock, 2006; Villegas and Lucas, 2002).

Guidance counselors

The impact of school guidance counselors has been identified in the literature as a component of the system that either supports or suppresses student success and opportunity. Since the early days of desegregation, academic counseling techniques were not utilized to ensure success of the African American student (Jackson, 1995). Culturally appropriate counseling recently emerged in the 1990s as the African American population increased (Harley, Jolivette, McCormick, and Tice, 2002). Guidance counselors provide insight, resources, and motivation to students based on their expectations of what they perceive a student's ability to be (Cook, 2007). Irrefutably, school guidance counselors can be very influential in the course registration process.

The literature indicates that guidance counselors spend little time directing African American students into high-quality track programs. Sometimes referred to as "gatekeepers," school guidance counselors have the power to limit student access to various academic tracks and educational opportunity. As documented in the research, African American students, particularly males, tend to have a negative view of counselors seeing them as part of a discriminatory system that further endorses African American student academic inferiority (Cook, 2007). However, Farmer-Hinton and Adams (2006) conducted a comprehensive study of the role of counselors in advising college-bound African American students. The findings indicated that school counselors are change agents who have the power to guide students' commitment to academics. The researchers concluded that counselors have the ability to build and transfer norms that promote high academic expectations. Like teachers, school guidance counselors have the power to direct the students' academic pathways.

School Climate

As pointed out with tracking, ability grouping, and staff expectations, the climate of the school sets the tone for academic engagement. According to Ogbu (2003), African American students disengage in school based on the way they perceive discriminatory treatment from change agents within the school itself. Similar to a student's cultural environment, research suggests the structural characteristics of the school can encourage or discourage a student's academic engagement (Damico, Fradd, Roth, & Hankins, 1990; Stewart, 2007).

Accordingly, positive school characteristics such as safety and student support yield positive outcomes in terms of student effort and achievement (Johnson et al.,

2001). When studying the variables of school climate on academic achievement, Stewart (2007) investigated the organizational structure, the culture, and the social milieu of the school. To remain consistent with other research, she measured the organizational structure based on the school size, population of non-White students, school SES, and school location. She describes school culture as the interactions that define a student's sense of belonging. Stewart based the social milieu of the school on the internal stakeholders' background characteristics, which consist of social factors that influence students' perceptions of school engagement. Compared to other student groups, Stewart found African American students have a greater need for a more positive school climate that is nondiscriminatory.

In a study of faculty interactions on students' academic motivation and self-concept, Cokley (2000) examined student-faculty relationships as an influencing factor on academic outcomes. Cokley's research indicated that when students perceived faculty members as encouraging those students had a higher sense of academic self-concept and motivation in comparison to students who negative perceptions their relationships with faculty members. Similar findings composed by Wimberly (2002), show that three specific relationship characteristics that help make up school climate can influence the success or failure of African American students. Accordingly, School Personnel Expectations, Teachers Talking with Students, and School Extracurricular Participation has a statistically significant effect on the educational outcomes of particularly African American students. Using data from the National Educational Longitudinal Study of 1998, the researcher found that African American students had different types of relationships with their teachers than white students had with their teachers. In comparison to white students, African American

student were less likely to talk to their teacher's outside of class or discuss educational enrichment opportunities or postsecondary options. Wimberly concluded that because marginal relationships existed between African American students and their teachers those students are less likely to have high educational expectations and pursue postsecondary education.

In conclusion, African American students engage in school based on the treatment they receive while in school. Inequitable policies and procedures along with low-expectations and a discriminatory school climate can cause even the most academically-abled students to disengage.

Race and Gender Effects on Academic Engagement

While the findings vary, educational researchers have made numerous attempts to link race and gender to academic achievement. In regards to student expectations of disenfranchised African American students, Wood, Kaplan, and McLoyd (2006), found parent and teacher expectations differed based on gender. More specifically, they found in comparison to girls, both parents and teachers have lower expectations for African American boys.

In the same manner, Cooper (2006) found student aspirations differ based on race/ethnicity and gender. She concludes for the most part, women, no matter the racial/ethnic group, have higher educational aspirations than men within the same racial/ethnic group. Based on the research, race and gender gaps for African American students appear to be larger than those observed in other groups.

With regards to ethnicity, Greene, Marti, and McClenny's (2008) study revealed conflicting results of race as it relates to student performance and educational outcomes. They found that while African American students report

having to work at higher levels on class assignments, their levels of academic achievement is much lower than their peers. These findings led the researchers to propose the possibility that when it comes to student effort and student outcomes, African American students have to perform at higher levels to reach the same goals of their peers. As the research suggests, race and gender impacts variables that influence student achievement.

In the face of numerous studies investigating student effort, gaps in academic engagement research remain, especially with regard to race and gender differences as predictors of low student engagement.

Summary and Significance of the Present Study

Many researchers have focused on the underachievement of African American students. The literature speaks to the importance of making significant investments in high quality education for African American students as they continue to be underrepresented among the nation's high achievers. While many states are responding to No Child Left Behind by increasing access to rigorous coursework, only five of the fifty states have eliminated the racial/ethnic equity gaps that persist in Advanced Placement (AP) classrooms. According to the *Advanced Placement Report to the Nation 2007*, African Americans are "significantly underrepresented in AP classrooms nationwide (p. 8)," even though there have been more recent trends to diversify the AP programs. This same article also reports that while African American students represent 13.7% of the national student population, only 6% of those minority students took an AP exam. Unfortunately, even with increased access to AP courses, there have not been any significant changes in the equity gap since the year 2000. In fact, the percentage of African American students who were examined

only increased by 0.9% by 2006. Even more disappointing, a significant percentage of those African American students, who participated in the 2006 AP exams, performed lower than other students.

Undeniably, contemporary schooling faces a major problem educating even some of the brightest African American students. Enrollment into advanced courses and programs has a significant effect on African American students' academic achievements and post secondary opportunities. In order to be prepared for college admission, students must participate in advanced coursework. Most of the literature on minority student enrollment in upper level classes has concluded that students engage in academics based on their experiences with systematic racism within education and their cultural background. This body of literature speaks to the racial inequities that subvert actions to increase African American student participation in advanced courses and programs. The psychological and social characteristics of African American culture have also been associated with log minority student enrollment in rigorous courses. For the most part, the research acknowledges the critical need to eliminate equity gaps that limit performance in advanced coursework so that more African American students are prepared for college and have the ability to most effectively contribute to the human, social, and cultural capital of the U.S. A better understanding of the race and gender gaps of African American student engagement remains a significant educational issue.

Moreover, the literature presents strong evidence that African American student culture sabotages their educational opportunity to achieve. In trying to pinpoint the major problems educating African American students, recent studies focus on the barriers created by either cultural factors or school factors. Ogbu (2003)

investigates both, the system forces and the community forces. Ogbu acknowledges systematic racism has an impact on the Black-White achievement gap; however, he identifies African American cultural resistance to education as the primary blame for the academic gap. Although controversial, he found that African American students themselves choose not enroll in challenging courses. Accordingly, Ogbu's findings consistently demonstrate that low-effort syndrome may be more to blame than race relations. In regards to the enrollment gap within advanced courses and programs, this study considers the core of Ogbu's conclusion that "...discrimination alone is not the cause of the low school performance" (Ogbu, 2003, p. 45).

To date, studies of student engagement tend to examine select system structures and cultural limitations. Existing empirical studies typically concentrate on the school and cultural factors that perpetuate the enrollment gaps; however, there is little evidence of personal factors and comparative evaluations of race and gender effects. This study is the first to focus on the impact of personal, cultural, and school factors influencing African American student academic effort. No researcher has investigated the interlocking relationships of personal, cultural, and school factors on African American students' academic effort.

Even though Ogbu dedicated his studies to observing African American academic-engagement, very limited empirical-research literature exists regarding the determinants. Researching the variables affecting African American students' academic effort is important because it will help close gaps in the literature by identifying more closely the cultural and school factors that motivate academic effort and identify the personal factors that impact one's personal choice to engage in academics.

CHAPTER II

METHODOLOGY

Overview

This chapter explains the methods and procedures used in the study. The primary purpose of this study was to examine the effects of personal, cultural, and school factors on academic effort among African American students. This study utilized data from the Educational Longitudinal Study of 2002 (ELS: 2002), which provides trend data on a nationally representative sample of American students. The chapter begins with a presentation of the ELS: 2002 and a description of the participants, an explanation of the research design and the research questions, followed by the conceptual model, the independent variables, the dependent variable, the statistical analysis, and the limitations of the study. The chapter closes with a summary and significance of the methodology.

Educational Longitudinal Study of 2002

ELS 2002 is a multilevel longitudinal study conducted by the National Center for Educational Statistics (NCES) of the United States Department of Education by the Research Triangle Institute (RTI). Based in North Carolina, RTI is a nonprofit research organization that collaborates with the Educational Testing Service of Princeton and MPR Associates of Berkeley. Authorized by section 406(b) of the General Education Provision Act, NCES was mandated to gather policy-relevant data about the state of education in the United States. In response to this mandate, NCES developed the National Education Longitudinal Studies program, which thus far consists of three completed studies that have been widely accepted and used by

educational researchers and policy-makers. Those studies consist of the National Longitudinal Study of the High School Class of 1972 (NLS-72), the High School and Beyond (HS&B) longitudinal study of 1980, and the National Education Longitudinal Study of 1988 (NELS:88).

ELS 2002 is comprised of educational achievement data based on the experiences of a nationally representative sample of students who were high school sophomores in 2002. The two-stage sampling selection process first selected the schools and then the sophomores to be included in the sample. Eligible schools were selected with probability proportional to size; that is, they matched the target population. The target population consisted of regular public schools, charter schools, and private schools located in all 50 states of the U. S. and the District of Columbia. The study required that these schools have 10^{th} graders; however, the study does not include foreign exchange students. The resulting 752 schools that participated in the ELS: 2002 study were the schools that responded of the 1,221 eligible public and private schools. The participating schools provided enrollment lists of their sophomore students. To complete the second stage of sampling process, the researchers then selected 26 students from each school. Stratified random sampling was used to separate the students into non-overlapping groups by student characteristics. The students were surveyed once in 2002 and again in 2004, which at that time the sample of students was freshened to guarantee a more representative sample of the 2004 senior cohort. At the same time, principals, media center specialists, and parents were also surveyed. In 2005, one year after the students projected graduation date, high school transcript information was collected, which provides records for course-taking and course offerings for each individual student.

Until each individual student turns 30 years old, the students will be surveyed every two years. In 2006, post-high-school follow-up questionnaires were administered in order to track the cohorts' achievement.

The appropriate steps were taken to protect the confidentiality of all participants in the ELS: 2002 database. In order to minimize disclosure risks according to NCES Statistical Standards, the ELS: 2002 data files were subject to various procedures that include data swapping, coarsening, and disclosure risk analysis (Ingels, Pratt, Rogers, Siegel, and Strutts, 2005). Data swapping involves randomly selecting cases, pairing them, and exchanging variables between the cases so that specific cases cannot easily be identified. Coarsening reduces the level of some variables by putting it into categorical form. The high-risk variables are included only on the restricted-use file. The data on the public-use file, which are used for this study, does not release any identifying information of specific individuals or schools. Having satisfied the requirements for the protection of human subjects, this study was approved by the Institutional Review Board (IRB).

