

“THE ACADEMIC ACHIEVEMENT GAP BETWEEN AFRICAN AMERICANS AND
WHITES: AN EXPLORATORY STUDY ON READING ACHIEVEMENT AND
MOTIVATION”

by

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A DISSERTATION

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ABSTRACT

The purpose of this study was to explore the academic achievement gap between upper elementary African American and White students. This study sought to assess any relationships between whether academic reading, students attitudes toward reading, and academic intrinsic motivation related to ethnicity. This study also sought to assess whether differences in reading achievement, attitudes, and intrinsic motivation varied by ethnicity, gender, or SES. Participants in the study were students enrolled in grades 4 through 6 in a rural West AL school district.

Students with parental consent participated by completing the Children's Academic Intrinsic Motivation Inventory (Gottfried, 1990) to assess motivation and the Elementary Reading Attitude Survey (McKenna & Kear, 1990) to assess reading attitudes. Scores from the SAT 10 and Dibels were also utilized to assess reading achievement. Results indicated that based upon the population observed that SES is an outstanding variable in this study. In addition to research suggesting evidence that SES is a major correlate of the achievement gap, the focus turned towards a specific aspect of SES which is wealth. Children from wealthy families acquire more experiences through provisions of social and cultural capital which may be supportive in explaining the disparities between African American and White students in academics, including reading achievement and intrinsic motivation.

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I laud and magnify your Holy name.

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CHAPTER I

INTRODUCTION TO THE PROBLEM STATEMENT

Historically the black and white achievement gap in academics has been a widespread persistent concern (Obed et al., 2001). This widespread problem has yet to be remedied. Policymakers, educators, and researchers have offered many suggestions for closing the achievement gap. Policymakers suggest that the problem in achievement disparity stems from wrongly designed school policies. Other suggestions include “failing schools” while some researchers suggest factors such as cultural, social, economic, and parental disparities. There are many underlying theories and probable causes for the achievement gap between African Americans and Whites. More specifically, the gap in reading achievement and motivation is an issue in the field of educational psychology worthy of addressing.

Research has shown that motivated readers will engage more in reading activities than those who are not motivated to read (Oldfather & Wigfield, 1996) as well as possess positive attitudes about reading (Mathewson, 1994; McKenna, Kear, & Ellsworth, 1995). In terms of motivation, research suggests that students who demonstrate highly efficacious behaviors view themselves as more willing to face challenging problems (Schunk, 1994, 1985; Bandura, 1993). Self-efficacy theory simply posits that if a student demonstrates high efficacy, the student will more than likely be motivated. If a student demonstrates little to no efficacy, the student is likely to not be motivated. The literature in reading suggests that children in the fourth grade should be ready to move beyond decoding (learning to read) to reading to learn. (Grosso de Leon, 2002). According to the National Assessment of Educational Progress (NAEP), 37% of America’s

fourth grade students are not demonstrating reading achievement. They suggest these students are reading below the basic level and few (one in three) read at a proficient level (Grosso de Leon, 2002). Looking at children's emotions or how they feel about reading may reveal information about why some students do not demonstrate reading achievement.

It has been said that academic intrinsic motivation for elementary children could have profound implications throughout a student's school years. The literature displays very little about the nature of elementary school children's academic motivation (Gottfried, 1990). However, Gottfried, (1990) demonstrated that intrinsic motivation could be differentiated across subject domains with the use of the Children's Academic Intrinsic Motivation Inventory.

Some researchers suggest that it is important that the development of perceptions of competence in an academic domain is necessary to develop and maintain intrinsic motivation in a specific domain (Skaalvik & Rankin, 1995; Stipek, 1992). Wigfield, Eccles, Yoon, Harold, Arbretton (1997) suggests that the issue of domain specificity to motivation as opposed to general motivation is taking center stage due to the fields of psychology and educational psychology becoming more contextualized. There is an extensive literature on intrinsic motivation within the context of school; however, according to Gottfried (1983) there is inadequate information pertaining to academic subject domains in academic intrinsic motivation as well as its relation to school achievement for elementary students.

In the past, there was a significant reliance on measures of global academic motivation that was used to reflect an attempt to broadly signify all academic subject domains (Green, Martin, & Marsh, 2005). The assumption was that a global measure of motivation was adequate enough to explain the uniformity across all subject domains as well as capture the intricacy of school motivation and academic achievement (Bong, 2001; Marsh, Martin, Debus, 2002).

More recent research shows attempts to take into consideration the possibility that academic motivation and academic engagement may actually vary as a function of specific subject domains (Green, Martin, & Marsh, 2005). The possibility that academic motivation and engagement vary as a function of the domain begs to differ whether academic motivation is domain specific or domain general. Green et al. (2005) also suggests that if academic motivation is domain specific then goals and values may vary as a function of the academic subject. If academic motivation is domain general then there should not be a significant difference between motivational dimensions from academic subject to subject. Researchers suggest that a student may demonstrate high motivation in English but may demonstrate less motivation in math (Bong, 1996; Marsh et al., 2002; Pintrich, 2003).

Research conducted by Wigfield et al. (1997) observed elementary students' interest for various academic subject domains. They found that students experience a decline in interest for reading and instrumental music with no change in sports and mathematic subjects. This study was conducted over a course of three years. Findings of research conducted by Marsh et al. (2002) found that measures of verbal and self-efficacy were not consistent. Despite the recent developments in academic subject domain specific research and academic motivation, inconsistent findings continue to persevere which begs for an all-inclusive and integrative framework. Although the literature in academic subject domain appears to waiver, the contemplation of motivated readers demonstrating willing acts of reading persists. Research has shown that motivated readers will engage more in reading activities as opposed to readers that do not demonstrate motivation (Oldfather & Wigfield, 1996) as well as possess positive attitudes about reading (Mathewson, 1994; McKenna et al. 1995). In terms of academic achievement as it relates to reading and motivation, the reading literature speaks to gender in academics.

Many researchers suggest that there is a gap in gender in academics (Dee, 2006). Other researchers suggest that the gender gap is overrated (Duckworth & Seligman, 2006). There is a great deal of research that implies girls are more likely to outperform boys on reading and comprehension tests and boys are more likely to outperform girls in math and science (LeGorfo, Nichols, Chaplin, 2006). Research by LeGorfo et al. (2006) suggest that females start ahead of males in reading and learn faster during the elementary and high school years. The literature focusing on academic achievement oftentimes speaks to the social ramifications of poverty or low socio-economic factors as contributing to the gap.

Researcher John Ogbu's (2003) observation of academic disengagement in his Shaker Heights study suggested that SES was not a major determinant. Ogbu's Shaker Heights study was done in Shaker Heights, Ohio (an affluent suburb of Cleveland) with upper middle class African American students. Shaker Heights was considered to be a well-educated community. The Shaker Heights study suggested that White students continued to outperform African American students from upper middle class families.

Statement of the Problem

It has already been mentioned that there are many underlying theories and probable causes of the achievement gap between African Americans and Whites. The current study was inspired by the works of the aforementioned researcher / anthropologist John U. Ogbu. Ogbu (1990) observed the achievement gap between White and non-White students by means of a cultural ecological theory. This theory of minority student performance posited that:

there are two sets of factors influencing minority school : how society at large and the school treats minorities (the system) and how minority groups respond to those treatments and to schooling (community forces). The theory further posits that differences in school performance between immigrant and nonimmigrant minorities are partly due to differences in their community forces (Ogbu, 1990 p. 122).

Reading is the central focus of this exploratory study as it along with mathematics is considered to be central domains of learning through the early academic years (Bouffard, Marcoux, Vezeau, & Bordeleau, 2003). The achievement gap in education is mostly used to describe the disturbing gap between minorities and their White peers. Further, there is a similar academic achievement gap between students from low SES backgrounds and students from financially stable families.

Ogbu discussed large-scale signifying factors such as “the system” and “community forces” as major determinants of the academic achievement gap while the current study addresses the reading achievement gap and intrinsic motivation between African American and White students in a rural school district. According to the US Department of Education (2000b), African American and Hispanic kindergartners trailed their White and Asian American peers on tests of general knowledge, early reading and math skills. Data from the USDE (2000b) indicated that the average cognitive scores of pre-kindergarten students in the highest economic bracket was significantly higher than the average score of students in the lowest socioeconomic brackets. Disparities in academic achievement are oftentimes contributed to socio economic factors (EPE Research Center, 2004). Viadero (2000) concluded that being raised in a low income family often meant having fewer educational resources at home.

There is evidence in the academic achievement literature that suggests that a gap persists in reading achievement and motivation between African American and White students. Children can be greatly affected if they are unable to read in elementary grades as the ability to read bridges opportunities to learning other skills and academic subjects. According to research fellow Mead (2007), children who do not learn to read by the 3rd grade are at great risk of suffering academically and experience lifetime consequences of low self-confidence as well as

the motivation to learn. The construct of motivation is becoming quite noticeable in terms of academic achievement.

A study by O'Flahavan, et al (1992) suggested that reading teachers and specialists as well as classroom teachers indicated (via survey) that motivational research should receive high priority during the next decade. Teacher surveys also indicated that creating an enduring interest in reading; promoting a desire to read; and understanding how teachers, peers, and parents can enhance motivation was highly rated (Miller & Meece, 1997).

Purpose of the Study

This study was not the standard investigation focusing on the African American and White achievement gap based upon the theoretical precepts of cultural deprivation due to the historical nature of education for African Americans as opposed to White students. The current study produced information on the intrinsic motivation for reading and attitudes about reading in upper elementary school students. This study investigated intrinsic motivation and reading achievement in African American and White students and attempted to provide information that could be used to enable all children to further their interest in reading.

Significance of the Study

Much of the research on intrinsic motivation has focused on middle school aged and high school children in terms of motivation. Many studies viewed adolescence as being a period where motivation is most critical due to the heightened awareness of emerging adulthood (Anderman & Maehr, 1994). Other studies focused on the school context and how motivation played out in the learning environment (Anderman & Maehr, 1994; Maehr, & Midgley, 1996) while some studies examined student goals as they pertain to academic achievement (Urden & Maehr, 1995). Recently the literature in educational psychology has focused on parental

involvement and academic achievement in elementary school children (Green, Walker, Hoover-Dempsey, & Sandler, 2007; Walker et al., 2005). Previous bodies of research have not focused much attention on how attitudes and perceptions on reading may relate to intrinsic motivation and ultimately to reading achievement. The current study was significant in that the literature was limited in regards to upper elementary school aged children and the construct of motivation specifically geared towards the reading subject domain in southern rural schools. There is a wealth of literature focusing on reading achievement and motivation in urban and suburban schools. There was and continues to be a great need to focus on younger children as academic intrinsic motivation in the early elementary years may have profound implications for initial and future school success (Gottfried, 1990).

The current study focused on the more internal or intrinsic causes of the reading achievement gap in terms of being motivated to read. This study was also significant in that it focused on participants in a rural West Alabama school district. Unlike urban areas, rural areas are not traditional areas of focus when observing the achievement gap. Rural areas of focus optimistically lend new insights to the study of reading achievement as well as prompt additional research in the reading subject domains.

Research Aims

It has been often noted that there is a difference in reading achievement by African American students when compared to their White counterparts. This study explored this finding by:

- First observing if similar differences in reading achievement using SAT 10 and Dibels were found in a population of upper elementary school aged students in rural West Alabama.

- Second, this study assessed whether the following student characteristics: reading attitudes (measured by ERAS) and intrinsic motivation (measured by CAIMI) differed by ethnicity in a population of elementary school aged children in rural West Alabama.
- Third, this study provided an assessment of whether reading achievement was uniquely related to ethnicity, reading attitudes, and intrinsic motivation when considered together or in combination. Additionally, demographic variables such as SES and gender were assessed in order to observe if these variables accounted for any relationships noted between reading achievement, ethnicity, and intrinsic motivation.

Hypotheses

Most of the literature in reading suggests that recent research revolved around the idea that attitude to reading is seen as one part of a broader construct, motivation to read (Sainsbury & Schaegen, 2004). The education literature suggests that there are many probable causes of the achievement gap such as school policies, cultural, social, economic, and parental disparities. Based on the inconsistencies in the research highlighted in this study, the following hypotheses were stated in null form.

The following were specific hypotheses for the current study:

1. Reading achievement as measured by Dibels and SAT 10 does not differ by ethnicity or gender.
 - 1a. Any effects observed in hypothesis one will not be accounted for by SES when used as a covariate in the analysis.

2. Academic attitudes (as measured by ERAS) and academic intrinsic motivation (as measured by CAIMI) does not differ by ethnicity or gender in school.
 - 2a. Any effects observed in hypothesis two will not be accounted for by SES when used as a covariate in the analysis.
3. There is no unique relationship between ethnicity, reading attitudes, and intrinsic motivation on reading achievement either individually or in combination.
 - 3a. If hypothesis number three is rejected, then SES and gender will be used to assess whether these variables can account for the observed relationship either individually or in combination.

Assumptions associated with this study were the following:

1. All participating students responded to the questions honestly.
2. All participating students understood the instruments and had the skills necessary to complete the instruments.
3. All participants completed the instruments based solely on their own responses.
4. The research instruments were valid and reliable for measuring the data.

Limitations of the Study

Limitations associated with this study were:

1. The data was self-reported.
2. Consenting parents and students may have doubted complete confidentiality despite assurances made by the researcher.
3. There were an insufficient number of participants across upper elementary grades.
4. The study did not include direct parental input to better inform the study.

Definition of Terms

This study provided the following operational definitions:

- *Academic Achievement Gap*: The difference in academic achievement between African American, American Indian, and Hispanic students and their white and Asian peers and the difference in academic achievement between students whose families are of low income, and their peers from middle and upper class families (Washington State School Directors' Directors' Association (n.d).
- *No Child Left Behind*: Federal programs that strive to improve the performance of America's primary and secondary schools by increasing the standards of accountability for schools, and school districts.
- *Self-Efficacy*: The belief in one's capabilities to organize and execute the courses of action required to manage prospective situations (Bandura, 1993).
- *Intrinsic Motivation*: Motivation that comes from inside a person as opposed to external factors. According to Gottfried (1985), intrinsic motivation is defined as enjoyment of school learning characterized by an orientation toward mastery.
- *Oppositional Culture Theory*: A culture of poverty theory of African American academic performance (Lundy, 2003).
- *Minorities*: A group having a little representation as related to other groups in a society.
- *Immigrant / Non Immigrant Minority*: Voluntary or involuntary minorities; depending on if a people voluntarily came to the United States or were brought by force (i.e. slaves)

- *Social Capital*: refers to connections within and between social networks as well as connections among individuals; suggests that social networks have value
- *Human Capital*: skills and knowledge gained by an individual through educations and experience

Organization of the Study

This paper is composed of five chapters. Chapter one introduces the research problem, poses the hypotheses, and lists the assumptions, limitations, and operational definitions of terms used in the study.

Chapter Two discusses the historical literature and the current literature relevant to the research problem. The historical review discussed the many historical explanations of the gap to current research on reading and motivation. The latter part of the literature review is more specific in terms of the focus problem.

Chapter Three describes the research methodology as well as the demographics, the standardized assessment tools that were used in the school district (SAT 10 and Dibels), and the tools that were administered to the student participants (ERAS and CAIMI). Chapter three also describes the participant population as well as the study location. Chapter Four describes the results from the data collection. Chapter Five provides the study summary as well as suggestions concerning the direction for future research.

CHAPTER II

LITERATURE REVIEW

This literature review initially discusses the extensive and diverse literature as well as some historical background of the problem. This section highlighted anthropologist John U. Ogbu as it was his ideas on the achievement gap that inspired this research study. The literature review then moved forward to more specific discussions on the reading achievement gap and motivation. The literature discussed and highlighted the research problem itself, which was the gap in reading achievement and motivation.

History of the Academic Achievement Gap

The literature on the achievement gap is extensive in signifying factors that contributed to the achievement gap. The theory of capital deficiency also attempts to explain minority performance in academics where capital is presented in various forms (Massey, Camille, Lundy, & Fischer, 2006). Children from wealthy families may have an advantage over children from disadvantaged homes in terms of preparing for higher learning due to available resources.

Human capital refers to one's ability to be economically productive i.e. knowledge, skills, health. Education is considered to be a form of human capital in that it is considered to be an important investment (Becker, 1975). According to Massey and colleagues (2006), under the theory of human capital, parents invest in their children in the same manner that entrepreneurs invest in companies. This investment is to yield the maximum payoff. Based on the historical literature on African American achievement, African Americans may not operate within the

boundaries of this theory. It is said that parents that possess high measures of human capital are more likely to read to their children and provide intellectual stimulation within the home. These parents are known to better understand the process of schooling and allow them to monitor what their children are being taught as well as manage their education (Laurea, 2000). Research suggests that well educated African American parents are less likely to transmit human capital when compared to White parents due to the historical legacy of racism and discrimination (Duncan, 1969; Borgas, 1992). This was determined due to a lack of resources in African American families. African Americans were not provided the opportunities to accumulate resources that were transmitted into human capital. Capitalism is considered the core value of the United States and possibly one of the foundations to the nation's wealth. Historically African Americans were considered as "capital" and consequently were denied opportunities to gain capital. It is believed that capitalism is the underpinning cause of the lack of equality between African Americans and Whites (Smith, 2003).

Social capital refers to the tangible benefits that people accrue from social networks. (Massey et al., 2006). Bourdieu (1986) and Coleman (1990) suggest that social capital is gained through membership and networks. This capital is then transferred into capital such as education to maintain or better their position in society.

Cultural capital is a general theory and refers to those non-economic factors that attempt to construct explanations of differential academic achievement as well as taking into account varying influences that may effect achievement (Massey et al., 2006). This theory associates class culture with how children see the world. Based on how children view their world they subscribe to or become socialized into the culture that best corresponds to their class (Bourdieu,

1977). These differing types of capital are almost always intercorrelated, and therefore, represent a major empirical problem for social scientists (MacLeod, 1995).

Although there are many underlying theories and probable causes of the achievement gap between African Americans and Whites presented in the current research, the current research project initially focused on and discussed research by anthropologist John U. Ogbu (1978) and how he explored the question of academic achievement over time. Ogbu's focus was on academic achievement as a whole and not specifically on circumstances contributing to the disparity in academic achievement between African American and White students in regards to the gap in reading achievement. Ogbu's (1978) views developed in the sense of explaining why African American students do not perform as well as White American students in school. These views included issues with the school curriculum (culture), language (Standard English), and the school environment (relationships with teachers and the school system).

Ogbu thought it to be important to recognize the history of African Americans receiving a deficient education. Ogbu (1978) stated:

But more important, I want to emphasize that it is the status of blacks in the social, political, and occupational realms of American society, as seen by the dominant white caste, which determines the kind of education offered to the former. (p. 12)

Ogbu's (1978) focus on social, political, and occupational realms was preceded by a number of views that emphasized differences in heredity, the family home environment, and school reforms as major factors relating to the disparity in the African American and White achievement gap.

“There is no disagreement over the fact that in the United States, in classroom work and in standardized tests of cognitive skills (IQ) and scholastic achievement, black students generally do less well than white students” (Ogbu, 1978, p. 43). Many explanations have been offered as to why black students do not perform at the level of white students. Researcher Washington stated,

“the 1997 NAEP assessment revealed that school-aged African American children consistently perform below their white peers in reading, mathematics, and science. This general difficulty with academic achievement has been called the black-white achievement gap” (Craig & Washington, 2006, p. 213).

Ogbu’s observations supported historical and theoretical perspectives on the achievement gap on African Americans and non-white students. His observations were initially rooted in the cultural – ecological theory that highlighted historical barriers faced by minorities (Ogbu & Simons, 1998).

John Ogbu and the Academic Achievement Gap: Stockton, CA Study

For many years Ogbu’s focus centered around the differences in school performance between students of minority and dominant groups. Ogbu initiated his search for an explanation with the 1968 multi-ethnic Stockton, CA study. The Stockton study later led to a comparative work of the same problem in six countries to focus on the education of those minorities who were castelike. Castelike minorities are identified as a subordinate group in a stratification system that is more extreme than social class stratification. (Ogbu & Simons, 1998). Ogbu concluded that lower academic achievement was an adaptation to barriers in terms of opportunity structures (Ogbu, 1978). Ogbu found in every case that these minorities were denied equality in educational resources, unfair treatment in school, and unequal job opportunities for educational accomplishments. Ogbu did not subscribe to disengagement as a result of intelligence nor did he subscribe to minorities not receiving the type academic training that majority middle class children were thought to experience at home. He concluded that the differences resulted from the perceptions and responses demonstrated by minorities because of the treatment they experienced by society and school (Ogbu 1974, 1978). Ogbu thought these students lacked “effort optimism”

which he stated was the faith that hard work will bring rewards in life (Tobias, 1989). He believed minorities performed less well because they did not persevere to do better and did not have a serious attitude about excelling academically. Ogbu's study observed voluntary and involuntary minorities and how they differed in sociocultural adaptation. Ogbu did not study the implications of this disparity in school differences at this point. Structural barriers continued to be a factor in future studies but his research focus shifted to community forces.

Community Forces

It was in the early 1980s that Ogbu's research interests shifted from explaining the differences between minority and dominant groups to focus on explaining the differences in school performance among minority groups themselves (Ogbu, 1987). Ogbu's focus shifted to community forces that he believed were products of sociocultural adaptation located within the minority community (Ogbu, 1983). Ogbu expanded his study to observe closely African American students' beliefs on their instrumental educational beliefs and behaviors; their relationship with the educational system and the schools as well as their expressive beliefs and behaviors which included how they interpreted and responded to cultural and language differences because of their collective identity; and their educational strategies (Carter, 2004). Ogbu hypothesized that by observing community forces, there would be some explanation as to why immigrant minorities do well in school as opposed to non-immigrants i.e. African Americans.

The Stockton study led to the realization that there were differences in academic achievement between the two groups, but he did not investigate the implications of this difference. Ogbu's (1978) comparative analysis posed questions such as did intelligence (genetics) account for disparity; could it be the different languages or learning styles? He

concluded and argued that none of these issues were the case. Ogbu argued from a comparative perspective that genetic, cultural, nor linguistic perspectives could not be solely attributed to the difference in achievement (Ogbu & Simons, 1998). For example, the Buraku in Japan do not demonstrate academic achievement in their country but do well in the United States. He also observed that Koreans do well academically in China and the United States but do not do well in Japan.

Based on Ogbu's comparative research it was thought that by closely observing the histories and sociocultural adaptations of minorities may help explain the problem (Simons, 1990). It was thought that to better understand why minority groups differ among themselves was to take into account their responses as to how they were assimilated into U.S. society and how the dominant group treated them. Secondly Ogbu focused on how they responded to their historical background and how they were treated affected how they perceived and responded to academics; hence the community forces that caused a shift in Ogbu's research focus. Community forces are the second part of the cultural ecological theory. Ogbu used the cultural ecological theory to observe the broad societal factors and school related factors as well as the dynamics within the minority community (Ogbu and Simons, 1998).

Cultural-Ecological Theory

Ogbu's observations and explanations of minority academic performance derived from a cultural ecological theory. This theory focused on the macro dimensions of the achievement problem: societal and school as well as the dynamics within minority communities. This broad perspective represented the cultural aspect of the theory and how minority people (minorities for purposes of this paper) perceived and responded to their environment. The ecological aspect of the theory referred to the environment.

The cultural-ecological theory is made up of two main parts. One is how minorities are treated or mistreated in regards to education (policies, pedagogy) and how being denied these educational opportunities lessened their chances for rewards and competing wages in gainful employment. In essence, this was “the system.” The accompanying goal focuses on how minorities respond to or perceive education as a consequence of treatment (Ogbu & Simons, 1998).

According to Ogbu, minorities were faced by collective problems such as instrumental, symbolic, and relational issues. Instrumental discrimination related to employment and wages, symbolic discrimination referred to the vilification of the minority culture and language while relational discrimination referred to social and residential segregation (Ogbu & Simons, 1998).

In order to examine the minorities’ perceptions and responses to white treatment, Ogbu used the cultural ecological theory to explore the impact of this treatment. This impact is examined by observing minority responses or their “collective” solutions to collective problems. Structural barriers or discrimination in society and school were thought to be determinant of academic disengagement. However, it is important to note that these barriers are not the sole cause of minority academic disengagement. Ogbu noted that community forces were dissimilar for different minority groups (Ogbu & Simons, 1998).

Ogbu’s investigation’s found that African American students thought they had to work extra hard academically and in the labor market when compared to their White counterparts. This finding supported earlier work by Ogbu that disengagement and inequality in the labor market was contributed to unequal opportunities in society (Ogbu & Simons, 1998).

Minorities

Ogbu defines a minority not in terms of numbers but in the event that a population occupies a less powerful or some form of subordinate position in relation to another population based on the same country or society (Ogbu & Simons, 1998). It is also important to note that a person's race or ethnicity does not designate them to being a minority. The determining factor is based upon the group's history and how it became a minority. The roles of the dominant group also helped to define minority status. In terms of observing minorities and academic performance, minorities were classified as autonomous, voluntary, and involuntary. Voluntary minorities came to the United States in hopes of securing better opportunities. Voluntary minorities are different from those in the dominant society in terms of race, religion, and education. Most importantly they do not feel forced to adapt the ways of the majority people because they chose to move to the United States. Voluntary minorities may face some difficulty in academic achievement initially due to cultural and language differences. However, cultural and language difficulties are not long term (Wang, 1995). The way voluntary minorities interpret their reasons for being in America and ability to embrace the culture and language promotes a positive attitude for academic success. Voluntary minorities generally are very much engaged in academics as a means to better their lot in life. Their peers also support successful academics and therefore do not have to bare the burden of "acting white" or being mocked for being a good student. Fordham and Ogbu (1986) found that some Black students avoided attitudes and behaviors they perceived as "acting White" for fear that these ways would be unfavorable to their collective racial identity (Carter, 2004). Voluntary minorities possess the frame of reference or look at their situation as positive. They have a dual reference that enables them to assess the situation in the United States and compare it to the situation at home. The reference is positive

because they see the move as gaining more opportunities when compared to home. Ogbu also speaks on instrumental responses that entail a group's idea about how to achieve success or their folklore of "making it." Voluntary minorities' folklore of making it involves the belief of a meritocracy; hard work and a good education will lead to opportunities and success in U.S. society.

In contrast, involuntary minorities were brought to America by means of enslavement or colonization. Involuntary minorities did not migrate to America with the expectation to succeed or improve their condition. They were incorporated into American society against their will, which enabled them to conclude that they fare poorly due to belonging to a disfavored group (Ainsworth-Darnell, & Downey, 1998). Ogbu's logic of involuntary minorities is that they have limited occupational opportunities and resulted in putting little effort in academic engagement. Therefore poor perceptions of occupational opportunities encourage academic disengagement (Ogbu, 1978). The attitudes and behaviors of involuntary minorities possess ambivalent attitudes toward school. Involuntary minorities generally support academic success to enhance educational and employment opportunities. However, involuntary minorities have trouble with the dominant perception of education being the key to success due to previous experiences in dominant society and failure of school. Involuntary minorities (African Americans) are said to have a dual negative frame of reference. Therefore, parents of involuntary minorities often send mixed messages about education. These parents tend to encourage their children to work hard in school but also hold to the beliefs that the school system is not trustworthy. These parents place blame on the teachers when their children do not do well in school. Teachers are blamed for being discriminatory and not teaching their children properly.

Ogbu noted that all involuntary minorities are not alike. For instance, Mexican Americans possess beliefs and behaviors with a more varied history and different circumstances. Ogbu found that this group conformed less to the patterns of involuntary minority status. African Americans are said to be the most visible because their belief and how they respond to these beliefs exhibit the most conformity for the characteristics of the involuntary category (Ogbu & Simons, 1998). This indicates that the same treatment of minority groups can extract different responses based on one's history. In terms of the folklore of "making it," involuntary minorities are ambivalent. Involuntary minorities also believe that hard work and education are necessary to thrive in U.S. society. There is conflict with involuntary minorities (African Americans) because of issues with job and wage discrimination and the belief that a good education and personal effort is not enough to overcome racism and discrimination. Ogbu & Simons (1998) points out that this folklore or instrumental response of the means necessary to succeed in the United States may be unconscious. He suggests that because he found that African Americans do encourage their children to do well in school so that they will get a good job and be successful but on the other hand these parents are being haunted by past experiences that school success does not always allow for getting a good job. The children eventually adopt and share their parents' ambivalence in regards to academic achievement. Involuntary minorities also have a hard time trusting white-controlled institutions such as the school due to a long history of discrimination. Folk theories of effort and reward, identifying learning as white culture, and mistrusting white controlled institutions such as the school are considered to be community forces that hinder academic achievement. Ogbu (1994) states this is racial stratification and not class stratification. Ogbu ascribed certain characteristics to voluntary and involuntary minorities. Next, he distinguished between levels of cultural differences between majority and minority populations,

specifically minority populations (Foster, 2004). Ogbu conceptualized primary and secondary discontinuities to strengthen the cultural ecological theory.

Primary discontinuities are differences between cultural norms and language of students as well the schools these students attend. Ogbu thought that primary cultural and language differences differentiate from minority members and those from the dominant group. Ogbu indicated that these differences initially lead to learning and social adjustment problems (Ogbu, 1985). Further, Ogbu (1985) argued that there are several reasons why students are willing to overcome this barrier or discontinuity in order to succeed in academics. One reason includes students' sense of tangible benefits that they will accumulate as a result of their academic success.

Secondary discontinuities arise after groups have come into contact and are mostly associated with involuntary minorities (Ogbu, 1982). Ogbu argued that involuntary minorities discriminate against themselves and perceive this discrimination as institutional. These racial discriminations were thought to be important determinants of African American academic disengagement (Ogbu & Simons, 1998).

Oppositional Culture Explanation

Ogbu's (1978, 1991a) explanation for racial differences in academic disengagement is eminent in the academic achievement literature. The aforementioned explanation is referred here as the oppositional culture theory or as some refer the resistance model. Ogbu described the oppositional culture explanation as secondary cultural discontinuities that arise after groups have made contact (Ogbu, 1985). Ogbu sought to explain his thoughts on academic achievement with reference to broader societal structures and historical tenets relating to the gap. He began his journey by distinguishing between involuntary and voluntary minorities.

Identity problems are also problematic in regards to valuing education. Ogbu (1995a) suggested that involuntary minorities have developed group identities of who they are in response to the dominant white culture. Identity impacts the attitudes and perceptions of students, parents, and the community in regards to academic success. Some characteristics of academic success include the ability to write and speak Standard English, display appropriate behaviors, and master the curriculum as a means of academic success. It is these characteristics that have been interpreted as rejecting minority identity. Ogbu and Simons (1998) suggests minority students are forced to conform to “white” or dominant norms of education and community interpretations that do not approve or support the dominant attitudes or behaviors. This transforming identity role in school is viewed as the curriculum serving as a means to impose white culture on them. This imposition questions the curriculum in terms of why the history of and experiences of minorities are not included.

However, proponents of the occupational culture theory understand that not all African American students resist education. It is those high achieving African American students (involuntary minorities) that feel the “burden of acting white”.

Acting White Hypothesis

The acting white hypothesis may be considered as one of the most noted explanations for African American academic underachievement. This hypothesis supports the notion that African Americans are opposed to acting white. Fordham and Ogbu (1986) suggested this cultural opposition to acting white also led to being culturally opposed to succeeding in schools. Different scholars design the acting white hypothesis in different ways. Many definitions reference that some African American students criticize their high achieving African American peers for academic success. Freyer (2006) described the acting white hypothesis as “a set of

social interactions in which minority adolescents who get good grades in school enjoy less social popularity than white students who do well academically” (p. 52).

Former United States Senator Barack Obama (Democratic National Convention 2004) stated that “... it is the fact that reading a book or getting good grades might be perceived as acting white.” The oppositional culture theory led African Americans or involuntary minorities to define academic achievement as the prerogative of white students and to invest themselves in other alternatives outside of academic success (Freyer, 2006). In contrast, students from dominant cultures and voluntary minorities demonstrate optimism of their chances of academic success.

The “acting white” hypothesis proposes that successfully engaging in academics would be seen as one rejecting their very own culture. Again, Fordham and Ogbu (1986) were major proponents of the “acting white” hypothesis indicating African American students perceiving school related behaviors as acting white and therefore resist pursuing academic success socially and psychologically (p. 183). They also suggest that African American peer groups discourage their peers from putting forth the effort to do well in school as well as adopting the attitudes and behaviors necessary to advance academic achievement (p. 183).

Others interested in oppositional culture and academic achievement support the notion of acting white by observing and interviewing African American students. These observations were typically in inner-city high schools (Suskind, 1998). Other proponents include immigration scholars who use the oppositional culture theory to describe an “underclass” culture meaning immigrant students sometimes assimilate to the disadvantage of their academic success (Suarez-Orozco, 1989; Vigil, 1998; Waters, 1991). Other proponents include McWhorter (2000), and Thernstrom & Thernstrom (2003). These intellectuals used Fordham and Ogbu’s (1986)

hypothesis as evidence that African American and Latino students' peer culture is an important cause of the achievement gap. The acting white hypothesis failed to receive empirical support from other interested persons (Bergin & Cooks 2002; Ogbu, 2003; Ainsworth-Darnell and Downey 1998; Cook & Ludwig, 1997, 1998; Datnow & Cooper, 1996; Farkas, Christy, & Steve, 2002; Ferguson, 2002; O'Connor, 1999; Steinberg, 1996; Tyson, 2002). This evidence partly failed due to scholars employing only one ethnic group at a time and therefore challenges the oppositional culture theory.

Challenges to the Oppositional Culture Theory

Tyson (2002) conducted qualitative work on predominately African American third and fourth grade students. She found that these students do eagerly participate in class and take pride in learning and doing well in school. Tyson also found that peer groups did not tease high achievers but teased those who did poorly in school. Carter (1999, 2005) interviewed low SES African American and Latino adolescents (ages 13-20) in NY and found evidence opposite of the oppositional culture theory. Carter found that African American students did not view academic achievement as ethnically inauthentic. She found that the scorn of ethnic inauthenticity was not due to attitudes and behaviors of school related tasks but because they socialized with white students and acted like white students i.e. "speech styles" and "acting stuck up" (Bergin & Cooks, 2002). Although Tyson (2002) and Carter (1999, 2005) challenge the oppositional culture theory, questions arise because these studies focused primarily on African American and Latino students only.

Other challenges derived from quantitative work (using multi-ethnic samples from middle and high-school students) from Ainsworth-Darnell & Downey 1998; Kao & Tienda (1998); and Morgan (1996). They found that African American and white students have similar

educational and occupational aspirations that also challenge the oppositional culture theory. This is particularly so in the works of Cook and Ludwig (1997) and Ainsworth and Darnell (1998) who concluded that when controlling for SES, African Americans successful in academics were no less popular than White students. The results also show that African Americans on average were no more alienated than their White peers and on some dimensions were even more invested than their White counterparts. These findings were based on students surveyed in the National Educational Longitudinal Survey (NELS). Other researchers found that African American students were more likely than white students to disapprove of breaking school rules and cheating. African Americans also were found to try really hard in classroom activities and doing similar amounts of homework. It was also found that high achieving African American students were more likely to conclude that they remained popular with their peers than high achieving white students and their peers (Ainsworth-Darnell & Downey 1998; Cook & Ludwig 1997).

Ogbu (2003) revised his take on the (1986) “acting white” hypothesis. Instead of supporting the notion that African American students deride the actual practice of putting forth the effort to get grades as acting white, he suggested it was certain attitudes and behaviors that were derided. Many of these attitudes and behaviors are indeed favorable to getting good grades, for example, displaying intellectual conversation in the classroom, enrolling in advanced classes and speaking Standard or appropriate English etc.

Shaker Heights Study

Ogbu’s (2003) study in Shaker Heights, Ohio focused on Black students who did not perform academically like their White counterparts. He observed that Black students not only lagged behind their White peers at every social level, these students performed less well than immigrant minority students including Black immigrant students.

Ogbu's (2003) concluded from his Shaker Heights study that most of the students he observed appeared to be characterized by low effort syndrome. He noted that these students did not invest adequate or impressive quality time concerning academics. Further, the Shaker Heights research observed that the efforts students put into their school work decreased noticeably from elementary to high school. Students admitted putting academics behind leisure and recreational pursuits such as playing games, talking on the phone, working, or sports.

The Shaker Heights study also observed African American middle and upper class homes where the parents were college educated. He observed that the parents mistrusted the school system as a white institution. The study also concluded that African American parents did not supervise their children's homework, did not participate in school functions, and failed to motivate their children to engage in academics. Ogbu (2003) concluded that this parental behavior and the notion that teacher's and the schools were responsible for their students academic success was a cultural norm. Ogbu was perplexed by the idea of African American parents mistrust in the teachers and schools, but still held them accountable for their children's academic success.

Language

The current research paper observed the surface of issues relating to the use of Black English and Standard English, as language is vital to reading; hence reading achievement was the focal point of the current study. Recent research proposes that dialectical variation might have contributed to African American children experiencing a gap in reading and other academics when compared to nonminority students (Craig & Washington, 2006). Dialectical variation refers to the sound, structure, meaning and function of language. African Americans are thought to possess a dialect much different from Standard English used in classrooms. LeMoine (2001)

stated that with younger African American children entering pre-school or kindergarten the mismatch between the language forms and language use of their homes and that of the classroom are suspected to significantly and negatively influence their transition into school. This finding may very well hold true for children of other non-white ethnic backgrounds. Scientific research in language suggests that Standard English or standard dialects are not better by means of objective measures but are more favored because they are the dialects used by the most influential in society (Godley, Sweetland, Wheeler, Minneir, & Carpenter, 2006).

AAE (African American English) dialect is thought to be a significant divergence from standard classroom English (Craig & Washington, 2006). Scheffner Hamner (2001) and Craig & Washington (2006) concluded that African American mothers and their children utilize patterns of cultural language use much different from the language use for White middle SES mothers and their children. Scheffner Hamner (2001) further observed that African American mothers use a wide array of reading styles to their children like that of White parents. The difference in reading styles noted was that African American mothers failed to frequently use questioning such as why and what. Washington concluded, “by age four, however, these (cultural language patterns) forms are evident in the discourse of African American children from both low and middle SES backgrounds” (Craig & Washington, 2006, p. 216).

Some involuntary minorities (i.e. African and Native Americans) believed that using Standard English negated their own cultural identity. Ogbu (1986) suggested that when teachers possessed negative beliefs about African American Vernacular English that this belief hindered African American’s academic achievement and contributed to their oppositional standpoint in relation to school culture.

It is interesting to note that the Chinese or the Ibo from Nigeria had a different frame of reference. These groups believed that they were coming to America from the “outside” and accepted the premise that they had to learn the language to do well in school. Fordham (1996) revealed from an interview with an African American student that African American people’s linguistic practices are different. This student suggested that when Black people use Standard English their peers often perceive them as “putting on airs” or talking white. There is much debate about Standard English and Black English. Adger, Christain, & Taylor, (1999) suggest that teachers understand and respond appropriately to African American Vernacular English and other “less acceptable” dialects in order to help remove the academic achievement gap between African American and White students. Language is a worthy topic to discuss in terms of achievement because of the implications of varying dialects. Language or dialectical variations were not critical for purposes of the current study.

The current exploratory research project subscribed to the belief regardless of a child’s dialect he or she can learn to read. Recent research in the area of language variation supports the awareness of different dialects as a natural means of communication. Although differences between the dialect African American children speak at home and the dialect taught at school may contribute to difficulties in learning to read, this issue should not be considered a problem and can be remedied with the teacher possessing sufficient knowledge and sensitivity about dialect. This knowledge and sensitivity will enable the teacher to prepare materials and lessons that are consistent with the phonology, syntax, and vocabulary of those children that use a “stigmatized” dialect. Edwards & Garcia (1991) concluded:

Ideally, schools should recognize and incorporate the different interaction patterns and literacy events that characterize non-mainstream and mainstream communities. For this to happen, however, we need considerably more research documenting the different types

of interaction patterns and literacy events common in non mainstream communities and more teacher training. (p. 183)

Ladson-Billings (1990) used the term culturally relevant teaching. Culturally relevant teaching is used to describe the kind of teacher that it is better suited for using the students' culture (as opposed to fitting the school culture to the students' culture) as the basis for helping students understand themselves and others, structure social interactions, and conceptualize knowledge. Her key claim is that pedagogy must accommodate students in preserving their cultural identity as they engage in successful academics.

Lee (2001) supports Ladson-Billings claim but also offers concern in regards to how the term culture is conceptualized. Her argument is based on the notion that race grounds the concept of cultural responsiveness and what links culture and academic achievement. Lee (2001) supports the notion that the classroom and other cultural factors are used as a lever to support learning. She suggests that seeing students cultural backgrounds as a deficit negate students learning. Instead Lee (2001) used a cultural modeling framework to enhance students learning. The cultural modeling framework theorized the relationship between culture and learning. This framework enabled teachers along with the students' culture brought from their homes and respective communities to promote development and learning. Lee (1998) suggests that teachers should design meta-cognitive instructional conversations such as cultural concepts used in everyday discourse i.e. hip hop music. The idea of cultural modeling derives from a Vygotskian perspective where the goal of attending to culture while shaping the learning environment empowers students. This empowerment serves a model for students to become responsible and contributing members to their communities (Woodard, 2003). Ogbu (1987) stated:

the failure of school personnel to understand and respect minority children's culturally learned behaviors often results in conflicts that obstruct children's adjustment and

learning. Note however, that I am not saying that it is only school personnel who have an obligation to understand and accommodate cultural differences; minority children also have an obligation to understand and accommodate school culture. It is a two-way thing. (p. 319)

Shirley Heath-Brice (1983) observed children from a White working class community and an African American working class community in her book *Way With Words*. The well noted study emphasized that race was not the sole factor in determining the participants literacy practices but speaks to the different ways in which language was used due to the varying historical forces that shaped these language practices. She argued that the different ways children were socialized to use language depended upon how each community structured their families, defined familial roles, and their social mobility as it relates to position and power. Heath-Brice highlights the fact that readers must move beyond race when trying to explain the differences in the two communities. According to Heath-Brice (1983):

Therefore, any reader who tries to explain the community contrasts in this book on the basis of race will miss the central point of the focus on culture as learned behavior and on language habits as part of that shared learning. (p. 11)

Heath-Brice's (1983) research is not only based on how children from different communities learned to use language in their homes and communities but also how teachers' knowledge of how children used language enables them to incorporate these ways of language into the classroom. Although Standard English is the construct used in American education, the current research suggests that the use of using "proper" English may be over rated. Demo (1999) concluded that Standard English varies geographically. He stated that Standard English in the South shows some pronunciation contrasts with Standard English spoken in the North. Standard English in the United States also contrasts with Standard English in other countries such as Britain, Ireland, Australia, or India to name a few. Demo (1999) concluded there is no single

standard. One can speculate that the greater the difference in language skills, the more difficult it is for a child in the academic setting. Mufwene (1999) stated:

However, some vernaculars are structurally closer to the standard than some others are, and speakers of such varieties have fewer problems developing proficiency in standard English. One may also argue that one of the reasons some native speakers fail to acquire perfect command of standard English is their inability to perceive differences between some structures of their vernaculars and those of standard English. (p. 4)

Ogbu observed in one African American community that people speak different forms of English. Some speak a “personal dialect” (their own regular English i.e. Black English) and others speak Standard English (which is known as white people’s regular English). He observed that that some minorities tend to respond differently when asked to learn Standard English because they attach different meanings to speaking Standard English (Ogbu, 1995b). Tensions are often sharp because of misconceptions about Standard English. One tension is that it is a White man's language and necessary for success and that African American students must acquiesce part of their culture to succeed. The current study agreed that culture is central to language and ignoring or disrespecting one’s culture negated the very essence of one’s being. Language is one’s culture, one’s voice, and without it one’s identity is sacrificed. However, it is thought that using Standard English should be encouraged and not required. To reiterate Heath-Brice (1983), when teachers are accepting and learn and understand diverse dialects, it fosters a more rich academic culture, supports all identities, and is cognizant of all students.

Based on some of the linguistic literature it is important to recognize all dialects to eliminate the chances that those who do not (or do so on an irregular basis) employ Standard English to decrease the chances of feeling that their identity is negated. African American students oftentimes thought they were being forced to negate their own identity. To remedy this

perception, some African Americans adopted the mentality of being “cool” to promote a sense of collective identity.

Identity

Ogbu also found that high achieving African American students were pressured by their peers to be “cool.” Ogbu (2003) noted that African American students think that it is not “cool” to work hard in school and get good grades. This is when Ogbu (2003) concluded that African Americans have a “low effort syndrome” which means that African Americans do not put forth the effort they should or could to make good grades (p. 18).

Psychologist Claude Steele (1997) observed circumstances and situations that gave rise to the racial gap in test scores. He and other researchers observed African American and White students at Stanford University (sophomores) as they were given a standardized test similar to the more complex question of the Graduate Record Exam in literature. Half of the students were told that the test would focus on understanding psychological factors involved in solving verbal problems. Other students were told that the test would assess academic ability and capacity. Those African American students that were told that the test was a true measure of ability scored significantly lower than their white counterparts. African American students who thought they were being observed on psychological factors as related to solving problems scored the same as their White peers. White students performed the same in both scenarios. Steele concludes that African American students know that they are going to be seen as having limited abilities and therefore become intimidated. This phenomenon is labeled as stereotype vulnerability.