The purpose of ELS: 2002 is to grant educational leaders and policy makers access to a comprehensive dataset which tracks the changes in the education system and the effects of factors within the system on the lives of students who go through it. The other focus of ELS: 2002 is to provide researchers with an illustration of the students' cultural and environmental frame of reference and how it impacts the student.

ELS: 2002 is an ideal source for this research study, because it presents data that can address (1) the relationships between the students' cultural background and

school engagement and (2) the correlation between course taking patterns and academic effort.

Participants

This study was based on the academic engagement patterns of 2,336 African American students who attended public or private schools and participated in ELS: 2002. Only African American participants were selected for this study in order to determine what personal, cultural, and school factors influence African American student academic effort. The students self-reported their race as Black/African American. To correct errors in oversampling and non-response, NCES weighted the data. Based on NCES guidelines regarding English proficiency and mental and physical disabilities, all participating schools had to determine student eligibility. Students who spoke English as a second language or had limited English proficiency could only be eligible if they received academic support in English for three years or if officials thought the student could successfully respond to the questionnaire, which was only written in the English language. If mentally or physically disabled students could not take standardized paper-and-pencil tests, they were not required to complete the questionnaire.

Research Design and Research Questions

This research design is descriptive and correlational. Based on secondary data and using regression analysis, the research methodology was used to examine the relationships between personal factors, cultural factors, and school factors on African American students' academic engagement (effort). The independent variables were divided into three different sets of predictors: personal factors, culture factors, and school factors. The dependent variable is the academic effort. Both the independent

and dependent variables were defined by questionnaire items and responses; multiple components of the cultural-ecological theoretical framework were obtained from the ELS: 2002 base-year student survey to represent each construct. To substantiate validity and reliability of the base-year data collection instruments, NCES reviewed, revised, justified, and field tested the questionnaires. More specifically, the questionnaires were studied for test-retest reliabilities, calculation of scale reliabilities, and theoretically related measures (Ingels, Pratt, Rogers, Siegel, Stutts, 2005). The extensive reliability and validity review led to the addition of educational technology items and items relating to self-efficacy, both of which were examined in this study.

To more closely examine the relationships among the factors, student background information including gender, race/ethnicity, and socioeconomic status (SES) were collected from base-year student questionnaire. NCES imputed all variables for nonrespondent base-year students, those who were selected in the base year and did not fully complete a student questionnaire. Using logical imputation, NCES replaced missing classification data such as sex, race/ethnicity, and SES with imputed values. The data used for race/ethnicity and sex were supplied by the reporting schools while family income was imputed based on a composite variable response to parent education and occupation (Ingels et al., 2005). Although there is no base-year weight for nonrespondents, these students were analyzed using a normalized panel weight, which is the NCES panel divided by the average weight of the population sample. Using a normalized panel weight adjusted the sample size for differences in the population by reducing the influence of large sample sizes to determine which students should count more on the statistical tests. Normalized panel

weights were used in this study to estimate the relationships between personal, school, and cultural factors and student academic effort.

Of the seven sections in the student survey, the variables for this study were selected from information about the students' school experiences and activities, plans for the future, family background, and beliefs and opinions about self. To reduce nonresponse bias for the base-year data, NCES computed a school weight, a weight for student questionnaire completion (which generalizes only to the eligible population of students), and a contextual data weight for the expanded sample (which generalizes to the population of all 2002 sophomores despite eligibility) for the base year. The overall weighted student response rate for the base-year survey was 88.7 percent. If a student transferred, he or she remained linked to their base-year school.

In sum, this study examined those variables that impact a student's academic effort/engagement. Specifically, the variables were selected to explain the following research questions:

1. What personal factors predict a student's academic effort?
2. What cultural factors predict a student's academic effort?
3. What school factors predict a student's academic effort?
4. To what extent do personal, cultural, and school factors predict the level of academic effort among African American male and female students in the 10th grade?

Conceptual Model

While most research focuses on analyzing school structures and cultural factors that explain educational outcomes (Anguiano, 2004; Brown, 2000; Haycock, 2001; Stewart, 2007), the conceptual model in this study investigated the extent to

which sociological constructs influence student's academic engagement. This study employed a conceptual model that incorporates interrelated social structures (cultural, personal, and school) that impact student behavior in terms of academics (Figure 2). In addition, this model further investigated the interaction of gender as it relates to African American students' academic effort.

As illustrated in Figure 2, this conceptual model examines relevant components of the cultural-ecological theoretical model and the personal perspective. Because personal factors refers to an individual's psychological attributes, which are developed based on the social environment, this model takes a closer look at the way cultural factors and school factors influence personal factors. The cultural factors were defined by an individual's cultural environment (relationships, resources, and values). Whereas, school factors defined the school's structural and social characteristics (access, relationships, and norms). This model helped to explain to what extent a student's beliefs, behaviors, values, and aspirations effects his or her academic effort.

The cultural-ecological approach was used to describe the complex relationships between African American students' individual characteristics, the African American culture, and the school environment. This study explored the ideas of the personal perspective because ultimately the individual is responsible for his or her own actions. Researchers suggest examining student effort, arguing that it can be modified through external forces that can enhance African American student achievement (Flowers, Milner, & Moore, 2003; Stewart, 2007).

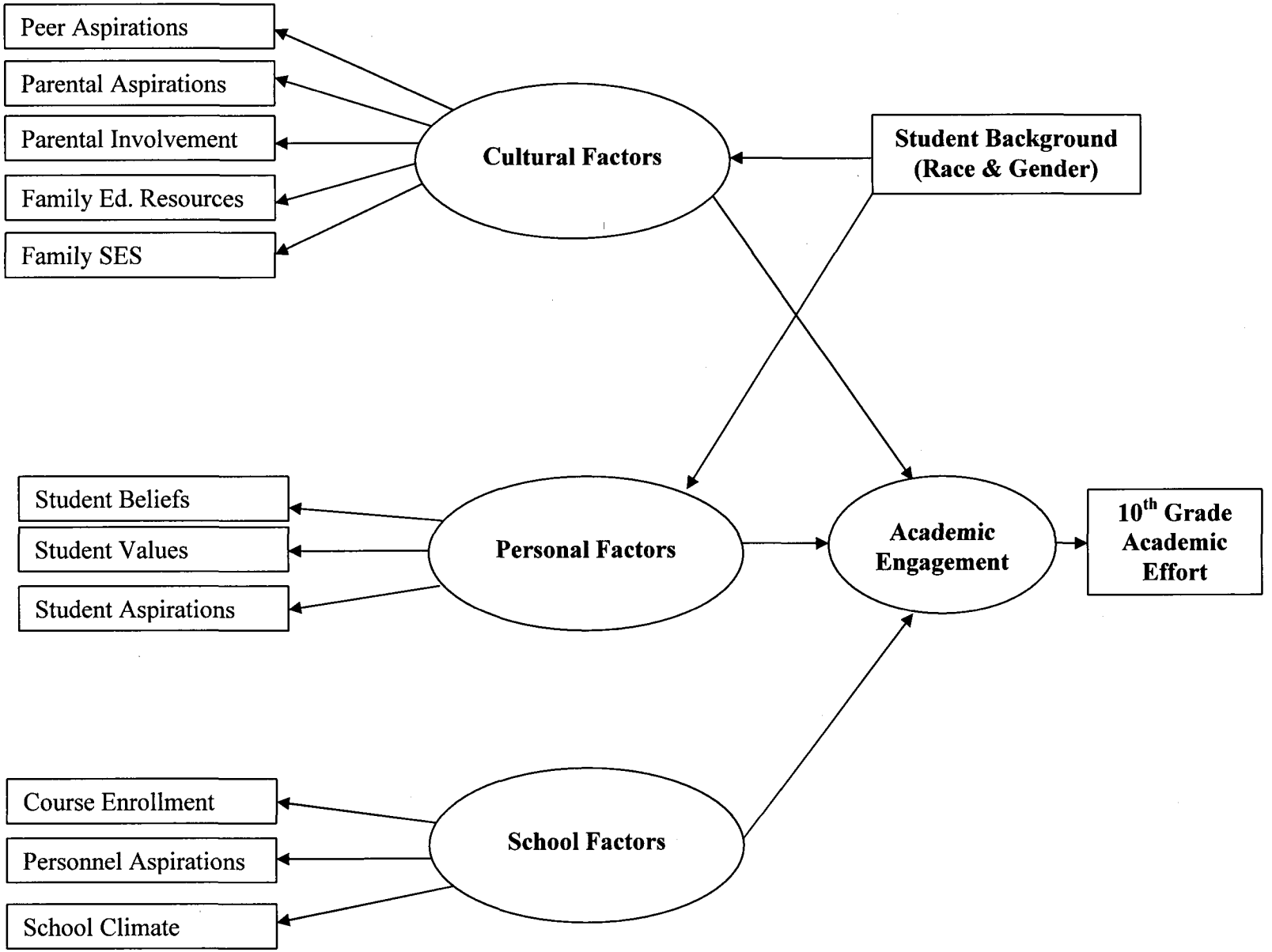

Figure 2. Conceptual Model for the effects of cultural factors, personal factors, and school factors on academic engagement effort.

Independent Variables

Personal factors, cultural factors, and school factors, the predicting variables, were derived specifically from Ogbu's findings, as explained in Chapter I, which describe the factors that influence African American students' engagement in their schooling, the cultural-ecological theory. This study improves upon past research by using a nationally representative sample of African American high school students who attend various schools to identify the exact school and cultural factors that influence their enrollment in advance courses and their postsecondary plans.

Personal Factors

As described in the review of literature, personal factors are an individual's characteristics that have the ability to motivate or prevent him or her from putting forth effort towards academics. Based on the student survey questions from ELS: 2002, those factors are described in detail below.

Students' beliefs

This construct described the students' personal beliefs about the importance of getting a good education (very important, somewhat important, and not important). This factor was determined by using the students' responses to two questions: 1) "How important are grades to you" and 2) "How important is getting a good education to you." The answers to these questions were used to examine their relationship with academic effort.

Student behavior

This variable indicated the way students act toward schooling. The students answered three items that asked them to indicate how often they went to class without

materials (usually, often, seldom, and never). The items used to measure student academic behavior were "Pencil/pen or paper," "Books," and "Homework done".

Student values

This personal construct was measured based on student survey responses that describe the students' personal perceptions of the value of schooling. This factor was determined by using the students' responses to two statements: "I go to school because education is important for getting a job later on" and "I go to school because I am learning skills that I will need for a job." The responses were recoded to 4 = Strongly Agree, 3 = Agree, 2 = Disagree, and 1= Strongly Disagree. These response items were used to examine the effects on African American students' academic engagement.