When viewed in combination with writings by Claude Steele (1997) regarding observations on the effects of racial stereotypes on academic performance, this research suggests an explanation for identity achievement. Identity achievement is an issue in that the theory

argues that certain minority groups are prone to be academically disengaged and underachieve because of an unconscious fear of living up to negative stereotypes assigned to their groups intellectual capacity. Steele (1992, 1997) thought when stereotype threats were present that this negated students' performance on standardized tests.

He focused on how societal stereotypes about groups tended to influence intellectual functioning and the identity of individual group members. Students from minority groups for which negative group stereotypes are affiliated, experience increased anxiety. Steele is making the point to say that additional anxiety can lead to minority students devaluing or reducing their identification with academics as a self-protective measure from the pressure of "being a good student." This threat is mostly observed with African Americans in a college setting when they are called upon to perform academically. Failure to perform successfully or to standards is psychologically distressing and supports the notion that African Americans are intellectually inferior to other students (Steele 1992, 1997). Steele continues to reveal that in order to avoid this risk that African American students downplay the importance of academic achievement. Therefore when an African American student fails, he or she can say that they really did not try to succeed and that academic outcomes are really not important. Stereotype threat is based upon three assumptions. The first assumption is that people generally like to think well of themselves and have others do the same; secondly it assumes the distress encountered about the possibility of performing poorly actually increases the likelihood that you will perform poorly and last it assumes that disidentification or psychological disengagement is the long term outcome of exposure to this distress. Massey et al., (2006) indicate that it is well documented that African Americans do value education just as much or more so than other races but continue to under perform; yet they possess high self-esteem (Mruk, 1999). Steele (1997) concluded although

academic performance is not considered to be a central domain of how African Americans construct self-esteem, they have disidentified with academic achievement instead being a domain of self-worth.

To generalize stereotype threat outside the laboratory, Steele instituted a special program for African Americans at the University of Michigan where students were recruited and told it was considered an honor to be accepted into the program. These students participated in weekly sessions to share common experiences and to receive exposure to advanced materials. After years of observations in this program Steele found that the students that were enrolled in the program made better grades and were less likely to drop out when compared to other African American students (Massey et al., 2006). This discussion reported results from minority participants although this may be true for white students as well.

The concept of academic achievement and identification may very well explain some of the underlying and embedded issues affecting students in disadvantaged minority groups. Ogbu's cultural oppositional explanation and Steele's stereotype threat model discuss both social and cultural factors that may inhibit academic achievement. Like Ogbu (1987) and Steele (1992, 1997), researchers Majors and Billson also addressed the oppositional identity theory. Although Majors and Billson discussed oppositional identity as being a mitigating social circumstance embedded in U.S. society that hinder minorities in educational attainment, their work focused on males.

Majors and Billson (1992) presented the "cool pose theory" where African American males adopted a social strategy for coping with their place in a subjugated group that is oppositional to "identifying" with academic achievement. Osborne (1999) stated, "many of the roots of cool pose seem to be similar to the social issues discussed by Ogbu" (p. 558). African

American males used the cool pose as a means of masculinity and allowed them to cope with the negativity associated with being a minority. Cool pose was the opposite of being identified as a “good student” and portrayed this opposite as one that did not identify with academic achievement. Theoretically, the failure to properly identify with academics has shown to be a factor in poor academic performance for minorities (Osborne & Rauch, 2001). The symbolic interactionist view posits that in regards to self, people receive feedback from their environment and that if people attend to this feedback they perceive it (Osborne, 1999). Depending on the value of these perceptions, they get incorporated into one’s self-concept and this concept is identified as important and it tends to impact one’s self-esteem. On the flip side if the concept is not considered important to the self it is considered to be disidentified and will have little impact on one’s self-esteem.

According to Osborne and Rausch (2001), the issue is how to ensure African American boys and other disadvantaged minorities remain identified with academics and how to help those who have disidentified regain identification. This issue is important because Osborne and Rausch (2001) found that students of all gender, races, and ethnicities, who are in school rate higher with identification than those students who are not affiliated with school. In regards to Osborne and Rauch’s argument, this issue can be addressed by helping those students at risk for disidentification resist the trend and by again helping those who have disidentified re-identify. Like Ogbu, (2003) Steele, (1997) Majors and Billson (1992) support the idea of a multicultural curriculum where contributions of people of color are infused into the curriculum to benefit all and lessen the potential for threat and anxiety. Grant and Sleeter (1985) suggest that a multicultural curriculum will diffuse some of the attention from African Americans and make

them less visible in academia that will help African American boys and other academically disadvantaged minorities positively identify with education.

In conclusion Majors and Billson, (1992) suggested that in order for African American boys to refrain from utilizing self-protective strategies such as cool-pose, curricula should incorporate an array of Afrocentric ideals through the teaching of values and other African American self-interests. They also suggest that this is not an oppositional ideology but instead a means to promote a more collective and cooperative focus among African American males and other academically disadvantaged minorities.

Although there are many studies to support the idea of disidentification, the idea may have resulted from societal inequality and failure to thrive academically. This disparity undermines academic achievement and motivation (Finn, 1989; Taylor, Carsten, Flickinger, Roberts, & Fulmore, 1994). To further support disidentification studies, Cross, Strauss, & Fhaghan-Smith (1990) suggested that minorities (i.e. African American adolescents) may have a personal identity and be less positive about the race as a whole. Cross et al (1990) recommended that research focus on individual differences and the preceding processes that underlie achievement outcomes. Some studies support the idea that students who positively identify with academic culture are more prone to academic motivation and engage in higher academic gains than those students that do not disidentify with school (Finn, 1989: Finn & Cox, 1992).

Reading and The Matthew Effect

The widening gap in reading achievement is known as The Matthew Effect according to psychologist Keith Stanovich (1986) who adopted the term Matthew Effect based on the Gospel of Matthew (Matthew 25:29, NIV). Researcher's Kush and Watkins (1996) indicated, "the improvement of children's reading remains one of the most important challenges for

contemporary educators” (p. 315). Stanovich, a researcher of reading and language disabilities used the term to observe how students acquire reading skills. He proposed that failure to learn reading before third or fourth grades may signal life-long problems in acquiring new skills. The Matthew Effect premise suggests a theoretical framework to describe the development of individual differences in reading ability (Bast & Reitsma, 1997).

This phenomenon has been observed and further described in educational settings (Wahlberg and Tsai, 1983) to address reading achievement. It has already been mentioned that the development of reading skills starts in the home before children are introduced to formal education. Wahlberg and Tsai (1983) suggest that differences among children exist as a result of inborn competencies as well as parental investment. The Matthew Effect suggests that the disparity between good and poor readers increases over time. This phenomenon has recently been regarded as a model to describe the developmental course of reading ability (Shaywitz et al., 1995). Shaywitz et al. (1995) conducted a longitudinal study on elementary students in Connecticut. They used a composite reading score as an outcome measure. This score contained word recognition and reading comprehension scores. The results failed to support the hypothesis that good and poor readers increase over time. The study concluded that during the early school years (grades 1-6) that a Matthew Effect for reading was not observed.

A study by Bast and Reitsma (1998) tested the Matthew Effect in a three year longitudinal study in the early elementary grades. They found a Matthew Effect for word recognition but not for reading comprehension. The findings of this study are in sharp contrast with the previous study conducted by Shaywitz et al. (1995). Again, Shaywitz et al. found no Matthew Effects in reading. Bast and Reitsma (1998) suggested the differences in their findings

might be due to Shaywitz et al. not utilizing an appropriate growth model and composite reading score.

Bast and Reitsma (1998) also suggest that motivation may be a strong and durable mediator of successful reading achievement and engagement. Researchers (Rowe, 1991; Walhberg and Tsai, 1983) show in the reading literature that being motivated to read increases reading skills, which in turn successively informs students' inclination and desire to read. Although there are many studies to support the Matthew model, the crucial issue remains if the model can allow for empirical testing (Bast & Reitsma, 1998). Studies conducted on the premise of the Matthew model focused on word recognition and reading comprehension. The current study did not observe the dynamics of word recognition and reading comprehension. The current study took interest in affective skills such as intrinsic motivation and how motivation contributes to reading success and engagement. Hence, the gap in reading may be better informed by observing individual student motivational factors and how they influence reading achievement.

Gender and Academic Achievement

Gender and academic achievement have been of interest to researchers and policy makers for a long time (LoGorfo et al., 2006). Smith and Wilhelm (2002) argue that research on gender suggested that boys do not learn to read as fast as girls. Gender reflects behaviors and dispositions in response to societal structures (Hubbard, 2005). Fordham (1996) posited that when compared to African American males, African American females persisted academically because they were better able to ignore discrimination.

This study was not interested in one's ability to simply ignore discrimination but focused more on issues such as age at entrance into the learning process, classroom grades and teacher gender effects. Many researchers suggest that there is a gap in gender in academics (Dee, 2006).

Other researchers suggest that the gender gap is overrated. There is a great deal of research that implies girls are more likely to outperform boys on reading and comprehension tests and boys are more likely to outperform girls in math and science (LeGorfo et al., 2006). Research by LeGorfo et al., 2006, suggest that females start ahead of males in reading and learn faster during the elementary and high school years. Despite these findings they report that the extra gains demonstrated by females are minimal when compared to overall gains experienced by both males and females.

Research has focused on the effects of age and gender and how it relates to reading achievement. Flynn and Rahbar (1993) observed the age of a child upon entering school and gender. They suggested that there was an interaction between the two variables that effected reading achievement. Flynn and Rahbar (1993) found that females that were age six or older when entering school demonstrated less achievement as opposed to females that entered prior to age six. However, the researchers did not find such effects for male students. They concluded that the focus should be not on gender and school class but specific skills that are brought to the learning process.

Jules (1988) suggested that relative reading achievement is largely unassailable from earlier to later grades in school. Phillips, Norris, Maynard, & Osmond (2002) challenged earlier research on the mutability of relative reading performance categorization. They suggest that reading categories are more porous than suggested from previous research.

Gender and reading achievement research have also focused on students and the teacher's gender. Literature in gender and achievement suggest that girls outperform boys in measures of reading while under performing in measures of science and math. Dee (1988) used data from the National Educational Longitudinal Study to observe gender interactions in the classroom. The

data suggested that when students are assigned to a teacher of the opposite sex their student achievement is lowered. Results also imply that if a male student has the opportunity to have a male English teacher that would eliminate some of the gap in reading achievement and improve the performance of boys while concurrently harming that of female students. Similarly, Dee (1988) indicated that data the suggested that when females were assigned to a female teacher in science education that they would decrease the gender gap in science.

Self-Efficacy

Reading infuses the school curriculum in its entirety (Cook, 1998), therefore it is suggested that young children's reading achievement is deeply related to academic achievement (Lynch, 2002). According to Bandura (1986), the self-efficacy theory is based on a person's belief in his or her own ability to exercise and maintain some level of control over events that affect his or her life. "Efficacy beliefs influence how people feel, think, motivate themselves and behave (Bandura, 1993, p. 118). Henk and Melnick, (1995) suggests that these judgments are likely to either motivate or inhibit learning.

Bandura's (1977a, b; 1986) model of self-efficacy seems to be a befitting framework to discuss how reading may be influenced by attitudes and perceptions. This framework includes (1) the perceptions or how people feel about their ability to perform a task, as well (2) the consequences people expect to result from their performances. This includes discussions on the behavioral aspects toward one's efficacy and the outcome the person expects to receive. Bandura (1977b), a social learning theorist, illustrated behavior as being a shared interaction between the individual, environment, and behavior. Although we know these variables are naturally interdependent, Bandura (1977b) highlights the core of operations that occur among the three variables by means of cognition. Bandura's (1977b) explanation of the self-efficacy theory

cannot be complete without discussing the concepts of symbolic, vicarious, and self-regulatory processes. For purposes of this study, self-regulation was discussed as it speaks to perceptions.

Self-regulatory activities enable a person to exercise some degree of control over their behavior (Bandura, 1977b). Positive attitudes and perceptions or the cognition that children possess about their ability to demonstrate reading achievement was relevant to the current study as they may impact motivation, preferably intrinsic motivation. It was important to note that the key to understanding Bandura's theory as it is related to the current study was not the actual skills that students have to achieve reading; but what students believe they are capable of in pursuing reading achievement. Bandura (1977a, 1986) further posits that efficacy expectations also establish motivation. This establishment derives from or is reflected by the amount of efficacy exhausted as well as the degree of persistence demonstrated during trials or obstacles.

Attitude and Reading Achievement

Wixson and Lipson (1992) suggested that the student's attitude toward reading is a vital factor affecting reading performance. Lazarus and Callahan (2000) suggest that attitudes toward reading affect student's achievement. Good (1973) defines attitude as "predisposition ... to react specifically towards an object, situation, or value [which is] usually accompanied by feelings and emotions" (p. 49). More specifically, Smith (1990) defined reading attitude "as a state of mind, accompanied by feelings and emotions that make reading more or less probable" (p. 215). Henk and Melnick (1995) suggests that how a person feels about him or herself as a reader could have some influence regarding if reading should be sought or avoided, the amount of effort contributed as well as if comprehension would be pursued.

Baker and Wigfield (1999) and McKenna et al. (1995) among other researchers have consistently found that high motivation and positive attitudes are related to higher reading

achievement and foster more reading activity. Other researchers propose that the direction is the opposite and actually yields achievement to attitudes (Quinn and Jadaz, 1987).

Reading research suggests that during the early stages of development that the causality of reading instruction and achievement is somewhat unclear, although this debate is not solely related to reading (Kush and Watkins, 1996). It applies to mathematics and science as well (Reynolds & Walberg, 1992a, 1992b).

Motivation and Reading Achievement

Smith (1998) observed that the emotional response to reading is the primary reason most readers read and most likely the primary reason why nonreaders do not read. Motivational theories in relation to student achievement are utilized to explain students' behaviors (i.e. task, attention etc.), emotions, and internal beliefs. Studies of motivation yield different theoretical perspectives to elicit varying patterns of behavior. Some of these theories include the aforementioned self-efficacy theory, attribution, self-worth, and achievement. The current review briefly highlights the different perspectives on self-efficacy theory. Self-efficacy beliefs are correlated with achievement related behaviors including academics (Bandura, 1977, 1993). Students who demonstrate highly efficacious behaviors view themselves as more willing to face challenging problems (Schunk, 1994, 1985; Bandura, 1993). Self-efficacy theory simply posits that if a student demonstrates high efficacy, the student will more than likely be motivated. If a student demonstrates little to no efficacy, the student is likely to not be motivated. According to Bouffard et al., 2003, p. 172, "it is important to stress that students' perceptions of competence do not necessarily reflect their real capacities".

Seifert (2004) points out that the self-efficacy theory is unsatisfactory on two accounts. He suggests that it is not always the case that students who do not demonstrate motivation are

not capable of learning. Students who possess motivation may not put forth necessary effort to achieve academically. Seifert (2004) suggests evidence for the claim that the self-efficacy theory is not so straightforward in that it can suggest that highly efficacious students are highly motivated. He suggests that his point is evident by using for an example a bright but bored underachiever who does the minimum to get by. He also uses for an example that some children who state they cannot do something may not necessarily deter the child from trying. Montcalm (1999) stated, "it is important to note that efficacy expectations are by no means considered the sole determinant of behavior" (p. 98). Bandura (1977a) suggested that sometimes it is not necessarily a lack of the skill that inhibits performance but a lack of adequate incentives. Concerning reading, it believed that if self-esteem and high achievements are correlated. If students feel good about themselves they are more likely to engage in academics or tend to read at a higher level. It is important to note that this type assumption is complex due to the difficulty in trying to demonstrate self esteem producing reading achievement or academic achievement.

The current research will now turn its focus to the aspect of intrinsic motivation. Students perceptions of intrinsic motivation and competence is said to be of great importance in cognitive and educational psychology (Bandura, 1986, 1993; Harter 1990, 1992). Researchers have evidence to support a strong link between student's perceptions of competence and intrinsic motivation (Deci & Ryan, 1985; Deci, Vallerand, Pelletier, Ryan, 1991). Speaking in general, researchers have found consistent evidence that student's intrinsic motivation decline during the elementary school years to the high school years (Gottfried, Fleming, & Gottfried, 2001). They also suggest that these observations were more profound based on certain academic subject domains.

From a constructivist's view, perceptions of competence and intrinsic motivation are developed or constructed over time as a function of learning experiences (Harter 1982, Hokoda & Fincham, 1995). These learning experiences are nurtured in environments with which we associate ourselves. Motivational theorists support the idea that students need to feel a sense of belonging in the classroom to promote academic achievement. Academic motivation is not purely individual or an intrapsychic state but develops out of a complex web of social and personal relationships (Goodenow & Grady, 1993). Motivation derives from a social fabric consisting of one's immediate and external environments. Weiner (1990) stated, "school motivation cannot be understood apart from the social fabric in which it is embedded" (p. 621). Another important element of this social fabric is a student's "place" or context in the classroom or school environment. Guthrie and Cox (2001) suggest that the amount of time students read for enjoyment purposes (intrinsic) and for school is a major contributor to reading achievement and overall knowledge of the world. Their study focused on 3rd and 5th graders to observe the motivation, strategy use, and past reading achievement results. They concluded that motivation was found to be a key variable when other variables were controlled. However, the results were contradicted in regards to reading for school. Results were different for each of the grades. Guthrie and Cox (2001) suggest that their study is consistent with the engagement perspective on reading development.

The current study was not intended to focus on the psychological processes of reading that can involve cognitive factors, information processing and other complex but important features; this research focused on the attitudes and perceptions that fostered motivation to embrace the act of reading and how it might promote reading achievement. The focus of reading achievement was grounded in the achievement motivation theory. Baker, Afflerbach, &

Reinking (1996) concluded, “the engagement perspective views readers as motivated, strategic, knowledgeable, and socially interactive” (p. xv). Students who are engaged in reading do so because they are motivated for different purposes. These purposes include utilizing preexisting knowledge from previous experiences to form new knowledge as well as participate in meaningful social interactions centered on reading (Baker & Wigfield, 1999).

Engaging in reading involves motivation and attention. Engaging in the practice of reading early on is important because time spent reading is tied to reading and writing competence and those students who do not practice reading in their free time often lag behind academically even if they are not initially remedial readers (Anderson, Wilson, & Felding, 1998; Stanovich, 1996). Baker and Mackler (1997) suggest that children who engage in reading early on are more likely to desire reading more frequently and broadly which is believed to enhance and emphasize the skills necessary for reading development.

The idea of reading early encourages thoughts of shared reading in the home. Early childhood researchers suggests that engaging in reading stories with children has historically been important in regards to fostering literacy acquisition (Scarborough & Dobrich, 1994). These authors suggest that the dialogue generated from the story is just as important as the actual act of reading (Sonnerschein & Munsterman, 2002). It is believed that this open dialogue about a book promotes or allows children to focus on sound structures, print awareness, and understanding of the story (Snow, Burns, & Griffin, 1998).

Emphasis on home based story reading oftentimes results in middle vs. low-income families being observed. Sonnerschein and Munsterman (2002) suggest that there is within group variability in regards to the frequency of reading interactions. It is suggested that there is a great deal of support in showing that the role that children’s interest in reading affects literacy

acquisition. Literacy acquisition includes print awareness and syntax or the sounds of language. Affective quality in terms of reading interactions is found to be a significant predictor of children's motivation for reading (Sonnerschein and Munsterman, 2002). High affective quality of reading interactions revealed that children being observed demonstrated attentiveness to how engaged their listeners were in the text. Sonnerschein and Munsterman (2002) revealed that these children also used the printed text to redirect their listeners if their attention appeared to waiver. However, observation by Baker et al., (2001) suggested that there is a negative relation between affective quality and dialogue of print. They found that affective quality was lower when the child and the listener engaged in discussion about the print. Despite the large body of research on motivation in general, there is limited knowledge for children's motivation for reading (Oldfather & Wigfield, 1996).

Some researchers question the age that children are able to distinguish between their motivation and competence in different academic subjects while others suggest that students are able to make this distinction by the first grade (Eccles, Wigfield, Harold, & Blummenfeld, 1993; Wigfield, 1997). Some authors suggest students are able to make these judgments by the 3rd grade (Harter, 1992; Harter & Pike, 1984). Another important question deriving from research on the development of perceived competence is the idea of these judgments of perceptions and motivation and how they evolve throughout the school years. Many authors suggest that changes in cognitive processing abilities and school environment impacts children as they age are likely to contribute to a decline in self-perceptions of competence (Bouffard, Boisvert, Vezeau, & Larouche, 1995; Stipek & Mac Iver, 1989).

Chapman and Tunmer (1995) observed that while student's attitudes about reading began to decline from grade four to five that reading perceptions of competence were found to be stable

over the first five years of elementary school. Studies by Harter (1982) and Harter and Pike (1984) found similar results and that there is no unique direction, instead reading along with mathematics is considered to be central domains of learning through the early academic years (Bouffard et al., 2003).

The literature in educational and psychological research stresses the importance of interest and motivation for learning. Early pioneers in education such as Dewey (1913) suggested that self-perceptions were found to remain stable for some while increasing or decreasing for others. These contradictory findings support the interests of the current research study as there is more research needed to add scholarship to the discussion of student's perceptions of their competence and intrinsic motivation during the elementary school years. Hidi (1990) and Schiefele (1991), both indicate that later research supports the premise that when students are interested in what is being taught and also have access to those materials that their motivation, efforts to learn, and attitudes about learning improve. "There can not be learning unless a person is willing to pay attention" (Csikszentmihalyi, 1990, p.116).

Many motivational theorists suggest that a student's efficacy and competence beliefs, intrinsic and extrinsic motivation, and purposes for achievement are essential in making decisions about activities to engage in, how long to engage in the activity and the amount of effort put into the activity or what moves people to act (Bandura, 1997; Eccles, Wigfield, Harold, Blumefield, 1993, Wigfield et al., 1997). Research has shown that motivated readers will engage more in reading activities (Oldfather and Wigfield, 1996) as well as possess positive attitudes about reading (Mathewson, 1994; McKenna et al., 1995).

Assisting students in the act of reading engagement promotes understanding and the ability to appreciate and enjoy reading. Guthrie and Wigfield (2000) suggest that engaged

readers are mastery oriented, intrinsically motivated, and have self-efficacy. Guthrie and Wigfield (2000) also proposes that a coherent classroom should promote readers being engaged by creating classroom contexts that support knowledge goals, real-world connections to reading, supporting meaningful choices about their reading as well as selecting texts that are vivid, relevant, important, captivating, and familiar to the student. He suggests that all of these qualities should be fused for successful reading engagement and achievement. It is also interesting to note that Snow (1991) suggests that “talk” requires the child to demonstrate critical thinking or going beyond the immediate text to foster cognitive skills to result in higher level learning. These skills include guiding the child in evaluating and questioning outcomes of a story. This was mentioned because of the importance of students being able to exhibit higher level learning skills. Despite the rich history of the achievement gap presented early on in this paper, it turns out that (for this study) race should not be a variable in observing the gap in reading achievement but turns to more constructive and individual explanations.