Student aspirations

This variable indicates the students' own postsecondary aspirations according to their 10^{th} grade perception. This variable was determined by using the students' response to the survey question, "As things stand now, how far in school do you think you will get." The responses were recoded into five categories: (1) don't know, (2) high school or less, (3) some college, (4) college graduation, and (5) graduate or professional degree.

Student background

This composite variable categorized the racial and ethnic background of the students. The students self-reported African American ethnicity based on five reporting categories: White, Black/African American, Asian, Native Hawaiian/Pacific Islander, and American Indian/Alaska Native. This variable was used to select only

African American cases. In addition, student gender was included in this construct. Taken from the student base year survey, students reported their gender base on two categories: 1 = Male or 2 = Female. This variable was used to further investigate the relationship between gender and academic effort after controlling for other variables.

Cultural Factors

The second set of predictors defined the cultural factors. For this study, the factors associated with culture were the community forces from which the students' frame of reference is based upon. These cultural factors influence student engagement in their own education as described by the culture-ecological theory. This set of independent variables was defined by the constructs below.

Peer aspirations

This variable indicated the student's academic relationship with his or her friends. This variable was measured by student responses to three statements. The first two, "It is important to my friends to study" and "It is important to my friend to get good grades." These variable responses are based on a Likert Scale 3) Very Important, 2) Somewhat Important, and 1) Not Important. With the third statement, "Friend's desire for the 10^{th} grader after high school" the students responded in one of seven categories: 1) go to college, 2) get a full time job, 3)vocational, technical, or apprenticeship program, 4) enter the military, 5) get married, 6) do whatever I want to do, and 7) I don't know. For the purposes of this study, responses indicating postsecondary aspirations to go to college are recoded "3", to enter trade school or the military were coded "2", and all other responses were coded "1."

Parental aspirations

This variable was measured by using survey response from the base year student questionnaire that asks, "What do the following people think is the most important thing for you to do right after high school?" Those people included the students' mother and father. The seven response categories were (1) go to college, (2) get a full time job, (3)vocational, technical, or apprenticeship program, (4) enter the military, (5) get married, (6) do whatever I want to do, and (7) I don't know. Responses indicating postsecondary aspirations to go to college are recoded "3", to enter trade school or the military were coded "2", and all other responses were coded "1." These responses more clearly described how students' cultural frame of reference as defined by the close friends and family effects their academic engagement and their educational outcomes.

Parental involvement

This variable was measured based on the student response to what extent they discussed their academics with their parents. The students indicated the level of parental involvement based on five questions asking how often the student discussed 1)"school courses with parents," 2) "grades with parents," 3) "things studied in class," 4) "prep for ACT/SAT with parents," and 5) "going to college with parents." The students responded with never, sometimes, or often.

Family educational resources

This variable indicates whether or not the students have home access to specific educational resources that can support their academic engagement. They

responded (yes or no) as to whether or not the family "has a computer," "has access to the Internet," and "has more than 50 books."

Socioeconomic status (SES)

This variable was included under the cultural factors construct because it provided family background data that have been proven to affect student engagement and achievement. Set up as a continuous variable, the SES measure was based on equally weighted components which include father or guardian's education, mother or guardian's education, family income, father or guardian's occupation, and mother or guardian's occupation. Based on the weights, the SES variable was divided into three categories: lowest quarter (below 25th percentile), middle quarter (between 25th percentile and 75th percentile), and highest quarter (75th percentile and above).

School Factors

The school factors were defined by the review of the literature and research as the system inequities that limit African American student engagement in advanced courses and programs. As described in Figure 2, these survey variables were linked to constructs derived from the cultural-ecological theory. In particular, the following constructs more clearly define the school factors that were used in this study.

Course enrollment

This variable indicated the type of courses the students were enrolled in throughout high school. The responses to this variable were reported as yes or no as to whether or not the students were 1) "ever in Advanced Placement program," 2) "ever in International Baccalaureate program," 3) "ever in part-time program at

regional vocational school," 4) "ever in a remedial English class," 5) "ever in a remedial math class" or 6) "ever in a special education program."

Personnel aspirations

Based on the student survey response, this variable was determined using the students' responses to the school counselor's desire and the favorite teacher's desire for the students after they finished high school. The students responded in one of the following categories as to whether the counselor or teacher thinks the student will (1) go to college, (2) get a full time job, (3)vocational, technical, or apprenticeship program, (4) enter the military, (5) get married, (6) do whatever I want to do, and (7) they don't care. Responses indicating postsecondary aspirations to go to college are recoded "3", to enter trade school or the military were coded "2", and all other responses were coded "1." This variable was used to examine the effects of student-teacher or student-counselor relationships on academic effort.

School climate

Students indicated the extent to which they agree or disagree with several statements about the overall values, attitudes, and beliefs of their school environment. Based on the cultural-ecological theory and the conceptual model five statements were used in this study: "Students get along well with teachers," In class student often feel put down by teachers," "In class students often feel put down by other students," "Disruptions get in the way of learning," and "Punishment is the same no matter who you are." The responses were recoded to 4 = Strongly Agree, 3 = Agree, 2 = Disagree, and 1= Strongly Disagree. The construct was used to examine to what extent school climate can cause a student to academically disengage.

Dependent Variable

The dependent variable was based on the students' responses to the survey questions about their level of academic. In order to gain insight into the development of academic effort, this study examined the student response data from the base year survey, which were gathered during the students' 10th grade academic school year.

Academic Effort

This construct indicated the educational strategies used by African American students to succeed academically. It was determined by student responses to five statements about the amount of effort they put towards their schooling. The statements included "Studies to get a good grade," "Studies to increase job opportunities," "Keeps studying even if material is difficult," "Works as hard as possible," "Does best to learn what is studied," and "Puts forth best effort when studying." Each of these statements assessed the degree to which students put forth effort to engage in academic schoolwork. To maximize the accuracy of measurement, the responses were reverse coded as "4" strongly agree, "3" agree, "2" disagree, and "1" strongly disagree. This dependent variable was examined to determine to what extent it is affected by the multiple independent variables: personal, cultural, and school factors.

Statistical Analysis

The research questions were addressed using data from ELS: 2002 and a three stage hierarchal linear regression model. The data were sorted by African American cases only. To ensure the accuracy of the data file, I conducted data screening

analysis and proofread the file for reverse coding. By conducting a reliability analysis, I reverse-scaled Likert item responses to use the same metric. Using factor analysis, a data-reduction technique was used to reduce a large number of measured variables from the ELS: 2002 data set to a much smaller set of constructs that will help examine student academic effort. A scale score was computed for each construct.

To verify that the assumptions of linear regression were met, regression diagnostics were conducted. The diagnostics showed that the residuals were normally distributed; therefore, the p-values for the t-test were valid. In fact, the normal probability plot showed a straight line further indicating that the sample comes from a normal distribution. Multicollinearity was assessed using tolerance indices. Because the tolerance values were all greater than .01, multicollinearity was not a concern. Table 1 presents the tolerance indices. In addition, the diagnostic revealed that the assumption that a linear relationship exists between the predictor variables and the outcome variables. Nonetheless, no curvilinear relationships were observed in the scatterplots of residuals.

Descriptive statistics were used to describe the central characteristics of personal, cultural, and school factors in correlation with student academic effort demonstrated during the 10^{th} grade school year. Descriptive analyses were also used to examine the observed differences of personal, cultural, and school characteristics on academic effort among African American males and females. After the initial analysis of the mean, median, mode, standard deviation, degree of variability to determine if the sample responses were normally distributed or not, bivariate statistics were used to determine the strength and direction of the relationships between each

Table 1: Tolerance Indices

Variable	Tolerance Index
Personal Factors	
Student Beliefs	.805
Student Values	.861
Student Aspirations	.899
Cultural Factors	
Parental Aspirations	.923
Parental Involvement	.753
Educational Resources	.861
Family SES	.865
School Factors	
Course Enrollment	.971
Personnel Aspirations	.653
School Climate	.982

Dependent Variable Academic Effort

variable construct and academic effort. A check for normality revealed that there are no outliers. A two-way analysis of variance (ANOVA) examined the independent variables, including student aspirations, student values, student beliefs, socio-economic status, parent aspirations, educational resources, parental involvement, school climate, course enrollment, and personnel aspirations as predictors of academic effort.

Because academic effort was constructed using multiple measures, this dependent variable was collapsed into a single value so it could be correlated with a single construct in each of the three models. Multiple linear regression analyzed the relationship of a given independent variable on the dependent variable. Standardized coefficients estimated the strength of each independent construct relative to the dependent variable, academic effort. This study used five strength predictors to assess

the quality and fit of the statistical models: a squared multiple correlation (R^2), an adjusted squared multiple correlation (R^2_{adj}), the degree of freedom (F), the alpha value (p), and the beta weights (β). In other words, this method uses five indicators to examine how well the linear combination of independent variables predicts the dependent variables. To facilitate the interpretation of how well academic effort was predicted by personal, cultural, and school factors, the change in R^2 was examined (the difference between R^2 for one set of predictors and another set of predictors).

The independent variables were entered into the regression analyses in three models, as summarized in the conceptual model in Figure 2.

Model I Personal Factors

Model II Cultural Factors

Model III School Factors

By constructing these models, the available data in the student base-year questionnaire were used based on the theoretical and conceptual cultural-ecological framework. Each model included constructs made of multiple variables that have been collapsed and scale scored. The first model included personal factors, which are made up of the student's own personal aspirations, values, and beliefs. The second model included all variables pertaining to cultural factors, which are socio-economic status, parental aspirations for the student, educational resources in the home, and parental involvement in the students' schooling. Although peer aspirations were originally considered for this model, there were too few cases of completed data for this variable for it to be included in this study. The variables entered into the third model represent school factors, which are school climate, course enrollment, and

personnel aspirations. The final model represented the dependent variable academic effort, which is a scaled score of multiple response items to combines variables that describe student academic effort. The alpha value, $p < .01$, determined whether the independent variables were related to the dependent variables. Because the alpha level .01 is more stringent than the traditional alpha level of .05, the chances of claiming that there is a significant correlation among the factors, which is committing a Type I error, are lowered. This first multiple linear regression analysis provided numeric values that indicate the degree of influence of the independent variables (personal, cultural, and school factors) on the dependent variables of the students 10^{th} grade academic efforts.

In addition, the multiple linear regression models test for interaction by gender and each independent variable. After analyzing the first regression model with all African American students, I conducted a second model analysis splitting the files by using the variable that represents gender (1=male, 2=female). This analysis was used to help determine if gender impacts academic effort over and above the personal, cultural, and school factors.

Limitations of the Study

Because precise measurements of the model constructs were not available in the ELS: 2002 dataset, there were at least two limitations in this study. The first limitation involves the number of measures selected to represent each construct interest. Instead of using four or more measures for each construct (Green & Salkind, 2005), this study combined two variables for the parental aspirations construct and three variables for family educational resources. I incorporated these measures

because researchers who examined academic engagement of racial/ethnic minorities and low-income students suggested that these variables are indicators of influential cultural factors for these groups (Brown, 2000; Jacobs & Harvey, 2005). Similarly, this study only used two variables for each of the constructs included in the personal factors. However, this study used these variables to represent personal and cultural factors that have been tested in prior educational academic engagement research using NCES databases (Cooper, 2006; Stewart, 2007).

A second limitation involved the methods used to decrease the adverse effects of missing data. After conducting a missing data analysis, I found that the data in the analytic sample were missing at random. Considering strategies for handling missing data, pairwise deletion was chosen over listwise deletion and mean substitution. Listwise deletion was inappropriate because it deletes all cases that do not have data on all variables and thereby, reduces the sample size by to 557 students. Mean substitution for missing values produced unreliable values for linear regression statistics by creating unequal cell sizes and non-normal distribution.

To minimize adverse effects of missing data, this study used pairwise deletion, which only omits cases that do not have data on a variable used in a particular calculation. Although different correlation coefficients use different cases and have different sample sizes using this technique, pairwise was the most appropriate method to account for missing data but it is not perfect. For instance, if an unknown systematic distribution of missing values exist then a bias may result when calculating a correlation matrix. Another disadvantage of using pairwise is that correlation coefficients can be mistakenly based on different subsets of cases.

However, I remained cognizant of this implication when analyzing and interpreting the data. Table 2 illustrates for each pair of variables the number of pairwise nonmissing values that match up with academic effort. As Table 2 shows, gender, ethnicity, and socio-economic status have no missing data when correlated with academic effort. Accordingly, the other nine variables have a significant number of cases that also match up with academic effort: student beliefs (97.5%), student values (99%), student aspirations (97%), parental aspirations (84.3%), parent involvement (94.8%), educational resources (97.5), course enrollment (96.2%), personnel aspirations (64.4%), and school climate (95.8). Despite the limitations, this research design is likely to illustrate the personal, cultural, and school constructs that impact the development of student academic effort as 10^{th} graders.

Table 2: Number and Percentages of Cases that are missing for Each of the Variables in the Analysis of Academic Effort

Variable	Number Complete	Number Paired with Academic Effort	Percent Nonmissing Correlations
Academic Effort	1241	1241	100
Sex-composite	2336	1241	100
African American	2336	1241	100
SES	2336	1241	100
Student Beliefs	2110	1211	97.5
Student Values	2184	1232	99
Student Aspirations	2197	1204	97
Parent Aspirations	1436	911	73.4
Parental involvement	1577	1177	94.8
Educational Resources	1812	1211	97.5
Course Enrollment	2065	1194	96.2
Personnel Aspirations	1222	800	64.4
School Climate	2117	1189	95.8

Note: Data weighted by normalized BYSTUWT panel weight

Summary and Significance of the Study

This study utilized quantitative data from the student and administrator survey questionnaires complied by the staff of ELS: 2002. Multiple linear regression was used to address the three sets of predictors defined as personal, cultural, school structural influences on student academic effort. The results of this study will be useful to all school personnel, educational policy makers, and constituents who play a part in recruiting and retaining minority students' academic engagement in advanced coursework. In addition, these findings will help us better understand how the interlocking characteristics of personal characteristics, cultural influences, and school

factors impact minority students' academic engagement and achievement. As a result, this study will contribute to the existing body of work that seeks to boost minority student achievement by increasing internal factors and eliminating equity and enrollment gaps that restrict academic engagement for African American students.

CHAPTER III

RESULTS

Overview

This chapter presents the results of all analyses. This study had two purposes. The first was to examine the extent to which sociological constructs (personal, cultural, and school) influence student's academic engagement (effort). The second was to investigate the interaction of gender with other predictors of African American students' academic effort. Descriptive and multiple linear regression analyses were used to address the research questions.

Descriptive Statistics

The analyses used for Table 3 provide the descriptive statistics and bivariate correlations with academic effort of all the study variables. Three of the construct measures for personal factors, student beliefs (.40), student values (.33), and student aspirations (.27) were found significant and positively associated with academic effort. Peer aspirations (.21), parental aspirations (.13), and parental involvement (.43) under cultural factors demonstrated a significant and positive relationship with academic effort. Similarly, school personnel aspirations (.15) were also significant and positive predictors of academic effort.

Table 3. Descriptive Statistics and Correlations with Academic Effort for the Study Variables

	Mean	Standard Deviation	Correlation with Academic Effort
Personal Factors			
Student Beliefs	3.21	.42	.40**
Student Values	3.52	.53	.33**
Student Aspirations	3.72	1.36	.27**
Cultural Factors			
Parental Aspirations	2.73	.58	.13**
Parental Involvement	2.19	.52	.43**
Educational Resources	.71	.34	.04
Family SES	-.24	.65	-.04
School Factors			
Course Enrollment	.08	.15	.04
Personnel Aspirations	2.79	.54	.15**
School Climate	2.29	.38	.03
Dependent Variables			
Academic Effort	2.79	.72012	___

*p <. 05, **p < .01

The first step in the multiple regression analyses was to estimate a model using the personal construct of variables as predictors of academic effort. The second step of the analyses estimated a model that included both personal and cultural sets of variables as predictors of academic effort. The third step of the analyses involved estimating a full model which included personal, cultural, and school sets of variables as predictors of academic effort. The final step of the analyses involved estimating a full model that included personal, cultural, and school variables and splitting the file by male and female to determine if gender influenced academic effort over and beyond the other variables.

Research Question One: What personal factors impact a student's academic effort?

The first research question analyzed the personal characteristics of 10th grade African American students' academic effort. The first step in the regression analyses was to build a model using personal construct variables as predictors of academic effort. Model 1 included personal predictors of academic effort and control variables: student aspirations, student values, and student beliefs. These personal factors accounted for 23% of difference in academic effort, $R^2 = .23$, $F(3, 796) = 77.08$, $p < .01$. Each effect is adjusted for all other effects in the model. The results are presented in Model 1 of Table 4.

Student beliefs, student values, and student aspirations were each significant and positively related to academic effort. This indicates that varying levels of personal attachment towards schooling, as measured by the students' own personal beliefs (.283), and values (.202), are strongly related to academic effort. Additionally, student aspirations (.155) are significant predictors of academic effort. The positive direction of this effect suggests that high levels of post-secondary aspirations are strongly associated with higher levels of academic effort. Collectively, these findings indicate that students' educational values and beliefs along with their post-secondary educational plans predict their level of academic effort.

Research Question Two: What cultural factors impact a student's academic effort?

The second research question analyzed the cultural characteristics of 10th grade African American students' academic effort. In Model 2, the combined effects of personal and cultural variables are examined. Four cultural predictors of academic effort are examined: parental aspirations, parental involvement, educational

resources, and socio-economic status. These four cultural measures accounted for a significant proportion (29%) of the academic effort variance after controlling for the effects of personal factors, R^2 change $=$ .07, $F(4, 792) = 20.73$, $p < .01$. Based on these results, cultural factors offer additional predictive power of academic effort.

Model 2 of Table 4 shows that after controlling for personal variables, one of the four cultural variables had a significant and positive effect on academic effort--parental involvement (.304). Students who have parents who hold them to high expectations and who are involved in their schooling put forth effort towards their academics. Surprisingly, education resources (-.028) had a negative and non-significant ($p > .05$) relationship with academic effort after controlling for the other variables in the model. Although significant, socioeconomic status (-.071) also showed a negative correlation with academic effort when students' beliefs, values, and aspirations were taken in account.

Table 4: Clustered Regression of Personal, Cultural, and School Variables on Academic Effort

	Model 1: Personal					Model 2: Cultural					Model 3: School Factors				
Constant	B	S.E.	Beta	t	Sig.	B	S.E.	Beta	t	Sig.	B	S.E.	Beta	t	Sig.
	-.027	.196	—	-.138	.890	-.193	.205	—	-.938	.349	-.290	.243	—	-.190	.234
Personal Factors															
Student Beliefs	.485	.060	.283	8.141	.000	.358	.059	.209	6.10	.000	.359	.059	.210	6.116	.000
Student Values	.271	.045	.202	6.006	.000	.185	.044	.137	4.16	.000	.177	.045	.131	3.965	.000
Student Aspirations	.082	.017	.155	4.697	.000	.056	.017	.107	3.23	.001	.056	.017	.106	3.202	.001
Cultural Factors															
Parental Aspirations	—	—	—	—	—	.029	.038	.024	.761	.44	-.013	.046	-.011	-.292	.770
Parent Involvement	—	—	—	—	—	.418	.047	.304	8.85	.00	.415	.047	.302	8.780	.000
Educational Resources	—	—	—	—	—	-.060	.068	-.028	-.879	.37	-.058	.068	-.027	-.850	.395
SES	—	—	—	—	—	-.078	.035	-.071	-2.22	.02	-.076	.035	-.069	-2.153	.032
School Factors															
Course Enrollment	—	—	—	—	—	—	—	—	—	—	.112	.144	.024	.781	.435
Personnel Aspirations	—	—	—	—	—	—	—	—	—	—	.086	.048	.065	1.77	.077
School Climate	—	—	—	—	—	—	—	—	—	—	.000	.056	.000	-.017	.987

Research Question Three: What school factors impact a student's academic effort?

The third research question analyzed the school characteristics in relation to 10th grade African American students' academic effort. The collective effects of personal, cultural, and school variables are examined in Model 3. This model included three school predictors of academic effort: course enrollment, personnel aspirations, and school climate. These three school factors accounted for a significant proportion (30%) of the academic effort variance after controlling for the effects of personal and cultural factors. However, theses school measures did not predict significantly over and above personal and cultural measures, $R^2change = .003$, $F(3, 789) = 1.18$, $p = .314$. Based on these results, course enrollment, personnel aspirations, and school climate appear to offer little predictive power beyond that contributed by student beliefs, student values, student aspirations, parental aspirations, parental involvement, educational resources in the home and socio-economic status.

As shown in Model 3 of Table 4, after controlling for personal and cultural variables, none of the three school variables were found statistically significant. However, course enrollment (.024) and personnel aspirations (.065) contribute more to prediction of academic effort than school climate (.000). When all other variables were taken in account, school climate was not significantly associated with academic effort.

Research Question Four: To what extent does gender impact African American students' academic effort as defined by personal, cultural, and school factors?

To determine whether the relationship between personal, cultural, and school variables and probability of putting forth academic varies by gender, the linear regression analyses were repeated for each model by splitting the file by the sex composite. The

first model examined the interaction of gender among personal measures as it correlated with predictability of academic effort. Combining personal and cultural factors, the second model examined the gender difference among each variable and each effect is adjusted for all other effects in the model. The third model examined the differences among gender interaction among school factors after taking into account personal and cultural measures. The purpose of these analyses was to determine if gender impacted the variables level of predictability in relation to academic effort.