The current review suggests that the attention focused on the reading achievement gap between racial groups may be overrated. The goal of this study was to present information worthy of fusing with other thoughts and methodologies to inform research on reading achievement beyond the cultural ramifications to establish future lines of observation.

For example, Ogbu (2003) noted that African American’s were affected by “the low effort syndrome” where there was not sufficient effort put forth to achieve academically or for fear that their peers would think it was not the cool or popular thing to do. The current study suggests that if students (regardless of race) possess positive attitudes about reading then they may be intrinsically motivated to read.

According to Gottfried (1990), observing intrinsic motivation in early elementary school children is essential due to the profound implications of school success. It is believed that when children develop intrinsic motivation it will set the tone for future academic engagement and success (Brooks, Freiburger, & Grotheer, 1998; Lumsden, 1994). Gottfried (1990) also suggested that students who are intrinsically motivated tend to do better as opposed to those students who are extrinsically motivated.

An investigation by Enrau & Schlackman, (2006), highlighted the importance of exploring more on the impact of motivation, specifically intrinsic motivation in terms of reading achievement and literacy. These researchers further speculated that discovering the factors contributing towards the motivation to read as well as deepening engagement in reading activities could enhance the lives of students and classrooms.

There are many studies in the education literature that demonstrates research on reading achievement and motivation in urban areas. Current literature addressing reading achievement and motivation for southern rural, upper elementary students is sparse. However, there is a wealth of literature addressing factors affecting reading achievement. Murray & Bottoms (2005) addressed low reading achievement among rural middle school students in Southern states. These researchers concluded that schools, teachers, and administrators created a culture of high expectations for all of their students. They also found evidence that having the right combination of literacy experiences across the curriculum increased reading scores. In another study by Ivy & Broddus (2001), they concluded that students thought that opportunities for independent reading as well as allowing students to select texts that are personally interesting are strong motivators for reading achievement. In a study conducted by the Program for International Student Assessment (2002), they observed reading achievement in urban and rural areas in Canada. PISA

(2002) concluded that the number of books in the home is an important indicator of reading achievement as it suggests it is possibly an indicator of home environment that encourages reading. Further, PISA (2002) observed that rural students were more likely to come from low socioeconomic backgrounds and tended to come from homes with fewer cultural belongings and educational resources. It was also observed that students from rural homes were less likely to discuss cultural, political, or social issues with their parents and may tend to be less motivated to engage in reading activities. There are other issues in the reading literature that go beyond variables such as home environment, prior literacy experiences, and number of books in the home. Issues centered on the school context are being discussed in the reading literature.

More recent research in reading explores how teachers and classroom factors contribute to students' achievement in reading. A study by Damber (2009) observed teachers cultural sensitivity as factors that contributed to producing an environment where the students' reading flourished. The main goal of Damber's study was to observe specifically those classes that had prior established predictors of reading achievement. These pre-established predictors included language background, home literacy environment, and SES which indicated lower expectancy levels of academic achievement (Heath-Brice, 1983).

Although Damber's (2009) study was conducted in Swedish municipalities, the issue of social class is also a concern in the United States. Social class designations are relevant in terms of students with diverse backgrounds. Some students from diverse or minority backgrounds may experience difficulties in teacher and classroom expectations (Damber, 2009). It is believed that students' lack of understanding may be linked to assumptions by teachers that all students share similar conditions which neglects marginalized students need for support. This assumption was coined as "colour blindness" (Damber, 2009). Key concepts emerging from Damber's work

recognized the importance of an adequate supply of reading materials but more importantly avoiding the idea of color blindness where students are assumed to be limited based on socio-economic background factors.

Carlisle, Correnti, Phelps, and Zeng (2009) recently conducted a study focusing on effective teachers as being critical for reading achievement as opposed to the issue of social class. They observed and focused specifically on teachers' knowledge on early reading in high poverty schools in Michigan. They suggest that linguistic knowledge as well as the developmental process of learning to read is critical in teachers understanding their job of teaching students how to read. They further suggest that the reading curriculum and measures of students learning must be in alignment for reading achievement. Carlisle et al, 2009 conclude that teacher prep programs in reading and professional development for elementary teachers specifically those teachers in high poverty schools should enhance teachers' ability to teach students to master reading achievement.

Teacher accountability concerning reading and academic achievement continues to be a major concern. Policymakers and researchers continue to focus on issues of improvement for students. There is even a greater concern for those students that are in low performing schools since teachers are identified in many studies as being an important factor or contributor to improving student outcomes.

Intrinsic vs. Extrinsic Motivation

Goldbert (1994) posited that it is important to discuss two orientations in regards to motivation that are intrinsic motivation or mastery orientation and extrinsic motivation or performance goals. Boggiano et al., (1992) found that motivational orientation dictated children's standardized achievement scores. It was specifically found that those students with

intrinsic motivational orientations obtained higher reading and math scores when compared to their peers that possessed extrinsic orientations. Skinner and Belmont (1991) suggested that intrinsically motivated students put forth intense effort and concentration in learning tasks; they generally show positive emotions and attitudes about learning. Students who are extrinsically motivated engage in learning activities just for the sake of attaining a reward or avoiding some type of punishment (Dev, 1997).

Academic and Recreational Reading

Gettys and Fowler (1996) suggested that teachers that enjoy reading and provide pleasurable reading opportunities in the classroom and allow time for recreational reading during class time promote and encourage positive attitudes about reading. Teachers can encourage students to view reading as a means of fun, relaxation, and an opportunity to learn new and different things that those who do not read would not encounter. Teachers should promote reading to be more than a requirement to achieve academically. Academic reading can be promoted in a way to encourage recreational reading habits outside of the classroom.

Previous national assessments suggested that across all age groups those students who read for fun were more likely to have higher proficiency and those students who did not read for fun (Cloer & Pearman, 1992). Ostling (1992) indicated that boys lag behind girls in reading starting in the elementary school years throughout high school. Reading literature shows consistent evidence that girls possess more positive attitudes than boys in reading (Ross & Fletcher, 1989; Smith, 1990). However, Worrell, Roth, & Grabelko (2007) observed that findings regarding grade level were found to be a little less consistent. Diamond and McKenna et al., (1995) suggested that reading attitudes started to decline as students moved to higher grades, except for those high ability students who maintained positive attitudes across grades. Diamond

and Onwuegbuzie (2001) supported this finding and concluded that reading attitudes declined considerably starting in the fourth grade. Kush et al., (1995) contradicted these findings. They found no differences in reading attitudes across grade levels in a suburban sample of students in grades 1-5.

It is believed that students who possess positive attitudes towards reading will apply more effort concerning the reading process as opposed to those with negative attitudes. Positive attitudes towards reading are fostered in the home. Parents can set the tone for fostering reading by reading in the home, sharing books with their children and maintaining reading materials in the home for children's use. Teachers in the classroom can foster positive recreational activities in the classroom by providing pleasurable reading experiences and allowing time for recreational reading during school hours.

CHAPTER III

METHODOLOGY

The purpose of the study was to explore reading achievement in a population of upper elementary school - aged students in a rural West AL school district. Specifically, this study assessed the relationship between whether academic reading, student's attitudes toward reading, and academic intrinsic motivation relates to ethnicity. This study also assessed whether the difference in reading achievement, attitudes and motivation varied by ethnicity, gender, or SES.

This chapter will be organized in the following way: First participants will be described followed by the plan for the research design. Following this description, attention will be directed toward the measures that were used to assess the various constructs followed by the proposed analysis strategy.

The University of Alabama Institutional Review Board (IRB) approved this study. The IRB also reviewed and approved the consents and assent forms that were forwarded to parents and students for permission or approval to participate in the research study. These forms are presented in Appendix A. The superintendent of the targeted school district also granted permission to conduct research in the county school system (See Appendix A for a copy of his letter of support).

Setting and Participants

Participants were students from the 4th, 5th, and 6th grades in a rural West Alabama school district. This district was made up of four schools. The school district is small (when compared

to neighboring county and city school systems) and serves the majority of students receiving free or reduced lunches. The majority of the students participating were African American. All student participants were English dominant. The average class size for each grade was between 20 to 30 students. None of the students received special education services.

The town of Greenwich is predominately White and is industrious in poultry and lumber goods. In Greenwich Elementary (grades 4-6) there were a total of 28 student participants. There were 8 males and 20 females; 23 White students and 5 African American students. Greenwich schools are considered as the most popular schools in the district due to its rich athletic programs, extra curricular activities, advanced classrooms, and good physical structures in terms of the buildings. Greenwich is known for its exemplary parental and community support systems.

Crenshaw Elementary is the only school in the town of Crenshaw due to the high school closing for financial reasons. This town is predominately African American and serves as the county seat. There were very few responses to the call for research. There were 3 boys and 6 girls participating in the project. All of the participants were African American.

Perry Elementary had 39 participants. There were 14 males and 25 females; 11 White students and 28 African American students. Perry is predominately African American and serves as a rival to Greenwich in sports.

Maryland Elementary had 35 participants. There were 10 males and 25 females. All participants were African American. Maryland has a variety of restaurants and specialty shops in the downtown area.

The school district receives federal support i.e. Title 1 funds to assist in improving the academic achievement of disadvantaged students. Like other schools receiving federal funding (Title 1), this district must meet the requirements of Adequate Yearly Progress (AYP) standards. Failure to make AYP may jeopardize the district and / or the school's ability to meet accountability standards.

All students were invited to participate, however, only those students that returned verification of parental consent was allowed to do so. Those students were given consents and assent forms to gain parental approval to participate in the study.

Measures

Elementary Reading Attitude Survey

The measure used to assess reading attitudes was the Elementary Reading Attitude Survey (ERAS) (McKenna and Kear, 1990). Previous literature in reading research suggests that reading is a unitary construct (Barnett and Irwin, 1994). Lehr (1982) and Schuy, McCardle, & Albro, (2006) suggests that reading may actually be multidimensional with environmental and developmental interactions defining the different aspects of reading attitudes. This study subscribed to the belief that reading is a multidimensional construct and will therefore chose to employ the ERAS as it provided scores for academic and recreational reading. This survey was used to assess recreational (outside of school) and academic (school related) reading attitudes in grades 4, 5, and 6 for purposes of this study. The ERAS was designed to assess grades 1 through 6 if so desired. The ERAS is a 20 item instrument that uses a 4-point Likert scale with pictorial anchors of the cartoon character Garfield. The authors chose to use a pictorial assessment to help young children comprehend the significance of the assessment. A neutral choice was not used

due to participants failing to commit to a choice by choosing the neutral option even when the opinions are clear (Nunnally, 1967).

Garfield number 4 depicts a happy character with paws in the air with a large grin on his face. Garfield number 1 depicts an unhappy or tense character as he is scowling with limbs tensed at his side and paws clenched tight. According to McKenna and Kear (1990) this tool was developed to estimate reading attitude levels efficiently and reliably (p. 626). The ERAS is used to ask about students' feelings in a variety of reading situations.

Scoring of ERAS

The ERAS was scored by counting four points for each leftmost (the model that suggests "happiest"). Garfield character circled; three for each Garfield character that is slightly smiling; two for each model that depicts a mildly upset Garfield; and one point will be given for each model that depicts a very upset Garfield (rightmost character). The ERAS allowed for three different scores for each student: a total for the first ten items, second ten items, and a total merged score. The first ten items of the ERAS addressed attitude toward recreational reading and the second ten items assessed academic reading. The total score measures general attitude towards reading.

Score Interpretation

To interpret scores from ERAS, the raw scores were converted into percentile ranks using a table of norms constructed by the authors of the assessment. The table included norms from different grade levels. The table also included columns for recreational, academic, and composite or total scores. The table was used to locate the percentile rank that corresponded to the raw score mean.

Reliability and Validity

According to Worrell et al. (2007), the authors (McKenna and Kear, 1995) reported that the internal consistency of scores on the two factors is substantial for a measure of attitudes in elementary-aged populations. The support for reliability of the ERAS also extends the generalizability of the ERAS (McKenna & Kear, 1995).

Specifically, reliability estimates were based on Cronbach's alpha (1951) and yielded a coefficient range from .74 to .89. McKenna and Kear (1995) indicated that scores on the academic and recreational subscales were moderately correlated ($r = .64$). According to Kush, Watkins, McAtter, & Edwards, 1995 reported that ERAS scores demonstrated moderate stability.

Kazelskis, Thames, and Reeves (2004) investigated validity for the two factor ERAS model across gender and race, they concluded:

The academic reading attitude and recreational reading attitude factor parameters were found to be invariant across gender, namely, the two-factor model parameters (item loadings, factor variances, and factor covariances) were not found to differ for the male and female respondents. However, factor invariance did not hold for the two factors across the European – American and African – American samples. (p. 118)

Kazelskis et al. (1995) further explained that there were no significant differences between the two racial groups on the academic reading attitude factor. The difference was determined with the regression weights for specific items on the recreational reading attitude factor. The specific questions that indicated a difference were “how do you feel about reading during free time?”, “how do you feel about reading during summer vacation” and “how do you feel about reading instead of playing”? The researchers explained that the meaning of the ERAS recreational factor was different for the European American and African American groups. “For the European American group, items reflecting attitude about reading during leisure time were more important

in defining the recreational reading attitude dimension than they were for the African American group” (Kazelskis et al., p. 119).

Children’s Academic Intrinsic Motivation Inventory

It is important that academicians understand the nature of children’s motivation for reading; this task can be accomplished by measuring specific motives to read (Wigfield, 1997). The relationship between academic motivation and reading was observed because there is little information relating reading achievement and motivation for elementary school children (Deci & Ryan, 1985; Gottfried, 1985). Recently the literature is starting to show more research on the academic reading achievement and motivation in elementary school children. More recent research by Gottfried et al., (2001) observed intrinsic motivation as a significant factor based upon subject domain specificity. This study led to evidence suggesting intrinsic motivation for elementary through junior high students that reading declined while social studies increased. According to Broussard and Garrison (2004) the development of young children’s intrinsic motivation is very important in that as beliefs and practices situated early in life shape later behavior. Gredler (2001) defined motivation as the attribute that moves us to do something or not.

The CAIMI was developed to assess intrinsic motivation for school learning. It was composed of 122 items (Gottfried, 1990). It contained five subscales including reading, math, science, social studies, and general orientation to school learning. Each specific domain contained 26 items each with the general category containing 18 items. All categories were identical except for reference to subject area. This instrument was also used to assess intrinsic academic motivation characterized by little enjoyment of learning, orientation to tasks, little curiosity for school learning, little interest in mastering tasks, and low persistence and task

endogenous orientation (Gottfried, 1990). Gottfried (1990) concluded that the CAIMI is a popular measure used to assess intrinsic motivation in schools.

Gottfried (1985) and Gottfried and Gottfried (2005) conducted several studies using the CAIMI. Results from those studies suggested that intrinsic motivation is positively and significantly related to children's academic success when measured by standardized tests and school grades. Gottfried (1985) also concluded that students with higher intrinsic motivation had greater achievement in academics.

Scoring

The CAIMI items were scored by recording the rating for the reading response item on the horizontal line in the box to the right. It was important to notice the direction of the arrow to the right side of the ratings. Some items had an arrow pointing to the right whereas the ratings were assigned in the following manner: 1 strongly agree, 2 agree, 3 don't agree or disagree, 4 disagree, and 5 strongly disagree. The CAIMI also included reverse-scored items that were indicated by an arrow pointing to the left. Those items were assigned as follows: 5 strongly agree, 4 agree, 3 don't agree or disagree, 2 disagree, and 1 strongly disagree. The final two questions in the CAIMI only offered two possibilities to rate. Item for question #43 were scored as 2 or 1, which followed directions for reverse scoring. Item #44 was scored as 1 or 2 in the normal direction.

Scoring Interpretation

Percentiles and T-scores as well as standard errors of measurement assisted in interpreting scores on individual scores and profiles. The raw score was secured based on the student's grade level. T-scores and percentiles were recorded. T-scores were profiled in the graph area on the profile sheet (Gottfried, 1986a).

Reliability and Validity

Construct and criterion related validity was established for the CAIMI through the confirmation of hypotheses based on motivation theories (Gottfried, 1986a, p. 13). Specifically for purposes of this study, only the reading domain was assessed. According to Gottfried, 1986a, the reliability of this instrument is well established using internal consistency and test-retest reliability estimates. There were two studies used to establish reliability of the CAIMI over a two-month interval. The coefficients ranged from .66 to .76 in Study 1 and .69 to .75 in Study 2. Gottfried (1985) reported that the aforementioned coefficients indicated moderately high stability over a period of a 2 month interval. Gottfried (1985) further indicated that “for both internal consistency and test-retest reliability, coefficients were consistent across grade, sex, and race” (p. 4). Gottfried (1985) also concluded:

The subscales of the CAIMI were intercorrelated. The correlations indicate that the CAIMI subscales measured variance unique to each separate area, although there was some common variance between them. The proportion of shared variance between the subscales ranged from .00 to .42. The average correlation was .39, indicating that the average proportion of variance shared between the subscales was 15. (p. 634)

More recent research conducted by Gottfried et al (2001) indicated that the CAIMI and as well as a more advanced version of the CAIMI designed for high school students (CAIMI-H) are identical. Both assessments contain the same number of items and content. The only difference is that the more advanced CAIMI-H pertains to the names of two subject area scales (i.e. reading is referred to as English and social studies is referred to as history). In addition, this 2001 study indicated that the coefficient alphas for related subject area subscales range from .89 to .93 (p. 6). Gottfried et al., 2001 continued to indicate that the CAIMI contained substantial internal consistency as well as reported construct validity throughout the school years.

Stanford Achievement Test 10

The Stanford Achievement Test (SAT10) tenth edition was used to assess reading achievement. The researcher assessed individual student scores. The testing coordinator in the school district was responsible for maintaining individual scores. Permission to use scores was granted from parents by signing consent forms to participate in the research study (See Appendix A).

This information was accessible by visiting with the school district testing coordinator. To ensure anonymity the codes used on the assessments was used to secure individual SAT 10 scores. The researcher took the codes and met with the testing coordinator. The testing coordinator used the codes to identify the individual student therefore disclosing the unidentified individual student information.

The rationale for utilizing the SAT 10 was that it is the most widely used standardized test to test achievement in school districts throughout the United States (Wikipedia, 2009). It is also used to track students and schools by the state to comply with school accountability. This assessment was also used to meet standards of the No Child Left Behind Act.

The SAT 10 is a standardized, multiple-choice test that is administered in grades 3-8. It is a norm-referenced test that analyzes how well students have done in classrooms not only in Alabama but also across the nation. The SAT 10 observes progress in the domains of reading, math, language, science, and social studies. Reading and math domains are presented in clusters. The reading cluster measures mastery in reading comprehension and vocabulary.

The SAT 10 measures the range of critical reading components such as recognizing sounds to word identification from vocabulary skills to comprehension. This exploratory study assessed the reading domain only. According to the Alabama State Department Board of

Education (2007), the SAT 10 is closely aligned to state standards, major textbooks, national standards, and the National Assessment of Educational Progress (NAEP).

Data show that the SAT 10 is a reliable test, which indicated that an individual test taker would earn similar scores in the event the test is repeated. The reliability coefficient for critical reading was .90 to .92 (67 test items).

Dynamic Indicators of Basic Early Literacy Skills

Like the SAT 10, Dibels or the Dynamic Indicators of Basic Early Literacy Skills is an assessment used by the state of Alabama to comply with state and federal mandates to assess school accountability. This assessment is composed of five brief measures to observe early literacy development. According to the National Reading Panel (2000), Dibels is a standardized, individually administered assessment of early literacy development and comprehension.

Dibels is administered commencing in grades pre-K through eight. Grades 4, 5, and 6 are not mandated by the state of Alabama. However, the principals at each school use the Dibels test as an evaluative tool. The measure is administered three times during the school year. Like the SAT 10, the researcher met with the principals of each school and utilized individually assigned codes to secure individual student scores on the Dibels assessment. Parental consent for the researcher to use the scores that were unidentified was granted when the parent gave consent for the student to participate in the research study.

The Dibels website suggests that a series of studies have investigated the reliability, predictive validity, concurrent validity, and construct validity and item sensitivity of Dibels (<https://dibels.uoregon.edu/>). It is also suggested that test reliability refers to the consistency of the assessment score. The test is administered and scored in a uniform fashion to enable all students to be scored the same way.

The website suggested that a series of studies have confirmed test-retest reliabilities for elementary students ranged from .92 to .97. The site also suggested that criterion related validity considered in 8 different studies revealed coefficients ranging from .52 to .91 (Good & Jefferson, 1998). The researcher assessed Dibel scores by grade level reports and not individual reports.

Piloting the Measures for Readability and Appropriateness

The ERAS and the CAIMI were piloted using a smaller sample of 50 students in grades 4, 5, and 6 in order to evaluate the clarity, sequence, wording, and redundancy of survey items (Babbie, 1990; Yegidis & Weinbach, 2002). Pilot study participants were volunteers from a school in the Jefferson County school district. The students were informed that their information would not be used in the actual study. Participant responses were used solely to ensure students in grades 4 through 6 easily understood the questions. In addition to answering survey questions, pilot participants gave the researcher some feedback on the instruments.

Findings from the pilot survey indicated that the students suggested that the surveys were easy to understand. Some of the students stated that they liked the arrows in the margin because it indicated when a “reverse” order question was being asked. As no significant modifications to the survey were suggested and/or warranted, the researcher reiterated the fact and prompted students when the CAIMI asked that questions be answered in reverse order. There were no students that required the surveys be administered individually due to learning, reading, or perceptual difficulties. The researcher was prepared to accommodate the student’s needs and administer one on one. Students thought the ERAS were really fun and exciting due to the Garfield models. The children were able to complete both surveys within a one-hour timeframe.

Obtained (Pilot) Scores on the ERAS and CAIMI

ERAS

The ERAS provided assessments of recreation and academic reading attitudes, which were combined to form a composite score. Overall, the pilot data indicated that females scored higher than males on the ERAS. Specifically, on the recreational reading scale, the F test was significantly significant, ($F(1,48) = 3.99, p < .05$).

On the academic reading scale, the F test was also statistically significant, ($F(1,48) = 4.070, p < .05$). Finally, on the composite score, the females scored higher than the males ($F(1,48) = 6.99, p < .05$).

In addition to the gender differences, the pilot data indicated that on the attitudes to recreational reading scale, there were statistically significant differences by ethnicity, ($F(1,48) = 10.914, p < .05$). Although the means indicated that White students scored higher on the attitudes toward academic reading scale than African American students, this difference was not statistically significant, ($F(1,48) = 3.728, p > .05$). As expected from the subscale finding, the total composite, ($F(1,48) = 6.165, p < .05$) indicated that the means between African Americans and Whites were statistically different with Whites obtaining the higher scores. The interaction between gender and ethnicity on the overall score was not statistically significant ($F(1,48) = 2.617, p > .05$).