This first analysis examined how the predictability of personal characteristics of academic effort differed between males and females. For males, the first set of personal factors, student beliefs, student values, and student aspirations, were significant and accounted for 25% of academic effort's variance, $R^2 = .25$, $F(3, 336) = 36.91$, $p < .01$. Based on these results, personal measures of self-efficacy appear to be predictors of academic effort among African American males. In addition, the four cultural factors, parental aspirations, parental involvement, educational resources in the home, and socio-economic status, accounted for a significant proportion (30%) of the academic effort variance after controlling for the effects of personal measures, R^2 change = .05, $F(4, 332) = 6.40$, $p < .01$. These results suggest that African American males who have academic support outside of the school setting are likely to put forth academic effort. Further evaluation of whether course enrollment, school personnel aspirations, and school climate predicted academic effort among African American males over and above the other factors reveal that school factors account for 31% of academic effort variability. However, the regression equation with the school factors is not significant, R^2change = .01, $F(3, 329) = 2.55$, $p = .055$. In relation to school factors, the results of this analysis

indicate that personal and cultural factors are better predictors of academic effort among African American males.

More specifically, Table 5 illustrates the contributions of the individual predictors in association with African American males. The patterns of interactions by gender varied in association with each predictor variable. For males, all three of the personal factors were individually significant and positively related to academic effort. This indicates that education and getting good grades, as measured by the students' own personal beliefs (.255), values (.233), and post-secondary aspirations (.166), are important predictors of academic effort among African American males. Model 2 of Table 5 shows that after controlling for personal factors only one of the four cultural variables was statistically significant in determining academic effort for African American males specifically. While parent involvement (B = .259, $t = 4.933$, $p < .01$) impacted academic effort positively among males, parent aspirations, educational resources in the home, and family income were not statistically significant predictors of their academic effort. Moreover, educational resources in the home (B= -.044, $t = -.882$, $p = .379$) and socioeconomic status (B = -.084, $t = -1.65$, $p = .095$) contributed negative patterns of interaction among African American males. After controlling for personal and cultural factors, none of the three variables for school factors interacted with academic effort at $p < .01$ when evaluating only African American male students. However, personnel aspirations (.151) show a positive correlation with academic effort at $p = .01$.

In an examination of the female gender influence, interactions between personal variables and academic effort were significant and accounted for 20% of academic effort's variance, $R^2 = .20$, $F(3, 456) = 39.56$, $p < .01$. Based on these results, there was a

strong positive association between African American female students' personal factors (i.e. educational beliefs, values, and aspirations) and academic effort. After controlling for the effects of personal measures, the linear combination of the four cultural factors was significantly related to academic effort and accounted for a significant proportion (30%) of the academic effort variance for females, R^2 change = .096, $F(4, 452) = 15.50$, $p < .01$. These results suggest that African American females who have academic support outside of the school setting are likely to put forth more academic effort. Further evaluation of whether course enrollment, school personnel aspirations, and school climate predicted academic effort among African American males over and above the other factors reveal that school factors account for 30% of academic effort variability. However, the regression equation with the school factors is not significant, R^2change = .082, $F(3, 449) = .082$, $p = .970$. In relation to school factors, the results of this analysis indicate that personal and cultural factors are better predictors of academic effort among African American females than school factors.

Table 6 presents further evaluation of the contributions of the individual predictors in association with African American females. The patterns of interactions by female varied in association with each predictor variable. All three of the personal factors for African American female students were individually significant and positively related to academic effort. This indicates that belief in education and getting good grades is important, as measured by the students' personal beliefs (.306), values (.189), and post-secondary aspirations (.153), are strongly related to levels of academic effort among African American females. Model 2 of Table 6 shows that after controlling for personal factors, parent involvement (B = .344, $t = 4.933$, $p < .01$) is the only one of the four

cultural variables that was statistically significant in determining academic effort among African American females. The remaining three cultural variables, parent aspirations (B = .036), educational resources in the home (B= -.023), and socio-economic status (-.060) were not significant predictors of academic effort for females, $p > .05$. After controlling for personal and cultural factors, none of the three variables for school factors interacted with academic effort at $p < .01$ when evaluating only African American female students. In fact, course enrollment (-.002) and school climate (-.018) have negative relationship with academic effort. Collectively, these results indicate that parent involvement as well as the students' personal beliefs, values, and aspirations are important factors in helping to generate academic effort for African American females.

In conclusion, there was not a difference between males and females as to which variables impacted academic effort. However, for males, personnel aspirations is positively related to academic effort. For both groups, personal factors and parental involvement are statically significant predictors of high academic effort, $p < .01$. For both groups, school factors such as course enrollment and school climate have no significant relationship with academic effort among African American students.

Table 5: Clustered Regression of Personal, Cultural, and School Variables on Academic Effort by Males

	Model 1: Personal					Model 2: Cultural					Model 3: School Factors				
Constant	B	S.E.	Beta	t	Sig.	B	S.E.	Beta	t	Sig.	B	S.E.	Beta	t	Sig.
	.104	.266	—	.391	.696	-.032	.293	—	-.110	.913	-.357	.352	—	-1.013	.312
Personal Factors															
Student Beliefs	.399	.088	.255	4.555	.000	.293	.088	.188	3.32	.001	.304	.088	.194	3.455	.001
Student Values	..307	.071	.233	4.342	.000	.324	.070	.177	3.31	.001	.227	.070	.172	3.229	.001
Student Aspirations	.088	.027	.166	3.272	.001	.080	.028	.151	2.91	.004	.073	.027	.137	2.654	.008
Cultural Factors															
Parental Aspirations	—	—	—	—	—	.012	.058	.010	.206	.837	-.085	.070	-.071	-1.214	.226
Parent Involvement	—	—	—	—	—	.362	.073	.259	4.93	.000	.329	.074	.235	4.456	.000
Educational Resources	—	—	—	—	—	-.096	.109	-.044	-.882	.379	-.078	.109	-.036	-.718	.473
SES	—	—	—	—	—	-.093	.055	-.084	-1.67	.095	-.083	.055	-.075	-1.496	.136
School Factors															
Course Enroll	—	—	—	—	—	—	—	—	—	—	.217	.206	.049	1.053	.293
Personnel Aspirations	—	—	—	—	—	—	—	—	—	—	.196	.076	.151	2.581	.010
School Climate	—	—	—	—	—	—	—	—	—	—	.042	.088	.022	.477	.633

Table 6: Clustered Regression of Personal, Cultural, and School Variables on Academic Effort by Females

	Model 1: Personal					Model 2: Cultural					Model 3: School Factors				
Constant	B	S.E.	Beta	t	Sig.	B	S.E.	Beta	t	Sig.	B	S.E.	Beta	t	Sig.
	-.455	.316	—	-1.437	.152	-.570	.317	—	-1.796	.073	-.503	.367	—	-1.369	.172
Personal Factors															
Student Beliefs	.621	.088	.306	7.034	.000	.463	.086	.228	5.417	.000	.463	.086	.228	5.386	.000
Student Values	.260	.059	.189	4.397	.000	.153	.058	.111	2.651	.008	.151	.058	.110	2.587	.010
Student Aspirations	.082	.023	.153	3.574	.000	.042	.023	.078	1.826	.068	.041	.023	.077	1.784	.075
Cultural Factors															
Parental Aspirations	—	—	—	—	—	.046	.052	.036	.883	.378	.036	.062	.029	.586	.559
Parent Involvement	—	—	—	—	—	.471	.063	.344	7.522	.000	.473	.063	.346	7.515	.000
Educational Resources	—	—	—	—	—	-.047	.087	-.023	-.543	.587	-.049	.087	-.024	-.564	.573
SES	—	—	—	—	—	-.066	.046	-.060	-1.429	.154	-.067	.046	-.060	-1.436	.152
School Factors															
Course Enroll	—	—	—	—	—	—	—	—	—	—	-.011	.211	-.002	-.054	.957
Personnel Aspirations	—	—	—	—	—	—	—	—	—	—	.015	.064	.011	.229	.819
School Climate	—	—	—	—	—	—	—	—	—	—	-.032	.073	-.018	-.443	.658

CHAPTER IV

CONCLUSIONS

Overview

Ogbu's (2003) cultural-ecological theory has served as a guide to understanding academic engagement among minority students and exploring the interlocking factors that have the most impact on improving African American students' academic engagement and achievement. The cultural-ecological theory can help identify ways to intervene across social structures and processes that impact education. This study utilized the cultural-ecological model to investigate the relationships between academic effort and the social impact of race in education as it relates to personal, cultural, and school level predictors.

This study was conducted using data from the Educational Longitudinal Study of 2002 (ELS: 2002) which was compiled by the National Center of Educational Statistics (NCES) of the United States Department of Education. This comprehensive dataset was complied to provide educational leaders and policy makers access to information that reveals students' personal, cultural, and educational frame of reference as they transition through life, particularly secondary and postsecondary schooling as well as the work force.

For the purpose of this study, the African American population of 2, 336 students who attended public or private schools was chosen from a random sample of 15, 362 students. These students completed a 98-item Likert-scale questionnaire to provide information about their school experiences and activities, plans for the future,

family background, and beliefs and opinions about themselves as related to education (Ingles et. al, 2005).

The researcher examined the personal, cultural, and school factors that impact a student's academic effort/engagement. Also of interest were the relationships between gender and academic effort. The categorical factor regarding students' personal perspectives were derived from construct variables made up of statements regarding student beliefs, student values, and student aspirations. Similarly, the categorical factor representing the students' cultural factors were derived from construct variables made up of Likert-scale items regarding the students' view of their parental involvement, parental aspirations, and educational resources at home. The students' family socio-economic status was also included in this category to examine the impact of socioeconomic status and academic effort. Additionally, school factors were a categorical variable characterized by construct variables defined as course enrollment, personnel aspirations, and school climate.

The statements regarding students' academic engagement on a Likert-scale ranged from 1 (almost never) to 4 (almost always). The six statements used in this sample were "studies to get a good grade," "studies to increase job opportunities," "keeps studying even if material is difficult," "works as hard as possible," "does best to learn what is studied," and "puts forth best effort when studying."

Understanding the way the students' perceive the personal, cultural, and school factors that influence how they respond to education can prove to be a vital contribution to closing the achievement gap by creating highly engaging teaching and learning. More research should be conducted based on the students' perspective to

help guide best practices and teaching methods that generate academic engagement in the classroom setting.

Overall, the general conclusion from this study is that there are substantial associations between the identified cultural-ecological predictors and students' academic effort. Limited information was available on the students' perceptions of what their peers desired for them after high school (peer aspirations); therefore, this variable was left unexplored. However, interesting results were found in the various relationships between personal, cultural, and school factors and academic effort. While it was determined, after controlling for other factors, that two of the school factor variables (course enrollment and school climate) had no significant effect on the students' were important predictors. Consistent with Ogbu's theory, the results supported the notion that the psychological and social backgrounds of minority students influence their academic engagement (in this case academic effort). Based on the findings, the way students personally view education and the way they view how their own parents respond to the students' education are important and result in positive relationships with the students' academic effort.

Personal Factors and Academic Effort

The personal factors describe the students' psychological background as related to their perceptions about the importance of education. The strongest predictor of academic effort resulted from the questions "how important are grades to you?" and "how important is getting a good education to you?" Student beliefs showed nearly twice as much explanatory power over values and aspirations. The

analyses revealed that African American students who believe that getting a good education is important have high levels of academic effort.

Moreover, the results of the multiple linear regression indicated that students' personal perceptions characterizing the value of school demonstrated a significant relationship with academic effort. The findings suggest that African American students, who reported "I go to school because education is important for getting a good job later on" and "I go to school because I am learning skills that I will need for a job," put forth academic effort. In addition, how far in school the students expect to get was another significant predictor of academic effort. The higher the student aspirations to college, graduate from, or receive a graduate or professional degree, relates to the amount of effort they put towards their academics. In other words, African American students with educational goals are more committed to demonstrating academic effort. Positive relationships between academic effort and the students' educational beliefs, values, and aspirations tend to produce positive engagement behaviors. Thus, these results are consistent with Ogbu's view that students' personal beliefs influence their academic engagement.

Cultural Factors and Academic Effort

Cultural factors were defined by four social characteristics of the students' family and frame of reference that significantly impacted academic effort. The results of the second linear regression model indicated that parental involvement measures that were significantly correlated with academic effort involved the students discussing school courses, grades, classroom instruction, standardized test prep, and college plans. Parental involvement was the strongest positive cultural predictor of

academic effort among African American students. Nonetheless, the findings suggest that parental involvement is the strongest predictor of academic effort followed by student beliefs, student values, and student aspirations.

Although a moderately significant predictor, the students' family socioeconomic status negatively affects their levels of academic effort. Family SES is inversely related to academic effort and there is a strong possibility this correlation did not occur by chance. These findings concurs with the research literature showing high-ability minority students from low socioeconomic backgrounds are more likely to disengage from academics (Borman et al, 2000; Howells, 2001).

An unexpected finding showed that the students' perceptions of what their mother and father believes is most important for the students to do immediately after high school in regards to going to going to college or entering trade school or the military did not predict the students' academic effort. Contrary to the work of Brown (2000) and Jacob and Harvey (2005), this finding indicates that African American students' academic effort does not highly depended upon parental aspirations for the student. A possible explanation could be due to the limited number of pairwise comparisons due to missing data. An additional explanation could be that the students are unaware of the parents' aspirations for their children as it pertains to postsecondary educations. Nevertheless, the research shows that African American students are highly motivated by high expectations of others, especially people who the students hold in high esteem.

Another unexpected finding indicates that having educational resources in the home such as a computer, internet access, and more than 50 books is a negative and

non-significant predictor of academic effort among African American students. This finding indicates that family educationally resources are inversely related to academic effort. Although this study did not find a relationship between family educational resources and academic effort, schools should continue efforts to provide students with instructional resources to use at home and encourage parents to do the same. These overall findings are indicative of cultural capital and suggest that parent involvement and socioeconomic status are important to the development of academic effort amid African American students.

School Factors and Academic Effort

School factors describe the types of treatment African American students receive in their respective schools that influence the students' academic performance. All three of the relationships, course enrollment, personnel aspirations, and school climate, were positive but not significant predictors of African American student effort. The findings suggested that the variable indicating whether or not the students were ever in Advanced Placement, International Baccalaureate program, a part time vocational program, and a remedial or special education program demonstrated the strongest relationship of the variables but it did not significantly predict academic effort. According to research, students put forth effort depending upon their academic track or program (Ferguson, 2003; Darity et al., 2001). A possible explanation of this study's finding could be that because the model first controlled for personal and cultural factors that course enrollment is not as important as those factors, hence, the positive relationship but non-significant *p*-value.

Similarly, the student's perceptions of personnel aspirations describing whether or not the students believe the counselor and teacher think the student will go to college, enter trade or the military, or do something else were found to be positively associated with academic effort. However, these finding were moderately non-significant. A major contributing factor, other than other variables that were first taken in account, could be that when paired with academic effort there were significantly fewer cases that matched up using pairwise deletion. Students may have opted out of answering this question because they could not answer this question based on a lack of a relationship with a guidance counselor or favorite teacher. Research shows that African American students tend to have limited relationships with school personnel (Villegas & Lucas, 2002; Cook, 2007).

The results of the multiple linear regression for school climate were based on the way African American students perceive inequitable treatment at school: "students get along well with teachers," "in class students often feel put down by teachers," "in class students often feel put down by other students," "disruptions get in the way of learning," and "punishment is the same no matter who you are." According to the finding in this study, after taking to account all other variables in each model, the school climate variable construct shows no strength of relation to academic effort; however, it is entirely likcly that there maybe a relationship, $p = .98$. A possible explanation for this unexpected result is that school factors are less important to African American students who have strong personal beliefs about the importance of education and an educational support system outside of the school. Although theorists and researchers suggest that African American students need

school experiences that crate a student's sense of belonging (Ogbu, 2003; Stewart, 2007), they may not recognize cultural biases and exclusionary practices as 10th graders because their frame of reference would be compared only to the students within their own culture. Hence, there is a need for cultural responsive instructional practices and equitable course enrollment opportunities.

While course enrollment, personnel aspirations, and school climate variables were found to be influential predictors, the expected relationship between school factors and academic engagement was not confirmed by the analyses. These findings do not necessarily work against the importance of nondiscriminatory educational policies, practices, and school culture, which are important to successful student outcomes. The present findings might be interpreted as personal and cultural factors outweighed school factors in this model.

Gender and Academic Effort

In examining the fourth research question, this study shows variations in the student characteristic by gender. Overall, gender was found to be a statistically significant predictor of the relationships between the variables and academic effort. These findings suggest that gender difference contributed to the model's explanatory power. Nonetheless, for both males and females, this analysis confirms that student beliefs, values, and aspirations for education are positive and significantly correlated to academic effort. For both genders, the student's beliefs about the importance of education are the strongest predictors, followed by how much the students' value education and the students' postsecondary aspirations. However, student values and aspirations are more strongly related to academic effort among males than among

females. Yet, student beliefs are stronger predictors of academic effort for females than for males. Additionally, male and female African American students respond positively towards academic effort based on active parental involvement in the students' education. For females, parental involvement is a stronger predictor of academic effort than it is for males. However, when separated by gender, the data for both groups showed that parental aspirations were positively associated with academic effort, but they were not significant predictors. Moreover, there was no gender difference regarding the non-significant and negatively correlated relationship between academic effort and socioeconomic status and family educational resources.

The male-female comparisons indicate one major difference toward the males for school factors. The finding showed that personnel aspirations were positive and significant predictors academic effort among African American males whereas for females, personnel aspirations were positively associated with academic effort but not significantly influential. Similarly, course enrollment and school climate were found to be non-significant but positively associated with academic effort for males only. For females, course enrollment and school climate were negatively related to academic effort. Perhaps, males' perceptions of institutionalized discriminatory treatment are more affected than females as they are not affected by course enrollment and school climate. An explanation of this unexpected finding could be that African American students tend to work at higher levels regardless of their class assignments (Green et al., 2008).

Implications

Students' academic effort is the key to increasing educational outcomes for African American students. As demonstrated by the research, increased educational outcomes will help build cultural capital, social capital, and economic capital. Students' perceptions about education whether they are based on personal, cultural, or school constructs play a major role in student engagement and achievement.

Based on the findings of this study, recommendations for improving academic effort are made. Although student beliefs, values, and aspirations along with parental involvement and aspirations are personal and psychological processes, these factors can be developed and modified by external forces. Therefore, it is recommended that the goal of teacher education institutions, school administrators, and school districts is to better facilitate programs that increase personal and cultural factors among African American students.

Possible approaches for teacher education institutions include incorporating curricula grounded in epistemology research (as cited in Schommer-Aikins, 2004), which provides insight into how a student's self-identity and social relationships make them into passive receivers of knowledge or active receivers of knowledge. Teacher training and staff development programs might also offer teaching methods courses aimed at training potential educators how to adapt instruction to influence students' developing epistemological beliefs: knowledge is based on innate ability, either you have it or you do not. Providing these courses for future educators is two-fold. For one, exposure to the epistemological belief system will help alter the teachers' own beliefs about fixed ability, which influence the teachers' instructional

practices. Secondly, the teachers' instructional practices are likely to affect the way the students' learn and help to encourage more positive epistemological beliefs.

In the same manner, school administrators could benefit from training on how to foster engagement in schools and develop instructionally-centered behaviors. By adopting the engagement-based learning and teaching (EBLT) approach (Jones, 2008), school leaders should develop a climate of academic engagement that promotes students' educational beliefs, values, behaviors. More specifically, principals should develop an intellectual culture by providing school wide programs that positively influence learning relationships (i.e. parent partnerships, character building, and relevant learning).

Drawing from the cultural-ecological theory and the findings in this study, African American parental aspirations and parental involvement play a substantial role in students' academic effort. Instead of offering educational programs strictly geared towards increasing standardized test scores, school districts and administrators could boost student achievement by offering programs that develop an intellectual culture among African Americans who are heavily dependent on personal and cultural factors in order to academically engage in school. School districts should investigate creditable programs designed to enhance African American student achievement by building self-efficacy and developing cultural capital. Those programs should comprehensively involve parents and students. For example, districts could add an extra component to the current Parent University program, which provides workshops to help parents become actively involved in their students' education. It is recommended that a student component is added to evaluate the need

for educational support of recommended African American families and a one-year plan should be implemented to help the family develop strong positive personal and cultural beliefs about education. The plan should include educational involvement workshops for students and parents as well as family educational activities.

Recommendations for Future Research

The results of this study contribute to the body of research analyzing student's academic engagement. However, this study is only a small representation of African American students' academic effort and further research is needed to examine the relationship among many factors. Due to the limited amount of research available that incorporates both the psychological and sociological factors that influence student effort, more empirical studies using mixed methodology should be conducted to measure academic effort. Educational policymakers and researchers could conduct more research on students' perceptions from a mixed methods approach. These systematic types of studies are advantageous for policymakers to mandate courses in teacher and administrator education programs that integrate field experience activities aimed at improving culturally responsive teaching.

Together, quantitative and qualitative studies involving field research would provide more comprehensive insight into the students' feelings and behaviors as well as cultural frame of reference that influences academic effort. More specifically, the Racial/Cultural Identity Development (R/CID) model developed by Sue and Sue (2003) can be used in a research case study to understand African American students' academic effort.

Excluding the possibilities of interpretation differences, the findings in this study challenged the attempt to significantly associate the type of course enrollment, personnel aspirations, and school climate with academic effort. The fact that when observed in isolation of other variables these types of school factors influence student engagement suggests more research is needed in this area. When considering the complex interlocking relationships between personal, cultural, and school factors on African American students' academic engagement, it becomes necessary to carefully review the causal dependencies between the independent variables. The statistical technique structural equation modeling (SEM) can be used in future studies to test and estimate causal relationships based on statistical data and qualitative data. Figure three illustrates the causal assumptions and provides a conceptual model to examine the components of the cultural-ecological theory and the personal perspective.