CAIMI

CAIMI scores were found to differ by gender. Specifically, females were found to be more extrinsically motivated than males ($F(1,48) = 14.67, p < .05$).

With regard to ethnicity findings indicated that White students were more intrinsically motivated to read than African American students ($F(1,48) = 8.28, p < .05$). In terms of gender

by ethnicity, there was no interaction at ($F(1, 48) = .11, p > .05$). No statistically significant grade effects were noted on the ERAS and CAIMI ($F(2, 47) = 1.34, p > .05$ for the ERAS; and ($F(2, 47) = .80, p > .05$ for the CAIMI).

Procedure

Participants for the current study were solicited with the help of the Superintendent of Board of Education in a rural county in West AL. Pike County was chosen due to the researcher's interest in the welfare of the school system because of its disadvantaged economy. The researcher chose to observe upper elementary students (grades 4-6) due to this being the time where children are taught to read to learn. Students in grades 1-3 primarily focus on learning to read. According to the National Institute for Literacy (2009), it indicates that learning to read fluently and with comprehension by the end of grade 3 marks the difference between the "learning to read" phase of reading development and the "reading to learn" phase that typically begins in grade 4.

The researcher visited all four elementary schools within the Pike County district to solicit participation.

After all participants were invited to participate, consents and assents were provided to the families to secure permission to participate in the study and to use individual student scores. The consents and assents were given to the students at school to take home to their parent(s). The student was allowed to participate in the study after the researcher received receipt of permission. After permission was granted, the researcher visited each school to administer the assessments with the teacher present in the room. The researcher visited each school on different assigned days. The researcher introduced herself to the students and explained the purpose of the study and why the researcher is interested in their opinions. The researcher then proceeded to

share pencils with those students who did not have pencils. After all pencils were distributed, the researcher read aloud the instructions. The CAIMI assessment was completed initially, followed by the ERAS, and the family questionnaire. The procedures were repeated in an exact manner for all questionnaires. The researcher remained present in the room until all assessments were secured. The assessments were taken up by the researcher and thanked the participants for their participation.

Analysis

The study employed ANOVA and hierarchical multiple regression method to analyze the hypotheses. The primary focus of this study was to observe the pattern relationships between reading achievement, attitudes, and intrinsic motivation by ethnicity. Additionally, the study attended to the specific demographic characteristics of gender, and SES, in a rural West AL school district.

For the first two hypotheses mentioned above, ANOVA was the primary assessment strategy. Specifically, the study used four 3 way ANOVA's with SAT 10 and Dibels, CAIMI and ERAS as the dependent variables while ethnicity, gender, and SES were the between subjects independent variables. This analysis provided information on whether these dependent variables differed by ethnicity or gender either individually or in combination. Following each ANOVA an additional analysis of covariance was computed with SES as the covariate. Using SES as a covariate provided information about whether SES could account for any of the findings observed in each of the ANOVA's mentioned above.

Finally hierarchical regression was used to assess the third hypothesis in this study. Specifically reading achievement as the dependent variable was regressed on to ethnicity, gender, CAIMI and ERAS in step 1 of the analysis. F tests associated with this step in the

analysis and the associated t tests for each regression coefficients provided information about whether ethnicity, CAIMI, and ERAS uniquely related to achievement. In step 2 of the analysis, cross products between these variables were entered together. Step 2 in the analysis indicated whether the three predictor variables related to achievement in combination.

A second set of hierarchical regressions were conducted with background characteristics or demographics (gender, SES) entered in step 1 followed by in step 2 ethnicity, CAIMI, and ERAS and in step 3 the cross products described above. These last regressions were used to assess whether the demographic variables could account for any of the findings noted in the previous hierarchical regressions.

Preliminary to the ANOVA and regression analysis, all variables were described using descriptive statistics i.e. means, standard deviation and simple correlations between the achievement outcome variables and student characteristic variables. The primary investigator employed the following procedure in collecting the data: assessments and pencils were administered during a single class period at each school in order to collect the data. The investigator introduced the assessment and indicated why the investigator was interested in their thoughts. The investigator then read the assessment instructions aloud. The investigator also read the practice items aloud. After the students suggested that they were clear on how to complete the assessments they proceeded to complete the assessments on their own.

After the students completed the first assessment, the investigator collected and secured the assessments in a bag and proceeded with distributing and reading aloud the instructions for the second assessment. Again the investigator inquired about if students understood how to complete the assessment and if there were no questions the students were given permission to proceed in completing the second tool on their own. The assessments were administered in

groups by school and were monitored until all assessments were completed and secured by the investigator.

CHAPTER IV

RESULTS

Introduction

The present study provides information on the relationship between reading achievement and intrinsic motivation in a sample of African American and White upper elementary students. Two assessments were used to address intrinsic motivation toward reading (CAIMI) and attitudes toward academic and recreational reading (ERAS). Dibels and SAT 10 were used to assess students' reading achievement.

This study sought to determine if there is evidence of a link between reading achievement and intrinsic motivation in upper elementary students. This study further attempted to seek whether reading achievement is related to ethnicity, reading attitudes, and intrinsic motivation when considered together or in combination.

Current research indicates that there is evidence that the link between reading achievement and intrinsic motivation may differ by ethnicity. This study is an attempt to assess whether there are other differences outside of ethnicity linking the two together either in a positive or negative light.

Specifically, the dependent variable for the current study was Dibels and SAT 10 which are outcome variables and the independent variables were motivation and attitudes. Control variables for the study were SES and gender. The demographic characteristics of SES and gender were assessed to see if they would account for any observed relationships individually or in

combination. This chapter will present demographic data used to describe the sample and then discuss the three hypotheses used in the study. All students were invited to participate but there were only 111 participants within the school district. The participants completed the demographic data, ERAS, and Dibels, and a family questionnaire. An alpha level of .05 was used for all statistical tests.

Demographics

This study collected demographic data as a means to observe if the background demographic characteristics (ethnicity, SES, and gender) had an impact on the variables that were used in the study. The demographic information also asked that the student reveal whom they live with in their home.

In the sample there were 111 students from upper elementary grades. There were 77 African American participants and 34 White participants. Out of the 111 student participants there were 35 male participants and 76 female participants. The African American group was outperformed by the White group on outcome measures of Dibels and SAT 10. This finding is pretty much consistent with data in previous and current literature. The female group also outperformed the male group which is consistent with the literature (Osling, 1992; Peritz 2003).

The data indicated that on the CAIMI and the ERAS, the African American group outperformed the White group. These results were not consistent with previous research findings. The female group outperformed the male group on the CAIMI and ERAS. Demographic comparisons of the data are shown in Table 1.

Correlations among the achievement and motivation scales are presented in Tables 1a and 1b. In general, the correlations are positive with all of the positive correlations statistically

significant at the 0.01 level in terms of gender. Intercorrelations among ethnicity scales were also positive and were statistically significant at 0.01 and 0.05 alpha levels.

Table 1

Demographic Comparisons of Participants on Dibels, SAT 10, Caimi and Era Scales (N=111)

ACHIEVEMENT		AA (77)	W (34)	MALES (35)	FEMALES (76)	TOTAL
X(SD)	Dibels	141.8 (37.8)	153.7 (40.6)	138.5 (44.9)	148.6 (35.7)	145.4 (38.9)
	SAT 10	47.2 (24.7)	70.1 (26.5)	50.9 (28.9)	55.8 (26.8)	54.3 (27.2)
MOTIVATION						
	CAIMI	46.3 (29.5)	35.2 (26.2)	33.2 (23.6)	47.4 (30.1)	42.9 (28.9)
	ERAS	65.1 (26.5)	56.6 (31.7)	55.6 (31.7)	65.7 (26.9)	62.5 (28.8)
						N=111

Table 1a

Intercorrelations Between Subscales for Ability and Outcome Measures

Subscale	1	2	3	4
CAIMI	----	.70*	.07	.15
ERAS	.66*	----	.08	-.03
DIBELS	0.18	0.18	----	.53*
SAT 10	.24	.22	.68*	----

Note. *Correlation is significant at the 0.01 level (1-tailed).

The upper quadrant of the table represents female students while the males are represented in the bottom half

Females = 76

Males = 35

Table 1b

Intercorrelations Between Subscales for Ability and Outcome Measures

Subscale	1	2	3	4
Caimi	----	.70**	.08	.28**
Eras	.66**	----	.09	.23*
Dibels	.34*	.02	----	.54**
Sat 10	.30**	-.03*	.68**	----

Note. *Correlation is significant at the 0.01 level (1-tailed).

**Correlation is significant at the 0.05 level (1-tailed).

The upper quadrant of the table represents African American students while White students are represented in the bottom half

AA = 77

W = 34

Test of Hypotheses

The hypotheses for the current study were written in null form. It was hypothesized that reading achievement would not differ by ethnicity or gender (as measured by Dibels and SAT 10). It was also hypothesized that academic attitudes (measured by ERAS) or academic intrinsic motivation (measured by CAIMI) would not differ by ethnicity or gender. Further it was hypothesized that there would be no unique relationships between ethnicity, reading attitudes, and intrinsic motivation on reading achievement either individually or in combination.

Hypothesis One

Dibels and SAT 10 assessments are outcome measures used to assess school accountability. Hypothesis 1 stated that reading achievement as measured by Dibels and SAT 10 does not differ by ethnicity or gender. A two - way ANOVA (with gender and ethnicity as the between subject factors) was used to analyze the hypothesis. Tables 2 and 3 provide the descriptive data associated with this analysis. There were 77 African American participants and 34 White student participants for a total 111 students across grades 4-6.

Table 2

Dependent Variable: Dibels				
Gender	Ethnicity	Mean	Std. Deviation	N
Male	White	159.83	43.003	12
	African Amer.	127.35	42.535	23
	Total	138.49	44.875	35
Female	White	150.32	39.902	22
	African Amer.	147.94	34.228	54
	Total	148.63	35.705	76
Total	White	153.68	40.631	34
	African Amer.	141.79	37.826	77
	Total	145.43	38.911	111

Table 3

Dependent Variable: Sat 10				
Gender	Ethnicity	Mean	Std. Deviation	N
Male	White	75.00	24.042	12
	Black	38.43	22.944	23
	Total	50.97	28.944	35
Female	White	67.36	27.975	22
	Black	51.04	24.616	54
	Total	55.76	26.512	76
Total	White	70.06	26.541	34
	Black	47.27	24.671	77
	Total	54.25	27.262	111

The two-way ANOVA revealed a statistically significant difference with ethnicity on the Dibels, ($F(1, 107) = 4.38, p < .05$). There were no statistically significant differences by gender ($F(1, 107) = .442, p > .05$) and the gender and ethnicity interaction ($F(1, 107) = 3.27, p > .05$).

The two-way ANOVA revealed similar results on the SAT 10, there was a statistical significant difference on ethnicity, ($F(1, 107) = 23.60, p < .05$). There was not a statistically significant difference with gender, ($F(1, 107) = .208, p > .05$). There were no statistically significant differences on the gender and ethnicity interaction, ($F(1, 107) = 3.46, p > .05$).

The second phase of hypothesis 1 further stated that SES when used as a covariate would not account for any effects observed in hypothesis 1. Results of this analysis indicated that SES was related to Dibels scores supporting SES as an appropriate covariate for the analysis, $F(1, 106) = 6.85, p < .05$. Further, when SES was incorporated into the analysis, no statistical significant

differences were found by ethnicity and gender on Dibels scores when used alone or in interaction (Ethnicity, $F(1, 106) = .002, p > .05$); Gender, $F(1, 106) = .739, p > .05$); Ethnicity * Gender, $F(1, 106) = 1.90, p > .05$).

In general, there is no sufficient reason to reject hypothesis 1 as it relates to Dibels scores. Although there was a statistically significant difference in Dibels scores by ethnicity in the first phase of the statistical analysis of this hypothesis, when SES was included in the analysis the ethnicity effect was no longer evident. Similar results were found when using SES as a covariate on SAT 10. The results of the analysis indicated there were no statistical significant differences found by ethnicity or gender individually or the ethnicity by gender interaction (Ethnicity, $F(1, 106) = 1.580, p > .05$; Gender, $F(1, 106) = .658, p > .05$); Ethnicity * Gender $F(1, 106) = 1.449, p > .05$).

Hypothesis 1 addressed if reading achievement differed by ethnicity or gender. The results indicated that there was a difference with ethnicity on Dibels and SAT 10. There were no additional differences noted with gender on either Dibels or SAT 10 when observed alone or in combination. The ethnicity effect was no longer evident when SES was incorporated which suggested that there is no significant difference in reading achievement with ethnicity and gender.

Hypothesis Two

ERAS

Hypothesis 2 stated academic attitudes (as measured by ERAS) and academic intrinsic motivation (as measured by CAIMI) does not differ by ethnicity or gender. As in hypothesis 1, a two-way ANOVA (with gender and ethnicity as the between subjects factors) was used to analyze the hypothesis. The two-way ANOVA indicated there was a statistically significant

gender difference on ERAS, ($F(1, 107) = 4.96, p < .05$). The two-way ANOVA indicated there was no statistically significant difference on ethnicity, ($F(1, 107) = 3.68, p > .05$). However, the p value associated with this effect suggested a statistical tendency ($p = .058$). On the gender and ethnicity interaction there was no statistically significant difference, ($F(1, 107) = 3.39, p > .05$). The variance accounted for by gender on ERAS was small ($\eta^2 = .04$).

However, there were no statistically significant differences found with ethnicity on the ERAS. It should be noted that there is a tendency for there to be a difference with ethnicity on the ERAS.

CAIMI

There was a statistically significant difference with gender on the Caimi, ($F(1, 107) = 5.34, p < .05$). There was no statistically significant difference with ethnicity, ($F(1, 107) = 3.60, p > .05$). Consistent with the findings on ERAS, the difference on CAIMI by ethnicity indicated a statistical tendency (p value = .061); ($F(1, 107) = 3.60, p > .05$). There was no statistically significant difference on the gender and ethnicity interaction, ($F(1, 107) = .313, p > .05$). The variance accounted for by gender was small ($\eta^2 = .05$). The variance accounted for by ethnicity was smaller ($\eta^2 = .03$).

The second phase of this hypothesis stated that SES when using SES as a covariate would not account for any effects observed in hypothesis 2. Results on the ERAS (see table 3 Appendix E) indicated that gender was statistically significant; $F(1, 106) = 4.68, p < .05$, the variance accounted for by gender when adding SES as a covariate was small ($\eta^2 = .04$). The analysis indicated that ethnicity was not statistically significant; $F(1, 106) = .983, p > .05$. The gender * ethnicity interaction indicated no statistical significance; $F(1, 106) = 2.80, p > .05$.

SES did not relate to the dependent measure CAIMI. Therefore it is not surprising that the covariate SES did not alter the main effects model. Thus gender remained statistically significant. Results indicated that the gender effect accounted for SES; $F(1, 106) = 5.10, p < .05$. The variance accounted for by gender when using SES as a covariate was small ($\eta^2 = .05$). There was no statistically significant difference with ethnicity; $F(1, 107) = 1.22, p > .05$ nor the ethnicity * gender interaction; $F(1, 107) = .200, p > .05$. As with results on the ERAS, the data indicated a difference with gender and a statistical tendency with ethnicity. However, SES did not account for the difference on gender.

Hypothesis Three

Hypothesis three addressed whether there was a unique relationship between ethnicity, reading attitudes, and intrinsic motivation on reading achievement either individually or in combination. The second part of the hypothesis stated if hypothesis number three is rejected, then SES and gender would be used to assess whether these variables could account for the observed relationships obtained above.

SAT 10 (part one)

In the first step of the hypothesis, reading achievement (SAT 10) was regressed onto ethnicity, reading attitudes (ERAS), and intrinsic motivation (CAIMI). The analysis indicated that there was a statistical significant relationship. Twenty one percent of the variance was accounted for by regressing SAT 10 onto ethnicity, ERAS, and CAIMI. The $F_{\Delta}(3, 107) = 9.58, p < .05$. Inspection of the Beta weights indicated that ethnicity and CAIMI accounted for a significant amount of the variance in SAT 10; $\beta = -.430, (t_{107}) = -4.93, p < .05$ and $\beta = .297, (t_{107}) = 2.49, p < .05$ for ethnicity and CAIMI respectively.

The second step of the analysis included regressing SAT 10 onto the cross products. This analysis indicated that there were no statistically significant relationships among the cross products; the $F_{\Delta}(3, 104) = 1.38, p > .05$. These findings suggests that although the variables ethnicity and CAIMI accounted for the statistical relationship with SAT 10 (within the population used for this study); when combining the variables there was no effect evident.

SAT 10 (part two) Using Control Variables

If the first part of the hypothesis was rejected, the hypothesis stated that gender and SES would be added to observe for relationships between ethnicity, ERAS, and CAIMI individually or in combination. In step 1 of this analysis, SES and gender were entered as controlling factors. The results of step 1 indicated that there was a significant relationship; $F(2, 108) = 24.12, p < .05; R^2 = .31$. Inspection of the Beta showed that SES was statistically significant; $\beta = -.550, (t_{108}) = -6.87, p < .05$. The Beta associated with gender was not statistically significant; $\beta = .103, (t_{108}) = 1.29, p > .05$. In the previous model ethnicity was significant, however when adding SES and gender as controlling variables ethnicity was no longer statistically related to SAT 10 ($t_{105}) = -1.24, p > .05$).

Within Step 2, SAT 10 was regressed onto SES and gender and then the main effects (ethnicity, ERAS, and CAIMI). The set of variables associated with step 2 indicated a statistically significant relationship to SAT 10; the $F_{\Delta}(3, 105) = 3.89, p < .05; R^2_{\Delta} = .07$. Inspection of the Beta's indicated that CAIMI was statistically significant; $\beta = .282, (t_{105}) = 2.60, p < .05$.

Within step 3, SAT 10 was regressed on the control and main effects variables followed by the cross products (ethnicity * CAIMI; ethnicity * ERAS; ERAS * CAIMI). There were no statistical significant relationships observed. $F_{\Delta}(3, 102) = 2.19, p > .05; R^2_{\Delta} = .04$.

The analysis provided evidence that SES demonstrated a significant relationship when used as a control variable along with gender. In previous analyses, ethnicity demonstrated a significant relationship. Again, the ethnicity effect disappeared after controlling for SES and gender. These were unique effects but there were no joint effects observed. This analysis provided sufficient evidence that SES accounted for the ethnicity effect found in model 1. Since ethnicity is no longer evident after adding control variables, there were no additional significant relationships observed (in combination).

Dibels

Using Dibels as an assessment of reading achievement Dibels was regressed onto ethnicity, ERAS, and CAIMI (step 1) which demonstrated no effects, and then the cross products (step 2) derived from these variables; as with step 1 there were no effects noted. The analysis indicated no statistical significant relationships in either the main effects or cross product models. $F_{\Delta}(3, 107) = 1.84, p > .05; R^2_{\Delta} = .05$ and $F_{\Delta}(3, 104) = 1.30, p > .05; R^2_{\Delta} = .03$.

Within model 2 using Dibels as an assessment of reading achievement, the hypothesis observed if SES and gender would account for any changes. When using SES and gender as control variables, there was statistical significance. $F_{\Delta}(2, 108) = 6.29, p < .05; R^2_{\Delta} = .10$. Inspection of the Beta indicated that SES was statistically significant and accounted for ten percent of the variance. $\beta = -.299 (t_{108}), = -3.27, p < .05$. As with SAT 10, the analysis indicated that SES demonstrated a significant relationship with Dibels.

When regressing Dibels onto the main effects there was no statistical significance. Neither were there any statistical significant relationships when Dibels was regressed onto SES and gender followed by the cross products. Therefore the motivation variable (CAIMI) and attitude variable (ERAS), ethnicity, and gender did not reach statistical significance.

Summary

In measures of achievement (Dibels and SAT 10), the results provided evidence that there were patterns of ethnicity effects with both measures. The significant ethnicity effect was no longer relevant to either measure when SES was used as a covariate. Furthermore, gender did not have an effect on either Dibels or SAT 10 in either the main or cross product models. However, SES did relate to both measures when observed alone.

Concerning the attitude and motivation measures (ERAS and CAIMI respectively), there were patterns of significant gender effects on both the ERAS and CAIMI. The results indicated that with both measures there were statistical tendencies with ethnicity. Further, when SES was added as a covariate, the gender effect for both ERAS and CAIMI remained significant. There were no significant effects found within the cross products. These results suggest that within the given population that SES is a prominent variable in this study. When using SES with motivation measures we find that gender has a significant effect. This was not the case when using SES with the achievement measures as the significant ethnicity effect was no longer evident.

When observing the relationships between variables (ethnicity, reading attitudes, and intrinsic motivation) and the achievement measure SAT 10, it was evident that ethnicity and CAIMI were significantly related. Within the population observed, ethnicity had a relationship with SAT 10 such that those participants who demonstrated high intrinsic motivation did well on the SAT 10. However, the ethnicity relationship did not remain when SES and gender were used as control variables. Specifically SES was found to account for the relationship between ethnicity and reading achievement as measured by SAT 10. Thus in the full model the statistical significant correlate of SAT 10 was the CAIMI. There were no significant relationships observed when Dibels was regressed onto the main and cross product effects. Further, the analysis

indicated a significant relationship between Dibels and the control variables despite the fact there were no relationships observed prior to adding the control variables. Only SES was found to be related to achievement as assessed by Dibels.

CHAPTER V

DISCUSSION

The purpose of this study was to explore the academic achievement gap between African American and White students with a focus on reading achievement and intrinsic motivation. There continues to be a great deal of research attempting to explain the causes of the achievement gap between African Americans and Whites. This literature indicates that overall African American students lag behind their White counterparts in terms of academic achievement (e.g. Roach, 2004) including reading achievement and motivation. This chapter provides a discussion of the study and an interpretation of the data presented in the previous chapter. In addition this chapter provides a discussion of proposed implications as well as recommendations for future research.

Overall, this study compared African Americans and Whites on measures of reading achievement used by the school district to track their students and make judgments about school progress and success. Second, the study related well – established measures of students’ intrinsic motivation and attitudes toward reading achievement and assessed whether these measures could account for group difference on achievement. Finally, the demographic variables; SES and gender were employed to ascertain whether these individual characteristics could account for relationships between ethnicity, reading achievement, reading motivation, and reading attitudes. A review of the research questions is now presented:

The first research question asked whether differences in reading achievement using SAT 10 and Dibels were found in a population of upper elementary school aged students in rural West Alabama that are similar to those in other settings.

The second research question asked whether the following student characteristics: reading attitudes (measured by ERAS) and intrinsic motivation (measured by CAIMI) differed by ethnicity in a population of elementary school aged children in rural West Alabama? Finally the third research question addressed whether reading achievement was uniquely related to ethnicity, reading attitudes, and intrinsic motivation when considered together or in combination? Additionally, demographic variables such as SES and gender were assessed in order to observe if these variables accounted for any relationships noted between reading achievement, ethnicity, and intrinsic motivation?

Question One: Reading Achievement

Hypothesis one tested whether reading achievement as measured by Dibels and SAT 10 differed by ethnicity or gender. The hypothesis further stated that any effects observed would not be accounted for when using SES as a covariate. Results indicated that within the population observed, ethnicity did relate to reading achievement (Dibels and SAT 10). White students performed significantly higher than African American students on Dibels and SAT 10. Interestingly, when SES was controlled for, it was evident that ethnicity was no longer related to reading achievement. In the same analysis, there were no significant relationships observed with gender.

The findings of the current study are consistent with the literature which indicates that SES is a major determinant of the achievement gap between African American and White students (Orr, 2003; Madhabi, 2006).

In addition to research indicating that SES is a major correlate of academic achievement, some researchers have focused on a specific aspect of SES which is wealth. It is also suggested that wealth directly contributes to the achievement gap. Wealth is different from the SES variable because wealth is what people own such as your home, liquid assets, real estate, business etc. and contributes to another dimension of well-being (Wolff, 2003). Further, Wolff indicates wealth can be viewed as a safety blanket. He explains that income can be interrupted or lost but with assets or wealth one remains financially secure.

In this view, African Americans have less wealth than White students do regardless of income, education, and occupation (Merida, 1995; Orr, 2003), which in turn hinders or contributes to African Americans lagging behind other ethnic groups particularly whites. Although there is a large body of research devoted to socio economic factors and race in academic achievement, the role of wealth, as differentiated from income has not been largely explored (Jez, 2008; Yeung & Conley, 2004).

Concerning wealth, children from wealthy families appear to acquire more experiences through the provision of social and cultural capital which may be suitable for explaining disparities in the black and white achievement gap. More bodies of research are starting to focus on families' net worth and how it mediates or modifies the race – child achievement association (Yeung & Conley, 2004). Data from Yeung & Conley's 2004 study also indicated that for a group of pre-school children that wealth did affect their cognitive development through material resources. Material resources included the physical home environment and resources to stimulate intellectual growth.

Applied to the current study and given the make up of the demographic area, it was observed that the majority of African American students fall into the poverty category. The

learning gap literature concerning SES seems to be headed in the direction where assets are going to be considered in achievement and how assets can be translated into capital. For these researchers, wealth disparities exist because African American families are less likely than Whites to invest in assets that gain income (Orr, 2003 & Keister, 2000). Orr further indicated that African American families may have fewer assets that could be converted into money to alleviate the burdens of educational expenses.

Question Two: Academic Attitudes and Intrinsic Motivation

Second this study assessed whether the following student characteristics: reading attitudes (measured by ERAS) and intrinsic motivation (measured by CAIMI) differed by ethnicity in a population of elementary school aged children in rural West Alabama?

In the analyses associated with the previous hypothesis, ethnicity was shown to relate to achievement, however, this effect could be accounted for by SES. The impact of SES on ethnicity relating to measures of achievement may be prominent due to theory and evidence in achievement gap research indicating that SES environments (i.e. characteristics such as number of children's books in the home, age of mother at time of birth, parental income etc.) in which children are reared may explain the entire racial reading gap achievement (Future of Children, 2005).

In the current analyses it is interesting that although the effect was statistically non-significant, African American students within this population scored higher than White students on the ERAS and CAIMI. This finding is inconsistent with researcher Kim's (2006) study where the effects of a voluntary summer reading program utilizing the ERAS suggested that White students scored higher than African American students. Kim (2006) found that African American children reported owning fewer books than White children which may have contributed to the

gap in reading achievement (ERAS). This researcher also reported that others in the field indicated that the number of books in a child's home was conducive to academic success.

In contrast to the relationship between ethnicity and the reading motivation measures, the data indicated a clear gender difference where females outperformed their male counterparts on the ERAS and the CAIMI. When SES was introduced to the model, the gender difference was not affected. These findings are consistent with the literature on the ERAS where females are typically found to outperform their male peers (Vollands, Topping, & Evans, 1999). Findings from the current study are also consistent with a larger finding indicating that verbal ability measures typically favor females. Further, findings from the current study are very consistent with a general female advantage in the verbal/reading domain.

Question Three: Unique Relationships on Reading Achievement

The third research question provided an assessment of whether reading achievement was uniquely related to ethnicity, reading attitudes, and intrinsic motivation when considered together or in combination. Additionally, SES and gender were assessed in order to observe if these variables accounted for any unique relationships noted between ethnicity, reading attitudes, and intrinsic motivation on reading achievement. The corresponding hypothesis indicated that there were no unique differences on ethnicity, reading attitudes, or intrinsic motivation on reading achievement individually or in combination. The hypothesis further stated that if there were differences then SES and gender would be observed to assess their impact on the relationships of interest.

A multiple hierarchical regression analysis was employed to address this question. Concerning the SAT 10 measure, the first step of part one of the hypothesis indicated that ethnicity and CAIMI accounted for the significant relationship observed. Ethnicity and intrinsic

motivation (which was assessed by the CAIMI) seemed to be related to performing well on the SAT 10. The second step indicated that when observing SAT 10 along with the cross products that the variables included did not indicate a significant relationship.

Step one of the second part of the hypothesis indicated that the background variables SES and gender were controlled for to observe for any relationships between ethnicity, ERAS, and the CAIMI either individually or in combination. When SES and gender were entered into the model, the data concluded that there was a significant relationship between SES and ethnicity, reading attitudes (ERAS) and intrinsic motivation (CAIMI). There were no significant relationships observed with gender. The control variable SES accounted for a significant relationship within the population observed. SES continued to signify major importance in the current study.

The second step indicated that when SAT 10 was regressed onto the main variables (ethnicity, ERAS, and CAIMI) that there was a significant relationship. CAIMI accounted for this significance. Concerning the given population, findings indicate that those students who were intrinsically motivated performed well on the SAT 10.

The third step observed the control variables with the cross products. The results indicated that this specific set of variables when observed in combination did not demonstrate any significant relationships. Recall that initially, there was evidence that ethnicity provided a significant effect, however when adjusting for SES, ethnicity was no longer statistically significant.

Concerning the results on the Dibels, it appeared that ethnicity, ERAS, and CAIMI did not relate to Dibels scores when observed individually or in combination. However, the second phase of the analyses indicated that when the control variables SES and gender were entered into

the model that SES was a significant correlate of Dibels. Again, SES is a key factor in achievement as measured by Dibels. There was no significant effect when Dibels was regressed onto the control variables followed by the main effects (ethnicity, ERAS, and CAIMI). As with the previous model observing SAT 10, there were no significant relationships between Dibels (measure of reading achievement) and the control variables SES and gender with the cross products.

Summary

This research study highlights the role of SES in assessing the relationship between intrinsic motivation and reading achievement. Specifically, SES seemed to play a major role as it was a statistically significant correlate with measures of achievement and motivation across all analyses. Thus one significant question this study raises is what SES means in terms of achievement and motivation. One explanation is provided by Ogbu's work. Ogbu based his academic achievement gap research on an ecological framework. His contributions to the field and to this study are very important as it portrays the rich historical tenets of how African Americans recognized their subordinate status in society and how this perspective relates to why African Americans failed to excel in academics when compared to their White counterparts. Historically, there has been a weak link between academic success and upward mobility for African Americans. Ogbu posited that African Americans did not attempt to excel in academics for fear that it would not pay off.

Ogbu took concern with what he called "structural barriers"; the system and community forces. The system included barriers such as school tracking, overt racism and under funded schools just to name a few. The current study did not observe any variables relating to these type barriers. Ogbu also took concern with what he called community forces or factors in the

community that affected minority academic performance. Community forces contributed to sociocultural adaptations such as positive attitudes about academics. The current study contradicts this assumption as it was the African American children that did possess the most positive attitudes on attitude and motivation measures. Based on observations from the current study, it appears that African American students do possess positive attitudes about academics and desire to excel academically. The current study concludes that African Americans are aware that education unlocks doors and is the key to poverty, unemployment, social ills, and increases chances for upward mobility. However, the current study provides evidence that the African American children continue to lag behind their White counterparts as the White students outperformed the African American students on measures of ability.

There continues to be something very striking about this phenomenon. It is believed from the current study that social class, specifically in terms of assets and wealth shape experiences in a more positive manner for White children. The majority of the White students did not come from a low socio-economic status (which was dictated by free and reduced lunch) unlike the African American students. It is believed that White students experience opportunities to transmit assets and resources throughout generations. It appears that opportunity structures may have a negative effect on African American children, hence contributing to African Americans lagging behind in academic resources.

The current study however, challenges Ogbu's oppositional culture theory (formerly cultural ecological theory) which was grounded in the idea that African American students resist education. Instead, the current study observes attitudes toward reading and intrinsic motivation to read, Ogbu did not focus on these variables. He did give attention to the SES variable but used it in a different way than it is used in the current study. Ogbu's study observed a connection

between SES, perceptions and attitudes regarding academics. His 2003 Shaker Heights study focused more on minority students' interpretations and responses to the school system and how they were treated. The current study did not address how African Americans viewed the school system and how they were treated.

The current study directly observed reading achievement and intrinsic motivation of students. Although Ogbu was aware that socio economic components were critical in his research, this study suggests that components of SES such as wealth and class are strongly related to the achievement gap. Research conducted by Bradley and Corwyn (2002) agree that success in school has been the long-established means to upward mobility. However, they also concluded that success in academics is one of the principal means by which parents pass their advantages on to their children from generation to generation. Gosa and Alexander (2007) indicate that the strategy by which parents pass on their advantages through educational opportunities is more problematic for African American parents than for White parents.

According to Gosa and Alexander (2007), it is more problematic for African American parents to pass advantages through educational opportunities due to specific barriers such as social processes. It is believed that these social processes derive from the home environment, through friends and peers, schools and neighborhoods, and finally society at large. Gosa and Alexander's (2007) approach is somewhat similar to Ogbu's cultural ecological theory. The differentiation between Gosa and Alexander's (2007) approach is that their focal point highlights social factors whereas Ogbu focused on the connection of culture to context. Further, Gosa and Alexander (2007) study concluded that African Americans are prevented from passing on advantages to their children is a racial issue and is based on a historic social ecology of race. The

present study provided evidence that race was not a factor but did show evidence that SES is a factor.

The components of SES, i.e. wealth and class mean so much more than material possessions concerning the learning gap between African Americans and Whites. The cultural content of social class is very critical to the learning gap. Unlike Ogbu's notion that African Americans resisted education in his oppositional culture theory (1978) (which was formerly known as the cultural ecological theory), the current study subscribes to the belief that characteristics of culture such as values, attitudes, beliefs, and habits may not be routine or customary concerning reinforcement in the home. When these type of positive behaviors are implemented in the home, they are readily acquired for use in academic settings. Gosa and Alexander (2007) suggest that the acquisition of values and attitudes in African American families may develop over time from experience. Further it was suggested by Gosa and Alexander (2007) that it is very reasonable to conclude that a family lineage with soaring educational accomplishments and economic stability will foster a "different kind of class". It appears that African American families (as opposed to White families) are entrenched in a snare of social complexities that hinder academic success. More research is necessary to investigate issues that prevent African American families from transmitting assets and resources throughout generations.

Like Ogbu, the current study supports the notion that changes have to be made in our communities; specifically in African American communities and at the school level to affect change in academic achievement. Changes in the African American community should include continued knowledge of the value of academic success and the visibility of academically successful African American role models; distinguish the emotional from the realistic value of

education; develop and institutionalize apt and effectual parental educational strategies as well as inspiring children to work hard towards academics and persevere to make good grades (Ogbu, 2003). These changes in the African American community should give African American children a better chance in closing the achievement gap. It has been noted that African American students recognize the importance of making good grades but may not have developed habits to make such grades. Developing this type of academic cultural context would enable parents to become more involved in their children's academic endeavors i.e. supervising homework, sheltering their children from negative peer relations, teaching time management, and motivating children to engage in academic work. However, according to Ogbu, these changes are not enough to impact the learning gap. Ogbu concluded from his Shaker Heights study that the need is greater than communities discussing and planning to contribute to or inform educational policies. He believed that action is necessary as opposed to discussing the issues and making plans to address issues concerning the gap. He also suggested that schools can play a role in ensuring that students feel apart of the academic community. This can be accomplished by establishing trusting relationships with minority students as well as hosting workshops to inform parents of issues concerning education in the schools such as tracking.

Based on the fact that there are many facets to remedying the gap, Ogbu's conclusions are worthy of attention. However based on the current study, results suggest that additional research unpacking SES should be conducted while considering the importance of social class or wealth. In terms of class and wealth, students surveyed for this research were considered economically disadvantaged based on how the researcher depicted SES (free and reduced lunch).

Limitations

There are many interesting studies in the field that have addressed issues of the academic achievement gap between African American and White students. After conducting this research study, it appears that researchers should continue to engage research on and pay increasing attention to findings of ethnic, socio-economic and familial financial resource differences in reading achievement and other academic achievement studies. There have been detailed studies of what contributes to the learning gap between African Americans (as well as other minorities) and White students. The present study was grounded on much of what an earlier researcher identified about the gap between African Americans and Whites. Recall the present study took a different approach to increase the focus on SES. The focus on SES directed the researcher's attention to wealth and how wealth and assets may contribute to the learning gap.

This work further supports additional attention to more demographic data concerning not only SES but the family's wealth, parental educational attainment, and employment status as well as type of employment. In addition, increasing the sample from a relatively small school district and corresponding student group to a larger more representative sample would increase the generalizability of the study.

The data obtained was self-reported which also leave open the question of truth and accuracy. Data from the current study resulted from a single period of data collection and may need to employ a longitudinal study to gain more insight about the participants, their reading patterns and growth in literacy. The study could also profit from the use of measures to assess attitudes of parents, specifically African American parents to expand the researcher's knowledge of their attitudes and actions concerning the value of academics.

Measures

Concerning the measures used in the current study, Dibels is a test of reading skills used throughout the nation's schools. It is a very controversial assessment; some argue that it is a very valuable tool in assessing reading achievement while others find fault in the measure's focus on being used primarily as a screening test (Garan, 2007). The current research utilized Dibels to assess reading achievement only because it is the assessment used in the schools. Research on the SAT 10 provided evidence that females outperformed males and White students outperformed African American students. Data analysis from the current research is consistent with these normative trends.

The data collected with the present research population provided evidence of a gender effect when assessing ERAS that remained even after using SES as a covariate. In a similar study on attitudes toward reading it was also found that females consistently possessed more positive attitudes towards reading than males across grade levels.

Unlike the current study where African Americans possessed more positive reading attitudes than their white peers, the authors of the ERAS did not focus on differences by ethnicity. Therefore there was no data collected on ethnicity of the participants when constructing the ERAS (McKenna et al, 1995).

It is important to note that since the current study observed upper elementary school children, recurring trends from the research on reading provided evidence that reading attitudes can be measured reliably at the elementary school level (McKenna and Kear, 1990).

As with the findings on the ERAS, data collected from the CAIMI also provided evidence that there is a gender effect. This finding contradicts findings by Gottfried (1985) that indicated gender and SES were not factors related to CAIMI scores. This may be due to

Gottfried's main focus and interest to develop a tool to assess student intrinsic motivation as well as the developmental processes of intrinsic motivation) of young children to adolescents. Thus the present study recalls the fact that reliability was demonstrated with no differences found as functions of gender, race, or IQ (Buros, 1987). Further, Gottfried did not focus on class differences during the construction of the CAIMI (Bornstein & Bradley, 2003).

SES and Class

SES is basically defined as an individual or family's income, education, occupation and wealth which in turn place an individual or family in a particular status (Yu and Williams, 1999). Yu and Williams defined SES as a broad construct that can characterize various aspects of social stratification. Social class is considered to be less broad. Social class refers to any indicator of social stratification. Yu and Williams (1999) further define social class as conceptually meaningful within the framework of a specific theory of class.

There is a great deal of academic achievement research in the literature that schools are putting forth great efforts to combat the learning gap. Countless reforms have been implemented to address the social and economic implications of the black - white achievement gap. Research in the literature seems to have turned its direction towards SES as a major determinant of the gap (Brown-Jeffy, 2008, Farkas, 2002). SES has been discussed in the literature as being a factor in the black – white achievement gap in that White students continue to outperform African American students. However, as mentioned earlier Ogbu's 2003 Shaker Heights study suggested that SES was not a major factor by observing middle class African American families that were just as economically stable as White families. He emphasized that negative peer relations and a sense of not belonging (community forces) as major deterrents to academic engagement (Gibson, 2005). While Ogbu suggested community forces and not SES, other researchers focused heavily

on SES from a different perspective. Bear in mind the current study does not support Ogbu's claims.

The following summation of research may be helpful in trying to grasp the conclusions from Ogbu's (2003) study in the affluent Shaker Heights, OH suburbs where African Americans did have similar socio-economic statuses. Recall that Ogbu's primary focus was on what he believed was mis-treatment of African Americans in a society dominated by Whites. His main interest was in how African American students interpreted how they were being treated in the school system and more importantly how they responded to how they were treated. His interests derived from previous works in achievement gap research which concluded that African Americans did not value academic achievement for fear that it would not help them concerning upward mobility. Based on Ogbu's observations, the issue of social class / wealth may be very suitable for consideration in this study.

Rothstein (2004) indicated that social class is an issue due to the type of wealth or assets that families possess. It has been noted that White families have greater economic mobility and is therefore able to pass their economic advantages onto their children creating a healthy cycle for upward mobility (Isaacs, 2007). A longitudinal study commencing in 1968 followed individuals aged 0-18 into adulthood through a study called the Panel Study of Income Dynamics (PSID). This yearly survey collected information pertaining to family characteristics such as income. The PSID concluded that when the variable income is controlled for then there are no major differences in African American and White mobility experiences. The significant difference was observed when income groups were a factor; White children were found to be more upwardly mobile than African American children. Children were compared from the middle income group. African American children were similar to the White children in the

overall scheme of upward mobility but lagged behind White children within income groups. This finding resulted from evidence showing African American students fall more heavily into the downwardly mobile group.

Economist Tom Hertz (2005, 2006) conducted a study resulting with similar conclusions. Hertz (2005, 2006) found similar mobility patterns where African American children were trapped at the bottom of the income distribution. He concluded that this intergenerational persistence of poverty resulted from historical experiences of African American children. Shapiro and Oliver (2006) indicated that mobility considered in terms of wage earnings show evidence that African American middle class has materialized since World War II, but the nonhuman means of production remain largely beyond its grasp. Based on much of the research conducted in the field, it appears that assets and wealth are major determinants of African Americans lagging behind their White counterparts in academics.

Using free and reduced lunch to determine SES status, those receiving free or reduced lunch is considered to be at a socio-economic disadvantage. Clark (2007) found that with regard to social class that the majority of “lower achieving” students received lunch from the federal school lunch program. Although the current study supports the notion that SES is a major determinant in the achievement gap, the idea of social class is indeed an issue. Class is a little different from SES in that class derives from the elements (income, education, and occupation) of SES. Social class along with race has been a factor in schooling as well as social and economic circumstances (Rothstein, 2004). The question becomes is low achievement of African American students grounded in culture or economics. Rothstein (2004) suggested that culture and socioeconomic status can not be separated. For instance, bear in mind this research discussed early on the historical assumption that African Americans devalued education because it did not

pay off in an economical sense. Regarding this statement, the act of devaluing education is hardly likely to be eliminated with cultural appeals and social and economic policy reforms (i.e. affirmative action).

Research indicates that there have been many educational policy reforms designed and implemented as a means of closing the academic gap between minority and White students with school reforms. Again these attempts were futile as school reforms are simply not sufficient. Based on the current research, there needs to be a huge investment of time and resources to address the gap in academics and reading. Concerning the school system, increased instructional time for those who need additional supports may be beneficial. It is the type of structural barriers that may gain trust in the school system for those parents who feel that the schools are failing their children. Further parents need to be committed and take responsibility for the children's reading and learning goals. Decent job opportunities for those who are disadvantaged would be beneficial to allow for families to participate in cultural activities. Exposure to leisure and cultural activities may expose the child to new opportunities to learn and create habits of mind that fosters new meaning to learning.

The No Child Left Behind Act is a decent attempt to close the achievement gap in that it provides federal dollars to those who have been historically underserved. The NCLB act also charges schools to be held accountable to ensure that all children are educated successfully. This is done by reauthorizing federal programs to focus on improving the performance of primary and secondary schools by increasing the standards of accountability. The NCLB act too has been scrutinized for its futile attempts to successfully close the achievement gap.

It appears that providing increased funding under the NCLB act for low income students is not enough to properly address the achievement gap between groups of students in school.

This is where the concept of class becomes an important part of addressing the closure of the achievement gap.

According to TKMC (2005), one of the most significant mechanisms through which SES has an effect on health outcomes is access to healthcare (p.10). Rothstein (2004) used an eloquent example of students from low SES backgrounds and the notion that these students receiving better instruction in the classroom may not be sufficient because the student may have vision problems. Rothstein (2004) suggested that you can't read if you can't see and suggested that funding be used in these cases to put an optometric clinic in the school due to a child being apart of a lower socio economic family may not support his or her abilities in accessing vision services. This example strengthens the SES or class argument as it is believed higher SES groups are more likely to make use of preventative services available within the healthcare system which therefore mediates health risks (PHAC, 2005, Berliner, 2005). An important aspect to consider is adequate and proper healthcare for those who are in disadvantaged homes. Proper healthcare is vital in that routine eye exams are necessary to ensure children can see to read, proper nutrition i.e. breakfast so that children are not hungry and can focus on learning, proper dental care where children do not experience on going toothaches that distract them from classroom instruction. The list of hindrances can become exhaustive and suggests that class is very much an issue concerning the achievement gap. Another facet of the learning gap derives from the lack of being exposed to meaningful community events and activities.

It appears that the problem may be that children from disadvantaged backgrounds do not have means of exposure in terms of cultural, community leisure and recreational experiences, or opportunities to engage in activities designed to enrich learning experiences such as after school programs. Such experiences are credited for providing optimal learning experiences such as

traveling outside of their environment, visiting museums, zoo, participating in arts such as ballet, gymnastics, etc., anything to build upon classroom knowledge and enhance thinking skills. The ability to grasp these type experiences should certainly prompt or motivate children to become more curious about the world they live and possibly seek further information by reading books, hence strengthening the reading and narrowing or closing the reading achievement gap in African American and White students.

Concerning the current study, there are no extra activities in the communities outside of school that invites children to enriching activities that may stimulate and create cultural and organizational extra activities. The focus community has little or no industry. Based on the area observed, children from low SES backgrounds may not have adequate resources (financial, transportation, knowledge of events) to access outside activities. The rural community the researcher focused on does not have certain businesses that people in neighboring communities may take for granted such as a movie theater, Wal-mart stores, large grocery store chains i.e. Bruno's, Publix, Food-Max, ballet classes, athletic clinics, gymnastics, museums, etc.