In addition, research should continue to explore the effects of adding epistemological variables to the study of academic effort for African American students. Findings from this study suggest the need to explore developing epistemological beliefs about self as it relates to receiving knowledge and about cultural relational views influencing one's ability to receive knowledge. Because personnel aspirations was a significant gender difference when observing its ability to predict levels of academic effort, future research should continue to refine conceptual models for the study of how African American students specifically engage in academics based on their gender and ethnicity.

As a final recommendation, research could benefit from a comparison of the relationship between personal, cultural, and school factors and academic effort across

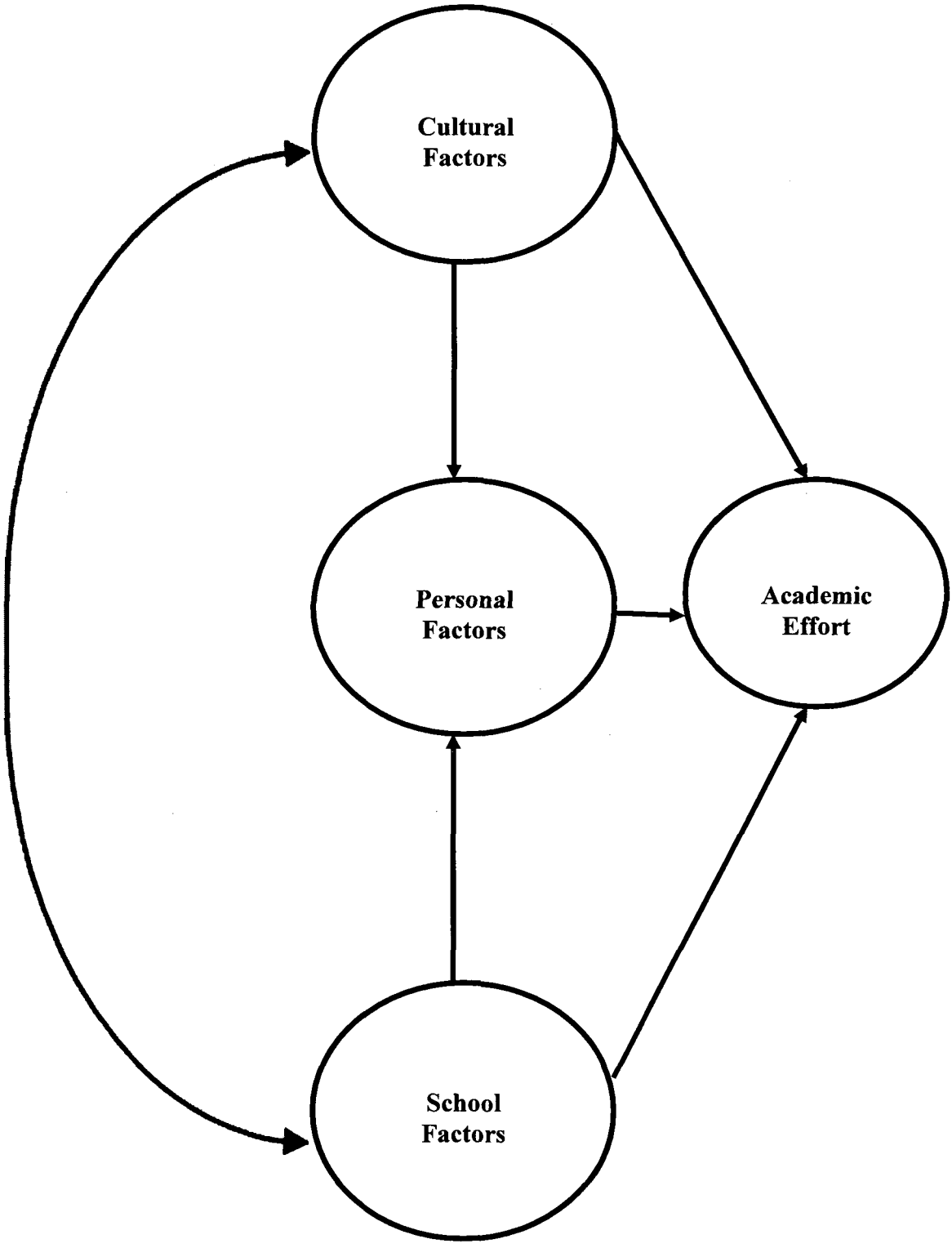

Figure 3. Conceptual model for use with structural equation modeling for cultural, personal, and school factors predicting academic effort

racial/ethnic subgroups and socioeconomic levels. A study of this sort will reveal common predictors of high levels of academic effort for all students.

Conclusion

This study of African American students' academic effort advances related research, policy, practice, and theory. Specifically, the descriptive findings highlight the personal, cultural, and school factors that significantly predict student effort based on race and gender. The multiple linear regression analyses test the applicability of cultural-ecological theory combined aspects of research on personal perspectives, identify the predictors of high levels of 10^{th} grade academic effort by race and gender, and examine the variation in predictors of high levels of 10^{th} grade academic effort by race and gender.

In connection with policy and practice, this study's findings confirm the need for inclusive programs and training that focus on facilitating cultural and personal factors that enhance student effort and academic outcomes. This study finds that the relationship among personal and cultural factors as it relates to school factors is complex. Because school factors (i.e., academic program of study, guidance counselor and teacher aspirations for the students, and school climate) have little to no influence when factored in with personal and cultural factors, an effective framework for educational reform must integrate epistemological theory into teacher training and encourage educational programs for at risk families and students.

It is important to note that this study represents one of many steps that must be taken in order to increase and sustain academic achievement among African American students. This study identifies educational strategies that matter most in

enhancing academic effort. By putting the recommended policies and practiced-based programs into action, policymakers and educators will help grow and build cultural, social, and economic capital. For African Americans, the development of cultural and personal factors that promote intellectualism is vital because putting forth academic effort is most important step a student can take towards gaining achievement and helping to close the racial/ethnic educational outcome gaps.

References

Adelman, C. (2006). The toolbox revisited: Paths to degree completion from high school through college. A report from the U.S. Department of Education. Washington, D.C.

Alexander, B. K. (2004). Black skin/white masks: The performative sustainability of whiteness (with apologies to frantz fanon) . *Qualitative Inquiry. 10(5),* 647-672.

Anguiano, R. (2004). Families and school: the effect of parental involvement on high school completion. *Journal of Family Issues. 25(1),* 61-85.

Baum, S., & Payea, K. (2005). *A supplement to education pays 2004: The benefits of higher education for individuals and society.* Washington, D.C.: The College Board. Retrieved March 17, 2008, from http://www.collegeboard.com/ prod_ downloads/press/cost05/education_pays_05.pdf

Borman, G. D. , Stringfield, S., & Rochuba, L. (2000). *Advancing minority high achievement: National trends and promising programs and practices.* The College Board. Retrieved March 17, 2008, from http://www. collegeboard .com/research/abstract/3879.html

Bourdieu, P. & Passeron, J. C. (1977). *Reproduction: In education, society, and culture.* London: Sage.

Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design.* Cambridge, MA: Harvard University Press.

Brown, M. L. (2000). *Factors that impact the educational pursuits and career aspirations of African American college students.* Unpublished doctoral dissertation, University of Georgia, Athens.

Burris, C. C., & Welner, K. G. (2005). Closing the achievement gap by detracking. *Phi Delta Kappan, 86*(8), 594-598.

Burton, N. W., Whitman, N. B., Yepes-Baraya, M., Cline, F., & Kim, R. M. (2002). *Minority student success: The role of teachers in advanced placement program (AP) courses.* The College Board. Retrieved March 17, 2008 From http://www.collegeboard.com/prod_downloads/ipeAPC/ ap02_ minority _pop_11805.pdf (.pdf/373k)

Carbonaro, W. (2005). Tracking students' efforts and academic achievement. *Sociology of Education, 78*, 27-49.

Clift, V. A., Anderson, A. W., & Hullfish, H. G. (Eds.). (1962). *Negro education in america: Its adequacy, problems, and needs*. New York, NY: Harper & Row.

The College Board. (2007). *Advanced placement report to the nation 2007.* Retrieved February 11, 2008, from http://www.collegeboard.com/ prod_downloads/about/news_info/ap/2007/2007_ap-report-nation.pdf

Cokley, K. (2000). Perceived faculty encouragement and its influence on college students. *Journal of College Student Development, 41*, 348–352.

Cook, O. M. (2007). *African-American males' reflections on their preparation and access to post-secondary opportunities: The impact of counselors' activities, interactions, and roles in urban schools.* (Doctoral dissertation, Claremont, California, 2007). Dissertation Abstracts International, 68 (09)

Cooper, A. (2006). Dreams deferred?-Exploring the relationship between early and later postsecondary educational aspirations among racial/ethnic groups. (Doctoral dissertation, University of Maryland, College Park, 2006).

Cross, R. D. (1990). The historical development of anti-intellectualism in American society: Implications for the schooling of African Americans. *The Journal of Negro Education, 59 (1),* 19-28

Damico, S. B., Fradd, S., Roth, R., Hankins, A. D. (1990). *Engagement with learning: The student perspective.* Paper presented at the meeting of the American Educational Research Association, Boston, MA.

Darity, W. Jr., Castellino, D., Tyson, K., Cobb, C., & McMillen, B. (2001). *Increasing opportunity to learn via access to rigorous courses and programs: One strategy for closing the achievement gap for at-risk and ethnic minority students.* Report prepared for the North Carolina Department of Public Instruction. Retrieved February 11, 2008, from http://www.dpi.state.nc.us/docs/racg/resources/increasingopportunities.pdf

Dash, S. T. C. (2005). The dynamics of ability grouping, teacher expectations, and school engagement: The british context. (Doctoral dissertation, Howard University, Washington, D.C., 2005). *Dissertation Abstracts International, 66(08),* 2831.

Dougherty, C., Mellor, L., & Jian, S. (2006). The relationship between advanced placement and college graduation. Austin, TX: National Center for Educational Accountability. Retrieved February 12, 2008, from http://www.just4kids.org/en/files/Publication-The_Relationship_Between_Advanced_Placement_and_College_Graduation-02-09-06.pdf

Duckworth, K. (1986). *The relationship of high school teachers' class testing practices to students' feelings of efficacy and efforts to study.* (Center for Educational Policy and Management Rep. No. 143).

Education Trust. (2004). *Measure progress: Achievement rises and gaps narrow, but too slowly.* Washington , DC: Author.

Education Trust. (2006). *The funding gap 2005.* Washington, DC: Author.

Elias, R. Z., (2008). Anti-intellectual attitudes and academic self-efficacy among business students. *The Journal of Education for Business. 84 (2),* 110-117.

Farmer-Hinton, R. L. & Adams, T. L. (2006). Social capital and college preparation: Exploring the roles of counselors in a college prep school for black students. *The Negro Education Review. 57(1&2),* 101-116.

Ferguson, R. F. (2003). Teachers' perceptions and expectations and the black-white test score gap. *Urban Education. 38,* 460-507.