With the condition of the current economy, if transportation is not a problem for many of these disadvantaged families, the issue of affording such opportunities may be problematic. The achievement gap can also be addressed in terms of the economy as it further hinders some people from obtaining financial resources. This problem is two-fold at best as you stand a better chance in gaining capital by means of education which in turn translates into financial, cultural, and social resources. Again this issue relates to class. Previously it was discussed how class expounds from the notion of SES. It was discussed how capital is transmitted from generation to generation, hence building and solidifying capital for the next generation. Based on knowledge and experience of the rural area observed in this research, the research area can be considered as

a breeding ground for disadvantages especially for African Americans as it is not likely that African Americans are able to transmit capital throughout the generations. Neither does this rural area produce adequate opportunities for financial gain. The current research provides data to suggest that White students are scoring higher on tests that measure achievement. This research noted that the achievement gap between minorities and White students may very well be affected by SES and class. Again based on familiarity with the rural area observed, there is an evident transmission of capital from generation to generation within some of the White families.

The literature in the education field is plentiful in its discussions on SES, class, and wealth or assets and how they may affect academics. The rural school district observed is very similar to the research presented in the literature in terms of African Americans not being exposed to assets that are or can be transmitted into an upwardly mobile state. Based on the current study, location may be a small issue in that the rural district does not have readily available attractions i.e. movies, skating rinks, museums etc. Like some of the research previously mentioned, the real problem becomes the amount of assets or wealth acquired by a family in order to access extra activities outside of school. Historically African Americans do not possess the type of wealth or assets (especially in southern rural areas as there are few opportunities to gain wealth) that can be transmitted throughout generations worthy of building and continuously producing capital. Therefore despite the location, the power to obtain goods and services is crucial for economic mobility. For instance, some individuals in city areas have access to movies, museums, etc but may not have money or transportation to access extra curricular activities. Additional research should be conducted to focus more on assets and wealth to further assess if location is not an issue as it appears from research observed.

The rural area observed for this research study exemplifies an area not too conducive for those who are disadvantaged. The area focused on does not afford opportunities to produce economic gains. Hence, this is relevant to Ogbu's interest in the idea that maybe African Americans did not value academics because it would not stimulate economic advantages for them.

Research Recommendations

The present study suggests that there are many opportunities to engage in research concerning the reading achievement gap and intrinsic motivation between African American and White students. Additional research is warranted for several reasons. First, the data collection process needs to be extended to include other assessments to capture more insight about the family dynamics in regards to family involvement, as well as to capture a sense of family assets.

Ford (2007) suggests that large scale change must first be implemented locally. Ford speaks of "concentric rings of influence" that include factors related to school, the family home, social, health, and psychological issues that affect school achievement. Many researchers dismissed research suggesting the achievement gap derived from genetic inferiorities and suggested environmental factors were heavy influences (U.S. Department of Education, 2000a; Viadero, 2000). Some researchers suggest that good teaching practices weigh heavily in addressing the achievement gap (The Teaching Commission, 2004; Hanushek, Kain & Rivkin, 2003).

Second, the need to observe assets may assist in generating discussion on ways to help people rise above poverty and assume valuable assets. Finally, a longitudinal study would be beneficial to gain a better sense of children's attitudes about reading and intrinsic motivation over a period of time as opposed to capturing reported data in a single period.

The main significance of replicating a study of the nature would be to assess the ideas of social class and assets (familial economic value) to see if there are any significant effects present. In replicating this study, researchers could make an attempt to talk with families about their assets and wealth as opposed to observing SES by using children's free and reduced lunch as indicators.

Although the current research challenges Ogbu's thoughts on the cultural ecological theory in that socio-economic status and social class are thought to be key issues concerning academic disengagement. A longitudinal study would be helpful if it placed a stronger emphasis on parental attitudes to assess if Ogbu's belief that history continues to be deeply embedded in many African Americans which hinders a positive attitude and negates demonstrating or encouraging intrinsic motivation to succeed in academics in preparation of upward mobility.

Conclusion

The current study suggests socio-economic status and social class may present vital concerns for the rural area observed. Evidence (i.e. issues surrounding SES and class) provided by this study propose similarities of other studies conducted to observe the academic or reading achievement gap and intrinsic motivation between African Americans and White students. Social class appears to be more critical in that it speaks to assets and how assets are transmitted through the generations for upward mobility.

It is believed that students from disadvantaged homes can defeat the odds. Demonstrating intrinsic motivation, succeeding in reading and academics as a whole may be a good starting point to excel in academics. Those students who were from the higher SES stratum are more than likely exposed to greater wealth and assets. It appears that just having good attitudes are very important but not enough to overcome the disadvantages of being poor. Children need to be

exposed to various sources to enhance and cultivate their abilities outside of what is learned in school. A wealth of experiences can very well motivate students to see additional opportunities to gain knowledge and to cultivate resources that could possibly initiate a means for upward mobility. This is not to say that a student has to come from a wealthy family to be intrinsically motivated to master reading. This research simply concludes that the disadvantages families from low SES backgrounds coupled with an economically disadvantaged residential area in which they live may result in disadvantaged students who continue to lag behind peers who have more advanced opportunities to accumulate academically relevant resources or assets.

REFERENCES

- Adger, C. T., Christian, D., & Taylor, O. (1999). *Making the connection: Language and academic achievement among African American students*. Washington, DC: Center for Applied Linguistics.
- Ainsworth-Darnell, J. W., & Downey, D. B. (1998). Assessing the oppositional culture explanation for racial/ethnic differences in school performance. *American Sociological Review*, *63*, 536-553.
- Alabama State Board of Education (n.d.). *Shelby County Board of Education*. Retrieved February 1, 2007, from <http://www.shelbyboe.k12.al.us/testing.aspx#sat>
- Alabama State Board of Education (n.d.). *Elementary and secondary education act materials*. Retrieved March 6, 2007, from http://www.archives.nysed.gov/edpolicy/find/ASA-ESEA_pub.shtml
- Alabama State Board (n.d.). *Accountability Reporting System*. Retrieved January 31, 2009, from <http://www.alsde.edu/Accounting/preAccountability.asp>
- Anderman, E. M., & Maehr, M. L. (1994). Motivation and schooling in the middle grades. *Review of Educational Research*, *64*(2), 287-309.
- Anderson, R. , Wilson, P., & Felding, L. (1988). Growth in reading and how children spend their time outside of school. *Reading Research Quarterly*, *23*, 285-303.
- Babbie, E. (1990). *Survey research methods* (2nd ed.). Belmont, CA: Wadsworth.
- Baker, L., Afflerbach, P., & Reinking, D. (1996). Developing engaged readers in school and home communities: An overview. In L. Baker, P. Afflerbach, and P. Reinking (eds.). *Developing engaged readers in school and home communities* (pp. xiii-xxvii). Mahweh, NJ: Erlbaum.
- Baker, L. , Scher, D., Mackler, K. (1997). Home and family influences on motivations for reading. *Educational Psychologist*, *32*(2), 69-82
- Baker, L. Mackler, K. Sonnenschien, S., & Serpell, R. (2001). Parent interactions with their first grade children during storybook reading and relations with subsequent home reading activity and reading achievement. *Journal of School Psychology*, *39*(5), 415-438.

- Baker, L., & Wigfield, A. (1999). Dimensions of children's motivation for reading and their relations to reading activity and reading achievement. *Reading Research Quarterly, 34*, 452-477.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*, 191-215.
- Bandura, A. (1977a). Self-efficacy: Toward a unifying theory of behavior change. *Psychological Review, 84*, 191-215.
- Bandura, A. (1977b). *Social learning theory*. Englewood Cliffs, NJ. Prentice Hall.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist, 28*(2), 117-148.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W.H. Freeman.
- Barnett, J. E., & Irwin, L. (1994). The effects of classroom activities on elementary students' reading attitudes. *Reading Improvement, 31*, 113-120.
- Bast, J. W., & Reitsma, P. (1997). Matthew effects in reading: A comparison of latent growth curve models and simplex models with structured means. *Multivariate Behavioral Research, 32*, 135-167.
- Becker, G. S. (1975). *Human capital*. Retrieved January 12, 2007, from [http://www.econlib.org/library/Enc/Human Capital. Html](http://www.econlib.org/library/Enc/Human%20Capital.html)
- Bergin, D. A., & Cooks, H.C. (2002). High school students of color talk about accusations of acting white. *Urban Review, 34*, 113-34.
- Berliner, D.C., (2005, August). *Our impoverished view of educational reform*. Retrieved April 23, 2009, from <http://www.tcrecord.org/content/asp?contentid=12106>
- Boehner, J.B. (2002, April). *Ensuring that every child learns to read by third grade. President Bush's reading first initiative*. Retrieved August 16, 2005, from, http://edworkforce.house.gov/issues/107th/education/nclb/factsheetreadingfirst.html
- Boggiano, A. K., Shields, A., Barrett, M., Kellam, T., Thompson, E., Simons, J., & Katz, P. (1992). Helpless deficits in students: The role of motivational orientation. *Motivation and Emotion, 16*(3), 271-296.
- Bong, M. (1996). Problems in academic motivation research and advantages and disadvantages of their solutions. *Contemporary Educational Psychology, 21*, 149-165.

- Bong, M. (2001). Between and within-domain relations of academic motivation among middle and high school students: Self-efficacy, task-value, and achievement goals. *Journal of Educational Psychology, 93*, 23-34.
- Borgus, G. (1992). Ethnic capital and intergenerational mobility. *The Quarterly Journal of Economics, 107*, (1), 123-150.
- Bornstein, M. H., & Bradley, R. H. (2003). Socioeconomic status, parenting, and child In bornstein, M. H., & Bradley, R. H. (Eds.). *Monographs in parenting, (2)*. Lawrence Erlbaum Associates.
- Bouffard, T., Boisvert T, Vezeau C., & Larouche C. (1995). The impact of goal orientation on self-regulation and performance among college students. *British Journal of Educational Psychology, 65*, 317-29.
- Bouffard, T., Marcoux, M., Vezeau, C., & Bordeleau, R. (2003). Changes in self-perception of competence and intrinsic motivation among elementary school children. *Journal of Educational Psychology, 72*, 171-182.
- Bourdieu, P. (1977). Cultural reproduction and social reproduction. In J. Karabel & A.H. Halsey (Eds.), *Power and ideology in education* (p. 487-511). New York: Oxford University Press.
- Bourdieu, P. (1986). The forms of capital. In J. Richardson (ed.), *Handbook of theory and research for the sociology of education* (p. 241-258). New York: Greenwood Press.
- Bradley, R.H. & Corwyn, R.F. (2002). Socioeconomic status and child development. In *Annual Review of Psychology, 53*, 371-399.
- Brooks, S. R., Freiburger, S. M., & Grotheer, D. R. (1998). *Improving elementary student engagement in the learning process through integrated thematic instruction*. Unpublished master's thesis, Saint Xavier University, Chicago, IL. (ERIC Document Reproduction Service No. ED 421 274)
- Broussard, S. C., & Garrison, M. E. B. (2004). The relationship between classroom motivation and academic achievement in early school aged children. *Family and Consumer Sciences Research Journal, 33*(2), 106 -120.
- Brown-Jeffy, S. (2008). School effects: Examining the race gap in mathematics achievement. Retrieved April 27, 2009, from www.springerlink.com
- Buros, O. K. (2001). *The mental measurement yearbook* (14th ed.). Highland Park, NJ: Gryphon.

- Carlisle, J.F, Correnti, R., Phelps, G., & Zeng, J. (2009). Exploration of the contribution of teachers' knowledge about reading to their students' improvement in reading. *Reading and Writing*, 22, 457-486.
- Carter, D.J. (2004). Editor's review of John U. Ogbu's black American students in an affluent suburb: A study of academic disengagement. *Harvard Educational Review*, 74(4), 470-473.
- Carter, P. (1999). *Balancing acts: Issues of identity and cultural resistance in the social and educational behaviors of minority youth*. Ph.D. dissertation, Department of Sociology, Columbia University, New York, NY.
- Carter, P. (2005). *Keepin' it real: schools success beyond black and white*. New York: Oxford University Press.
- Cartwright, F. & Allen, M.K.(2002). Understanding the rural-urban reading gap. Retrieved July, 12, 2009 from:
http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/44/38/10.pdf
- Cloer, T., & Pearman, B. (1992). The relationship of gender to attitudes about academic and recreational reading. Retrieved August 15, 2007, from
www.eric.ed.gov/ERICWebPortal/recordDetail?accno=ED356447
- Coleman, J.S. (1990). *Foundations of social theory*. Cambridge: Harvard University Press.
- Cook, C. (1998). Self-concept and the disabled reader. An annotated bibliography. Indiana: Indiana University Press. (ERIC Reproduction Service No. Ed 298 440).
- Cook, P. J., & Ludwig, J. (1997). Weighing the burden of acting white: Are there race differences in attitudes toward education. *Journal of Policy Analysis & Management*, 16, 256-278.
- Chapman, J. W., & Tunmer, W. E. (1995). Development of young children's reading self-concepts: An examination of emerging subcomponents and their relationship with reading achievement. *Journal of Educational Psychology*, 87, 154-167.
- Clark, C. (2007). *Early childhood education and the achievement gap: A moral imperative and call to action*. Retrieved June 1, 2009, from
www.nassauboces.org/nccss/pub/ElychldhdAchEdGap.pdf
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*. 16, 297-334.

- Craig, H. K., & Washington, J. A. (2006). Recent research on the language and literacy skills of African American students in the early years. In D. K. Dickinson & S. B. Neuman (Eds.), *Handbook of early literacy research*, 2, 198-210.
- Cross, N. E., Jr., Strauss, L., & Fhagan-Smith, P. (1999). African American identity development across the life span: Educational implications. In Hernandez Sletts, R. & Hollins, E. (Eds.), *Racial and ethnic identity in school practices: Aspects of human development* (pp. 29-47). Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.
- Csikszentmihalyi, M. (1990). *Flow - the psychology of optimal experience*. New York: Harper Perennial.
- Damber, U. (2009). Using inclusion, high demands and high expectations to resist the deficit syndrome: A study of eight grade three classes overachieving in reading. *Literacy*, 1, 43-49.
- Datnow, A., & Cooper, R. (1996). Peer networks of African American students in independent schools: Affirming academic success and racial identity. *Journal of Negro Education* 65, 56-72.
- Dee, T. S. (1988). Competition and the quality of public schools. *Economics of Education Review*, 17(4), 419-427.
- Dee, S. T. (2005, October). *Teachers and the gender achievement gaps in student achievement*. Retrieved April 22, 2007, from <http://papers.nber.org/papers/w11660>
- Dee, S. T. (2006). The why chromosome. *Education Next*, 4, 69-75.
- Deci, E. L., Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum Press.
- Deci, E. L., Vallerand, R. J., Pelletier, L. C., & Ryan, R. M. (1991). Motivation and education: The self-determination perspective. *Educational Psychologist*, 26 325-346.
- Demo, D. A. (1999). *Dialect in school and communities*. Mahweh, NJ. Lawrence Erlbaum.
- Democratic National Convention (2004). *Barack Obama keynote address*. Washington, DC. Democratic National Convention.
- Dewey, J. (1913). Unified versus divided activity: Interest and effort in education. In John Dewey, *The middle works*. Carbondale & Edwardsville: Southern Illinois University Press.
- Dev, J. (1977). Patterns of mother-infant behavior and subsequent childhood psychosis: A research and case report. *Child Psychiatry and Human Development*, 7(4), 211-230.

- Diamond, P. J., & Onwuengbuzie, A. J. (2001). Factors associated with reading achievement and attitudes among elementary school- aged students. *Research in the Schools*, 8, 1-11.
- Duckworth, A. L., and Seligman, M. E. P., (2006). Self-discipline gives girls the edge: Gender in self-discipline, grades, and achievement test scores. *Journal of Educational Psychology*, 98(1), 198-208.
- Duncan, O. D. (1969). Inheritance of poverty or inheritance of race? In D. Moynihan (Ed.). *On understanding poverty*. New York: Basic Books.
- Eccles, J.S., Wigfield, A., Harold, R., & Blumenfeld, P. B. (1993). Age and gender differences in children's self and task perceptions during elementary school. *Child Development*, 64, 830-847.
- Edwards, P. A., & Garcia, G. E.. (1991). Parental involvement in mainstream schools. In M. Foster (Ed.), *Readings on equal education: Qualitative investigations into schools and schooling* (Vol.11; pp. 167-187). New York: AMS Press.
- EPE Research Center (2004). Achievement gap. Retrieved June 25, 2009 from <http://www.edweek.org/rc/issues/achievement-gap/>.
- Farkas, G., Christy L., & Steve, M. (2002). Does oppositional culture exist in minority and poverty peer groups"? *American Sociological Review*, 67,148-155.
- Ferguson, R.F. (2002). *What doesn't meet the eye: Understanding and addressing racial disparities in high-achieving suburban schools*. Working paper. Cambridge, MA: Wiener Center for Social Policy.
- Finn, J. D. (1989). Withdrawing from school. *Review of Educational Research*, 59, 117-142.
- Finn, J. D., & Cox, D. (1992). Participation and withdrawal among fourth-grade pupils. *American Educational Research Journal*, 29, 141-162.
- Flynn, J. M., & Rahbar, M. H. (1993). The effects of age and gender on reading achievement: Implications of pediatric counseling. *Journal of Developmental and Behavioral Pediatrics*, 14(5), 304-307.
- Ford, D. Y. (2007). The Vanderbilt achievement gap project. Retrieved April 30, 2009, from <http://peabody.vanderbilt.edu/x7557.xml>
- Fordham, S., & Ogbu, J. (1986). Black students' school success: Coping with the burden of acting white. *Urban Review*, 18(3), 176-206.
- Fordham, S. (1996). *Blacked out: Dilemmas of race, identity, and success at Captial High*. Chicago: University of Chicago Press.

- Foster, K. (2004). Coming to terms: A discussion of John Ogbu's cultural – ecological theory of minority academic achievement. *Intercultural Education*, 15 (4).
- Fryer, R. G. (2006). "Acting white": the social price paid by the best and brightest minority students. *Education Next*, 6(1), 52-60.
- Future of Children (2005). *School readiness: Closing racial and ethnic gaps*. Retrieved May 29, 2009, from http://www.futureofchildren.org/usr_doc/Volume_15_No_1.pdf
- Garan, E. (2007). *Dibels results*. Retrieved June 9, 2009 from, http://www.literacyworkshop.org/pipermail/mosaic_literacyworkshop.org/2007
- Gettys, C. M. & Fowler, F. (1996). *The relationship between academic and recreational reading attitudes school wide: A beginning study*. Retrieved August 15, 2007, from www.eric.ed.gov/ERICWebPortal/recordDetail?accno=ED402568
- Gibson, M. A. (2005). Promoting academic engagement among minority youth: Implications from John Ogbu's Shaker Height's ethnography. *International Journal of Qualitative Studies in Education*, 18(5), 581-603.
- Godley, A. J., Sweetland, J., Wheeler, R. S., Minnici, A., & Carpenter, B. D. (2006). Preparing teachers for dialectically diverse classrooms. *Educational Researcher*, 35(8), 30-37.
- Goldbert, M. D. (1994). A developmental investigation of intrinsic motivation: Correlates, causes, and consequences in high ability students. (Doctoral dissertation, University of Virginia; 1994). *Dissertation Abstracts International*, 55-OB, 1688.
- Good, C. V. (1973). *Dictionary of education*. New York: McGraw-Hill.
- Good, R., & Jefferson, G. (1998). Contemporary perspectives on curriculum-based measurement validity. In M. r. Shinn (Ed.), *Advanced applications of curriculum-based measurement* (pp. 61-88). New York: Guilford Press.
- Goodenow, C. and Grady, K. E. (1993). The relationship of school belonging and friends values of academic motivation among urban adolescent students. *Journal of Experimental Education*, 62(1), 60-71.
- Gosa, T.L. & K.L. Alexander (2007). Family (dis)advantage and the educational prospects of better off African American youth: How race still matters. *Teachers College Record*, 109 (2), 285-321.
- Gottfried, A. E. (1985). Academic intrinsic motivation in elementary and junior high school students. *Journal of Educational Psychology*, 77(6), 631-645.
- Gottfried, A. E. (1986a). *Children's academic intrinsic motivation inventory*. Odessa, FL: Psychological Assessment Resources, Inc.

- Gottfried, A. E. (1990). Academic intrinsic motivation in young elementary school children. *Journal of Educational Psychology, 82*(3), 525-538.
- Gottfried, A. E., & Gottfried, A. W. (1996). A longitudinal study of academic intrinsic motivation in intellectually gifted children: Childhood through early adolescence. *Gifted Child Quarterly, 40*(4), 179-183.
- Gottfried, A. E., Fleming, J. S., Gottfried, A. W. (2001). Continuity of academic intrinsic motivation from childhood to late adolescence: A longitudinal study. *Journal of Educational Psychology, 93*(1), 3-13.
- Guthrie, J. T., & Wigfield, A. (2000). Engagement and motivation in reading. In M.L. Kamil, P.B. Mosenthal, P.D. Pearson, & R. Barr (Eds.). *Handbook of reading research*, 111, (pp. 403-422). New York: Erlbaum.
- Guthrie, J. T., & Cox, K. E. (2001) Classroom conditions for motivation and engagement in reading. *Educational Psychology Review, 13*(3), 283-302.
- Graham, S. (1994). Motivation in African Americans. *Review of Educational Research, 64*, 55-118.
- Grant, C. A., & Sleeter, C. E. (1985). The literature on multicultural education: Review and analysis. *Educational Review, 37*, 97-118.
- Gredler, M. E. (2001). *Learning and instruction: Theory into practice* (4th ed.). Upper Saddle River, NJ: Prentice Hall.
- Green, C. L., Walker, J. M. T., Hoover-Dempsey, K. V., & Sandler, H. (2007). Parents' motivation for involvement in children's education: An empirical test of a theoretical model of parental involvement. *Journal of Educational Psychology, 99*, 532-544.
- Green, J., Martin, A. J., & Marsh, H. W. (2005). *Academic motivation and engagement: A domain specific approach* (Australian Association of Research in Education Report No. GRE05384) Penrith South, Australia: SELF Research Centre.
- Grosse de Leon, A. (2002). Moving beyond storybooks: Teaching our children to read to learn. *Carnegie Reporter, 2*(1), 3-51.
- Guthrie, J. T., Cox, K. E. (2001). Classroom conditions for motivation and engagement in reading. *Educational Psychology review, 13*(3), 283-302.
- Hanushek, E. A., Kain, J. F., & Rivkin, S. G. (2003). *Teachers, schools, and academic achievement*. (NBER Working Paper No. w6691). National Bureau of Economic Research.
- Harter, S. (1982). The perceived competence scale for children. *Child Development, 53*, 87-97.