Flowers, L. A., Milner, H. R., Moore, J. L. (2003). Effects of locus of control on African American high school seniors' educational aspirations: Implications for preservice and inservice high school teachers and counselors. *High School Journal. 87(1),* 39-50.

Ford, D. Y., Grantham, T. C., & Whiting, G. W. (2008). Another look at the achievement gap: Learning from the experiences of gifted black students. *Urban Education. 43(2)*, 216-239.

Ford, D. Y., Moore III, J. L., & Millner, H. R. (2005). Beyond cultureblindness: A model of culture with implications for gifted education. *Roeper Review. 27(2)*, 97-103.

Fordham, S., & Ogbu, J. U. (1986). Black students' school success: Coping with the " burden of 'acting white' ". *The Urban Review, 18*, 176-203.

Fryer, R. G., Jr., & Torelli, P. (2005). *An empirical analysis of "acting white."* Cambridge, MA: Harvard University Press.

Gay, G. (2000). *Culturally responsive teaching: Theory, research, and practice*. New York: Teachers College Press.

Gayles, J. (2005). Playing the game and paying the price: Academic resilience among three high-achieving African American males. *Anthropology & Education Quarterly. 36(3),* 250-64.

Gibson, M. A., Gandara, P., & Koyama, J. P. (2005). The role of peers in the schooling of U.S. Mexican youth, peers, and school achievement. New York: Teachers College Press.

Green, T. D., McIntosh, A. S., Cook-Morales, V. J., & Robinson-Zanartu, C. (2005). From old schools to tomorrow's schools: Psychoeducational assessment of African American students. *Remedial and Special Education, 26(2)*, 82-92.

Greene, T. G., Marti, C. N., & McClenney, K. (2008). The effort–outcome gap: Differences for African American and Hispanic community college students in student engagement and academic achievement. *The Journal of Higher Education, 79(5),* 513-539.

Hardre , P, Crowson, H. M., Debacker, T. K., & White, D. (2007). Predicting the academic motivation of rural high school students. *The Journal of Experimental Education, 75(4),* 247–269.

Harley, D., Jolivette, K., McCormick, K. & Tice, K. (2002). Race, class, and gender: A constellation of positionalities with implications for counseling. *Journal of Multicultural Counseling and Development*, 30(4), 216-238.

Hawkins, R. & Mulkey, L. M. (2005). Athletic investment and academic resilience in a national sample of African American females and males in the middle grades. *Education and Urban Society, 38(1),* 62-88.

Haycock, K. (2001). Closing the achievement gap. *Educational Leadership.* 58(6), 6 11.

Hofstadter, R. (1963). *Anti-intellectualism in American life.* New York: Knopf.

House, N. G. (2005). Reclaiming children left behind: Addressing the causes and cures for low minority achievement. *School Administrator.* 62(1), 10-16.

Howells, R. (2001). *Underrepresentation of certain culturally and linguistically diverse students in programs for the academically gifted.* Mars Hill, NC: Mars Hill College.

Ingels, S.J., Pratt, D.J., Rogers, J., Siegel, P.H., and Stutts, E.S. (2005). *Education Longitudinal Study of 2002: Base Year to First Follow Up Data File Documentation* (NCES 2006–344). U.S. Department of Education. Washington, DC: National Center for Education Statistics.

Irvine, J. J. (1990). *Black students and school failure: Polices, practices, and prescriptions.* New York: Greenwood Press.

Jackson, J. H. (2001). *NAACP call for action in education.* Baltimore, MD: NAACP Education Department.

J. M., Casas, L. A., Suzuki, C. M., & Alexander, F. (Eds.) *Handbook of cultural counseling* (pp. 3-16). Thousand Oaks, CA: Sage Publishers.

Jacobs, N. & Harvey, D. (2005). Do parents make a difference to children's academic achievement? Differences between parents of higher and lower achieving students. *Educational Studies.* 31(4), 431-448.

Johnson, C. & Kritsonis, W. (2006). The achievement gap in mathematics: A significant problem for African American students. *National Forum Journals, 3.* Retrieved March 16, 2008, from http://www.nationalforum.com/archives.htm

Johnson, M. K., Crosnoe, R., & Elder, **G.** Jr. (2001). Students' attachment and academic engagement: The role of race and ethnicity. *Sociology of Education, 74,*318-40.

Jones, R. (2008). (2008 November). *Strengthening student engagement.* Retrieved April 24, 2010, from http://www.leadered.com/pdf /Strengthen%20Student%20Engagement%20whte%20paper.pdf.

Kahlenberg, R. D. (2001). Learning from james coleman. Retrieved December 31, 2008, from BNET Web site: http://findarticles.com/p/articles/mi_m0377/is_2001_Summer/ai_76812255/g_1?tag=artBody;col1

Kaufman, P., Kwon, J. Y., Klein, S., & Chapman, C. D. (2000). *Dropout rates in the United States: 1999* (NCES Publication No. 2001-022). Washington, DC: U.S. Department of Education

Klopfenstein, K. & Thomas, M. K. (2005). *The link between advanced placement experience and college success.* Retrieved March 15, 2008, from http://www.utdallas.edu/research/tsp/pdfpapers/newspaper/b.pdf

Krei, M. S. (1998). Intensifying the barriers: The problem of inequitable teacher allocation in low-income urban schools. *Urban Education. 33(1)*, 71-94.

Lin, N. (2001). *Social capital: A theory of social structure and action.* New York: Cambridge University Press.

Lucas, S. R., & Berends, M. (2002). Sociodemographic diversity, correlated achievement, and de facto tracking. *Sociology of Education. 75,* 328-348.

McWhorter, John H. 2000. *Losing the race: Self-sabotage in black America.* New York: Perennial Publishing.

National Center for Public Policy and Higher Education (2005). *Income of U.S. workforce projected to decline if education doesn't improve.* San Jose, CA: Author.

Nieman, D. G. (1991). *Promises to keep: African-Americans and the constitutional order, 1776 to present.* New York: Oxford University Press.

The No Child Left Behind Act of 2001. PL. 107-110. Available at http://www.ed.gov

Oakes, J. (1990). *Multiplying inequities: The effects of race, social class, and tracking on opportunities to turn math and science*. Santa Monica, CA: Rand Corporation.

Ogbu, J. U. (2003). *Black students in an affluent suburb: A study of academic disengagement*. New York: Lawrence Erlbaum.

Owings, W., & Kaplan, L. (2006). *American public school finance*. Belmont, CA: Wadsworth Publishing Company.

Peske, H. G. & Haycock, K. (2006). *Teaching inequality: How poor and minority students are shortchanged on teacher quality.* Washington, DC: Education Trust.

Rowan-Kenyon, H. T. (2007). Predictors of delayed college enrollment and the impact of socioeconomic status. *The Journal of Higher Education. 78(2),* 188 214.

Russell, M. (2005). Untapped talent and unlimited potential: African American students and the science program. *The Negro Educational Review. 56(2&3),* 167-182.

Saddler, C. (2005).The impact of brown on African American students: A critical race theoretical perspective. *Journal of the American Education Studies. 37(1)*, 41-55.

Saunders, T., & Maloney, K. (2005). Boosting black academic achievement and advanced placement enrollments. *Education Digest. 70*(6), 54-57.

Schommer-Aikins, M. (2004). Explaining the epistemological belief system: Introducing the embedded systemic model and coordinated research approach. *Educational Psychologist. 39*(1), 19-29.

Schweke, W. (2004). *Smart money: Education and economic development.* Washington, DC: Economic Policy Institute.

Skiba, R., Simmons, A., Ritter, S., Kohler, K., Henderson, M., & Wu, T. (2006). The context of minority disproportionality: Practitioner perspectives on special education referral. *Teachers College Record, 108(7)*, 1424-1459.

Smith-Maddox, R. (1999). The social networks and resources of African American eighth graders: Evidence from the national education longitudinal study of 1988. *Adolescence, 34(133),* 169-183.

Sokatch, A. (2006). Peer influences on the college-going decisions of low socioeconomic status urban youth. *Education and Urban Society. 39(1),* 128 146.

Stedman, L. C. (1994). The Sandia report and U.S. achievement: An assessment. Journal of Educational Research, *87(3),* 143-47.

Stewart, E. B. (2007). *Individual and school structural effects on African American high school students' academic achievement.* Florida State University, Center for Criminology & Public Policy Research.

Sue, D. W., & Sue, D. (2003). *Counseling the culturally diverse: Theory and practice.*New York: Wiley and Sons.

U.S. Department of Commerece (2002). *The big payoff: educational attainment and synthetic estimates of work-life earnings.* Retrieved March 17, 2008, from http://www.census.gov/prod/2002pubs/p23-210.pdf

U.S. Department of Education (2007). *Building on Results: A Blueprint for Strengthening the No Child Left Behind Act*, Washington, D.C., 2007.

Villegas, A. M., & Lucas, T. (2002). Preparing culturally responsive teachers: Rethinking the curriculum. *Journal of Teacher Education. 53(1)*, 20-32.

Walker, E. N. (2007). Why aren't more taking advanced math? *Educational Leadership, 65(3),* 48-53.

West, C. (1994). The dilemma of the black intellectual. *Journal of Blacks in Higher Education*, (2), 59-67.

Whiting, G. W. (2006). Enhancing culturally diverse males' scholar identity: Suggestions for educators of gifted students. *Gifted Child Today, 29(3),* 46-50.

Wimberly, G. L. (2002). School relationships foster success for African American students. ACT Policy Report. Iowa City, IA.

Wood, D., Kaplan, R., & McLoyd, V. C. (2006). Gender differences in the educational expectations of urban, low-income African American youth: The role of parents and the school. *Journal of Youth Adolescence, 36,* 417-427.

VITA

Ruth Alisha Jenkins Hill

Birth Date November 17, 1977

Birthplace Swainsboro, Georgia

Education

2009 Old Dominion University
Norfolk, Virginia
Educational Specialist

2002 Georgia State University
Atlanta, Georgia
Master of English Education

2000 Georgia State University
Atlanta, Georgia
Bachelor of Arts

Employment

Leadership Experience

2008-Present Department Chair – Azalea Gardens Middle School
2008-Present Program Coordinator for Over-age Students – Azalea Gardens Middle School
2008-2009 Small Learning Community Leader & Teacher – Maury High School

Post-secondary Teaching Experience

2008-Present Graduate Teaching Assistant – Old Dominion University
2008-2009 Adjunct Instructor – Paul D. Camp Community College
2002-2004 Adjunct Instructor – Central Georgia Technical College

Secondary Teaching Experience

2004-Present Teacher – Norfolk Public Schools
2003-2004 Teacher – Houston County Public Schools
2001-2003 Teacher – Bibb County Public Schools

Professional Service

- Writer, SAT Prep Curriculum
- Writer, The New Teacher Induction Program Plan for Maury High School
- Co-Writer, Maury High School Suspended Curriculum: Juniors and Seniors
- Co-Writer, Freshman and Sophomore Scholars Curriculum
- Researcher, Maury School Improvement Plan
- Editor, Norfolk Public Schools High School English Curriculum