- Harter, S. (1990). Identity and self-development. In S. Feldman and G.Elliott (Eds.), *At the threshold: The developing adolescent*. (pp. 352-387). Cambridge, MA: Harvard University Press.
- Harter, S. (1992). The Relationship between perceived competence, affect, and motivational orientation within the classroom: Processes and patterns of change. In R.K. Boggiano and T.S. Pittman (Eds.), *Achievement and motivation*, 77-114. New York: Cambridge University Press.
- Harter, S., & Pike, R. (1984). The pictorial scale of perceived competence and social acceptance for young children. *Child Development*, 55, 1969-1982.
- Heath-Brice, S.B. (1983). *Ways with Words*. Cambridge: Cambridge University Press.
- Henk, W., & Melnick, S. (1995). The reader self-perception scale (RSPS): A new tool for measuring how children feel about themselves as readers. *The Reading Teacher*, 48, 470-482.
- Hertz, T. (2005). Rags, riches, and race: The intergenerational economic mobility of black and white families in the United States. In Bowles, S., Gintis, H., Osborne, M. (Eds.), *Unequal chances: Family background and economic success*. New York: Princeton Sage and Princeton University Press.
- Hertz, T. (2006, April). *Understanding mobility in America*. Washington, D.C.: Center for American Progress.
- Hidi, S. (1990). Interest and its contribution as a mental resource for learning. *Review of Educational Research*, 60(4), 549-571.
- Hokoda, A., & Fincham, F. D. (1995). Origins of children's helpless and mastery achievement patterns in the family. *Journal of Educational Psychology*, 87(3), 375-385.
- Holy Bible (The New Oxford Bible). (year) Matthew 13:12.
- Hoover-Dempsey, K. V., Walker, J. M. T., Sandler, H. M., Whetsel, D., Green, C. L., Wilkins, A. S., Closson, K. E. (2005). Why do parents become involved? Research findings and implications. *Elementary School Journal*, 106, 105-130.
- Hubbard, L. (2005). The role of gender in academic achievement. *International Journal of Qualitative Studies*, 18(5), 605-623.
- Isaacs, J. (2007, November). *Economic mobility of black and white families*. Economic Mobility Project. Washington, D.C. Retrieved April 12, 2009, from www.brookings.edu/experts/isaacj.aspx

- Ivey, G., & Broaddus, K. (2001). "Just plain reading": A survey of what makes students want to read in middle school classrooms. *Reading Research Quarterly*, 36, 350-377.
- Jez, S. J. (2008). *The influence of wealth and race in four year college attendance*. Retrieved June 1, 2009, from [cshe.berkeley.edu/publications/docs/ROPS-Jez-Wealth-Race 11-13.pdf](http://cshe.berkeley.edu/publications/docs/ROPS-Jez-Wealth-Race%2011-13.pdf)
- Jules, C. (1988). Learning to read and write: A longitudinal study of 54 children from first through fourth grades. *Journal of Educational Psychology*, 80, 437-447.
- Kao, G., & Tienda, M. (1998). Educational aspirations of minority youth. *American Journal of Education*, 106, 349-84.
- Kazelskies, R., Thames, T., & Reeves, C. (2004). The elementary reading attitude survey: Factor invariance across gender and race. *Reading Psychology*, 25(2), 111-120.
- Kim, J. S. (2006). Effects of a voluntary summer reading intervention on reading achievement: Results from a randomized field trial. *Educational Evaluation and Policy Analysis*, 28, 335-355.
- Kozol, J. (1991). *Savage inequalities: Children in America's schools*. New York: Harper Collins Publishers.
- Kush, J. C., Watkins, M. W., McAleer, A. T., & Edwards, V. A. (1995). One year stability of elementary reading attitude survey. *Mid-western Educational Researcher*, 8(1), 11-14.
- Kush, J. C., Watkins, M. W. (1996). Long-term stability of children's attitudes toward reading. *The Journal of Educational Research*, 89, 315-319.
- Keister, L. (2000). Racial wealth gap: Stock investments play major role. Retrieved May 21, 2009, from <http://researchnews.osu.edu>.
- Ladson-Billings, G. (1990a, Spring). Culturally relevant teaching: Effective instruction for Black students. *The College Board Review*, 155, 20-25.
- Laurea, A. (1986, April). Social class differences in family-school relationships: The importance of cultural capital. Unpublished manuscript, Department of Sociology, Stanford University.
- Laurea, A. (2000). *Home advantage: Social class and parental intervention in elementary education* (2nd ed.). Lanham, MA: Rowman and Littlefield.
- Lazarus, B. D., & Callahan, T. (2000). Attitudes toward reading expressed by elementary school students with learning disabilities. *Reading Psychology*, 21, 271-282.

- Lee, C. D. (1998). Culturally responsive pedagogy and performance-based assessment. *Journal of Negro Education*, 67(3), 268-279.
- Lee, C. D. (2001). Is October brown Chinese? A cultural modeling activity system for underachieving students. *American Educational Research Journal*, 38(1), 73-95.
- LeGerfo, L., Nichols, A., & Chaplin, D. (2006). *Gender gaps in math and reading gains during elementary and high school by race and ethnicity*. Retrieved April 21, 2007, from <http://www.urban.org>
- Lehr, F. (1982). Identifying and assessing reading attitudes. *Journal of Reading*, 26, 80-83.
- LeMoine, N. R. (2001). Language variation and literacy acquisition in African American Students. In J. L. Harris, A. G. Kamhi, & K. E. Pollack (Eds.), *Literacy in African American communities* (pp. 169-94). Mahwah, NJ: Lawrence Erlbaum Associates.
- Lowell, J. R. (2001). *Teaching reading, teaching anything. Scientific learning*. Retrieved March 6, 2007, from http://www.brainconnection.com/content/1_1
- Lundy, G. F. (2003). The myths of oppositional culture. *Journal of Black Studies*, 33(4), 450-467.
- Lumsden, L.S. (1994). *Student motivation to learn* (ERIC Digest No. 92). Eugene, OR: ERIC Clearinghouse on Educational Management. (ERIC Document Reproduction Service No. ED 370 200)
- Lynch, J. (2002). Parents' self-efficacy beliefs, parents' gender, children's reader self perceptions, reading achievement and gender.
- MacLeod, J. (1995). *Ain't no makin' it: Aspirations and attainment in a low-income neighborhood*. Boulder, CO: Westview Press.
- Madhabi, C. (2006). *Reading achievement gaps, correlates, and moderators of early reading achievement: Evidence of the early childhood longitudinal study (ECLS) kindergarten to first grade sample*.
- Maehr, M. L., & Midgley, C. (1996). *Transforming school cultures: Lives in context series*. Westview Press: Boulder, CO.
- Majors, R., & Billson, J.M. (1992). *Cool pose: The dilemmas of black manhood in America*. Lexington Books: New York.
- Marsh, H. W., Martin, A. J., & Debus, R. (2002). Individual differences in verbal and math self-perceptions: One factor, two factor, or does it depend on the construct? In R. Riding, & S. Rayner (Eds.), *International perspectives on individual differences*. London: Greenwood Publishing.

- Massey, D. S., Camille, C. Z., Lundy, G.F., & Fischer, M. J. (2006). *The source of the river. The social origins of freshmen at America's selective colleges and universities*. Princeton University Press.
- Massey, D. S., & Denton, N. (1993). *American apartheid: Segregation and the making of the underclass*. Cambridge, MA: Harvard University Press.
- Mathewson, G. C. (1994). Model of attitude influence upon reading and learning to read. In R. B. Ruddell, M. R. Ruddell, & H. Singer (Eds.), *Theoretical models and processes of reading* (4th ed.) (pp. 1121-1161). Newark, DE: International Reading Association.
- McKenna, M. C., & McKear, D. J. (1990). Measuring attitude toward reading: A new tool for teachers. *The Reading Teacher*, 43(9), 626-639.
- McKenna, M. C., Kear, D. J., Ellsworth, R. A. (1995). Children's attitudes toward reading: A national survey. *Reading Research Quarterly*, 30, 934-955.
- McWhorter, J. (2000). *Losing the race: Self-sabotage in Black America*. New York: Free Press.
- Mead, S. (2007). *Continuing the investment*. Retrieved June 25, 2009 from http://www.prospect.org/cs/articles?article=continuing_the_investment
- Merida, K. (1995, October 9). *Worry frustration build for many in the Black middle class*. Washington Post, pp. A1, A21-A23.
- Miller, S. D., & Meece, J. L. (1997). Enhancing elementary students' motivation to read and write: A classroom intervention study. *The Journal of Educational Research*, 90(5), 286-301.
- Montcalm, D. M. (1999). Applying Bandura's theory of self-efficacy to the teaching of research. *Journal of Teaching in Social Work*, 19(1/2), 93-107.
- Morgan, S. L. (1996). Trends in black-white differences in educational expectations: 1980-92. *Sociology of Education*, 69, 308-19.
- Mruk, C. J. (1999). *Self-esteem: Research, theory, and practice* (2nd ed.). New York: Springer.
- Mufwene, S. S. (1999). *Ebonics and standard English in the classroom: Some issues*. Retrieved February 22, 2006, from University of Chicago website: <http://humanities.uchicago.edu/faculty/mufwene/gurt99.html>
- Murray, R. & Bottoms, J. (2005). *Improving reading achievement in middle grades rural schools*. Retrieved July 9, 2009 from www.sreb.org.

- National Institute for Reading (2009). *Questions about reading instruction*. Retrieved July 14, 2009 from <http://www.nifl.gov/>
- National Reading Panel (2000). *National reading panel reports combination of teaching phonics, word sounds, giving feedback on oral reading most effective way to teach reading*. Retrieved March 12, 2009, from <http://www.nichd.nih.gov/new/releases/nrp.htm>
- Nunnally, J. C., 1967. *Psychometric theory*. New York: McGraw-Hill.
- O'Connor, C. (1999). Race, class, and gender in America: Narratives of opportunity among low-income African American youths. *Sociology of Education*, 72, 137-57.
- Obed, N., Alt, C. R., & Bentz, B. (2001). The black-white achievement gap as perennial challenge of urban science education: A sociocultural and historical overview with implications for research and practice. *Journal of Research in Science Teaching*, 38(10), 1101-1114.
- O'Flahavan, J., Gambrell, L. B., Guthrie, J., Stahl, S. Bauman, J. F., & Alverman, D. A. (1992). Poll results guide activities of research center. *Reading Today*, 10, 12.
- Ogbu, J. U. (1974). *The next generation*. New York: Academic Press.
- Ogbu, J. U. (1978). *Minority education and caste: The American system in cross cultural perspective*. New York: Academic Press.
- Ogbu, J. (1982). Cultural discontinuities and schooling. *Anthropology and Educational Quarterly*, 13 (4), 290-307.
- Ogbu, J. U. (1983). Minority status and schooling in plural societies. *Comparative Education Review*, 27(2), 168-190.
- Ogbu, J. U. (1985). Cultural ecological influences on minority education. *Language Arts*, 62 (8), 860-869.
- Ogbu, J. U. (1987). Variability in minority school performance: A problem in search of an explanation. *Anthropology and Educational Quarterly*, 18, 317-334.
- Ogbu, J. U. (1990). Minority education in comparative perspective. *Journal of Negro Education*, 59, 45-55.
- Ogbu, J. U. (1991a). Low performance as an adaptation: The case of blacks in Stockton, CA. In M. A. Gibson, & J. U. Ogbu (Eds.), *Minority status and schooling* (pp. 249-285). New York: Grand Publishing.
- Ogbu, J. U. (1991b) Minority coping responses and school experience, *Journal of Psychohistory*, 18(4), 433-456.

- Ogbu, J. U. (1993). Variability in minority school performance: A problem in search of an explanation. In E. Jacob and C. Jordan (Eds.), *Minority education: Anthropological perspectives* (pp. 83-111). Norwood, New Jersey: Ablex Publishing Corporation.
- Ogbu, J. U. (1994). Racial stratification and education in the United States: Why inequality persists. *Teachers College Record*, 96, 264-298. Retrieved August 2, 2002, from www.tcrecord.org
- Ogbu, J. U. (1995a) Cultural problems in minority education: Their interpretations and consequences-part one: Theoretical background. *The Urban Review*, 27(3), 189-205.
- Ogbu, J. U. (1995b). Cultural problems in minority education: their interpretations and Consequences-part two: Case studies, *The Urban Review*, 27(4), 271–297.
- Ogbu, J. U. (2003). *Black American students in an affluent suburb: A study of academic disengagement*. Lawrence Erlbaum Associates, Inc., Mahweh, NJ.
- Ogbu, J. U., & Simons, H. (1998). Voluntary and involuntary minorities: A cultural-ecological theory of school performance with some implications for education. *Anthropology & Education Quarterly*, 29(2), 155-188.
- Oldfather, P., & Wigfield, A. (1996). Children's motivation to read. In L. Baker, P. Afflerbach, & D. Reinking (Eds.), *Developing engaged readers in school and home communities* (pp. 89-113). Mahwah, NJ: Lawrence Erlbaum and Associates, Inc.
- Orr, A. J. (2003). Black – white differences in achievement. The importance of wealth. *Sociology of Education*, 76, 281-304.
- Osborne, J. W. (1999). Unraveling underachievement among African American boys from an identification with academics perspective. *Journal of Negro Education*, 68, 555-565.
- Ostling, R. N. (1992, February 24). Is school unfair to girls? *Time*, 62.
- Panel Study of Income Dynamics. Retrieved April 22, 2009, from <http://psidonline.isr.umich.edu/>
- Phillips, M. L., Norris, P. S., Maynard, A. M., & Osmond, W. C. (2002). Relative reading achievement: A longitudinal study of 187 children from first through sixth grades. *Journal of Educational Psychology*, 94(1), 3-13.
- Pintrich, P. R. (2003). A Motivational science perspective on the role of student motivation in learning and teaching contexts. *Journal of Educational Psychology*, 95, 667-686.

- Public Health Agency of Canada (2005). Reducing health disparities – roles of the health sector: Discussion paper. *Health Disparities Task Group of the Federal/Provincial/Territorial Advisory Committee on Population Health and Health Security*.
- Quinn, B., & Jadav, A. D. (1987). Causal relationship between attitude and achievement for elementary grade mathematics and reading. *The Journal of Educational Research, 80*, 366-372.
- Reading links: A professional development resource (2001). Retrieved September 4, 2007, from http://www.linkslearning.org/reading_links/_index.html
- Reynolds, A. J., & Walberg, H. J. (1992a). A structural model of high school mathematics outcomes. *The Journal of Educational Research, 85*, 150-158.
- Reynolds, A. J., & Walberg, H. J. (1992b). A structural model of science achievement and attitude: An extension to high school. *Journal of Educational Psychology, 84*, 371-382.
- Roach, R. (2004). The great divide. *Black issues in higher education, 21*, 22-25.
- Ross, E. P., & Fletcher, R. K. (1989). Responses to children literature by environment, grade level and sex. *Reading Instruction Journal, 32*, 22-28.
- Rothstein, R. (2004). *Class and schools: Using social, economic, and educational reform to close the Black –White achievement gap*. Washington, DC: Economic Policy Institute.
- Rowe, K. (1991). The influence of reading activity at home on students' attitudes towards reading, classroom attentiveness and reading achievement: An application of structural equation modeling. *British Journal of Educational Psychology, 61*, 19-35.
- Sainsbury, M., & Schagen, I. (2004). Attitudes toward reading at ages nine to eleven. *Journal of Research in Reading, 27*, 373-386.
- Scarborough, H. S., & Dobrich, W (1994). On the efficiency of reading to preschoolers. *Developmental Review, 14*, 245-302.
- Scheffer Hammer, C. (2001). "Come sit down and let mama read": Book reading interactions between African American mothers and their infants. In J. L. Harris, A. G. Kamhi, & K .E. Pollack (Eds.), *Literacy in African American communities* (pp. 21-44). Mahweh, NJ: Lawrence Erlbaum Associates.
- Schiefele, U. (1991). Interest, learning, and motivation. *Educational Psychologist, 26*, 299-323.
- Schunk, D. (1994). Sequential and attributional feedback and children's achievement behaviors. *Journal of Educational Psychology, 76*, 1159-1169.
- Schunk, D. (1985). Self-efficacy and school learning. *Psychology in the Schools, 22*, 208-223

- Schuy, T. R., McCardle, P., & Albro, E. (2006). Introduction to this special issue: Reading comprehension assessment. *Scientific Studies of Reading, 10*(3), 221-224.
- Seifert, T.L. (2004). Understanding student motivation, *Educational Research, 46*(2), 137-149.
- Shaywitz B. A, Shaywitz, S. E, Pugh, K. R, Constable, R. T, Skudlarski P, & Fulbright R. K. (1995). Sex differences in the functional organization of the brain for language. *Nature, 373*, 607-609.
- Shariro, T. M., & Oliver, M. (2006). *Black wealth/white wealth: A new perspective on Racial inequality. Tenth anniversary edition.* New York and London: Routledge Publishers.
- Simons, E. (1990). Students' worlds students' words. Ph. D dissertation, University of California, Berkely.
- Skaalvik, E. M., Rankin, R. J. (1995). A test of the internal – external frame of reference model at different levels of math and verbal self perception. *American Educational Research Journal, 32*, 161-184.
- Skinner, E., & Belmont, M. (1991). *A longitudinal study of motivation in school. Reciprocal effects of teacher behavior and student engagement.* Unpublished manuscript, University of Rochester, Rochester, NY
- Smith, M. C. (1990). A longitudinal investigation of reading attitude development from childhood to adulthood. *Journal of Educational Research, 83*(4), 215-219.
- Smith, M. W., & Wilhelm, J. D. (2002). *Reading don't fix no Chevy's. Literacy in the lives of young men.* Heinemann.
- Smith, R. C. (2003). Capitalism in African-American culture. *encyclopedia of African- American politics. African-American history on-line. Facts on file, inc.* Retrieved August 12, 2007, from <http://www.fofweb.com> s
- Snow, C. E. (1991). The theoretical basis for of the home-school study of language and literacy development. *Journal of Research in Childhood Education, 6*, 1-8.
- Snow, C., Burns, M., & Griffin, P. (1998). Preventing reading difficulties in young children. Washington, DC: National Academy Press.
- Sonnenschein, S., & Munsterman, K. (2002). The influence of home-based reading interactions on 5 year olds' reading motivations and early literacy development. *Early Childhood Research Quarterly, 17*, 318-337.
- Smith, F. (1998). *Understanding reading: A psycholinguistic of reading and learning to read* (4th ed.). Hillsdale, NJ: Erlbaum.

- Smith, M. C. (1990). A longitudinal investigation of reading attitude development from childhood to adulthood. *Journal of Educational Research*, 83, 215-219.
- Snedecor, G. W., & Cochran, W. G. (1989), *Statistical Methods* (8th ed.). Iowa State University Press.
- Spencer, M. B., Soo-Ryon K., & Sheree, M. (1987). The black child's home environment and student achievement. *Journal of Negro Education*, 56 (1), 77-87.
- Stanovich, K. E. (1986) Matthew effects in reading: Some consequences of individual differences in the acquisition of literacy. *Reading Research Quarterly* 21(4), 360-407.
- Stanovich, K. E. (1996). *How to think straight about psychology* (4 ed.). New York: Harper-Collins.
- Steinberg, L. (1996). *Beyond the classroom: Why school reform has failed and what parents need to do*. New York: Simon and Schuster.
- Steele, C. (1992, April). Race and schooling of African Americans. *Atlantic Monthly*, pp. 68-78.
- Steele, C. (1997). A threat in the air: How stereotypes shape intellectual identity and performance. *American Psychologist*, 52 (6), 613-629.
- Stipek, D. J. (1992). The child at school. In M. H. Bornstein & M. E. Lamb (Eds.), *Developmental psychology: An advanced textbook* (pp. 579-625). Hillsdale, NJ: Erlbaum.
- Stipek, D., & Mac Iver (1989). Developmental change in children's assessment of intellectual competence, *Child Development*, 60, 521-538.
- Su Jin, J. (2008). The influence of wealth and race in four year college attendance. Retrieved May 19, 2009, from cshc.berkeley.edu/news/indx
- Suarez-Orozco, M. (1989). Immigrant adaptation and schooling: A Hispanic case. In M. Gibson & J.U. Ogbu (Eds.), *In Minority status and schooling: A comparative study of immigrant and involuntary minorities* (pp. 37-62). New York, Garland.
- Suskind, R. (1998). *A hope in the unseen: An American odyssey from the inner city to the ivy league*. New York: Broadway.
- Taylor, R. D., Carsten, R., Flickinger, S. M., Roberts, D., & Fulmore, C. D. (1994). Explaining the school performance of African American adolescents. *Journal of Research on Adolescence*, 4, 21-44.
- The Iowa Reading Content Network* (2004). Retrieved March 23, 2009 from, <http://www.iowa.gov/educate/proder/reading>

- The Teaching Commission* (2004). Retrieved April 30, 2009, from <http://www.edweek.org/rc/issues/achievement-gap>
- Thernstrom, A. M., & Thernstrom, S. (2003). *No Excuses: Closing the Racial Gap in Learning*. New York: Simon & Schuster
- TkMC (2005). *Background paper. Socioeconomic disadvantage: Health and education outcomes for school-aged children and youth*. Retrieved on April 30, 2009, from www.achsc.org/download/ACHSC%20Background%20Paper_SES_H
- Tobias, S. (1989). Tracked to fail: In today's schools, children who test poorly may lose the chance for a quality education. *Psychology Today*, 23(9), 54-59
- Toutkoushian, R. K., & Curtis, T. (2005). The effects of socio-economic factors on public high school outcomes and rankings: Evidence from New Hampshire. *Research in Higher Education*, 46, 955-984.
- Tyson, K. (2002). Weighing in: Elementary-age students and the debate on attitudes toward school among black students. *Social Forces*, 80, 1157-1189.
- Urdan, T. C., & Maehr, M. L. (1995). Beyond a two-goal theory of motivation and achievement: A case for social goals. *Review of Educational Research*, 65(3), 213-243.
- Unrau, N. & , J. Schlackman. "Motivation and its relationship with reading achievement in an urban middle school." *The Journal of Educational Research* 100 (2), 81-102.
- U S Department of Education, National Center for Educational Statistics (2000a). *Digest of Education Statistics*. Retrieved April 30, 2009, from <http://nces.ed.gov/>
- U S Department of Education, National Center for Educational Statistics (2000b). *America's kindergartners*. Retrieved June 25, 2009, from <http://nces.ed.gov/>
- Viadero, D. (2000). Lags in minority achievement defy traditional explanations. *Education Week*, 19(28), 18-22.
- Vigil, J. D. (1998). *A rainbow of gangs: Street cultures in the mega-city*. University of Texas Press: Austin.
- Vollands, S. R., Topping, K. J., & Evans, R. M. (1999). Computerized self-assessment of reading comprehension with accelerated reader: Action research. *Reading and Writing Quarterly*, 15(3), 197-211.
- Walberg, H. J., & Tsai, S. L. (1983). Matthew effects in education. *American Educational Research Journal*, 20, 359-373.

- Walker, J. M. T., Wilkins, A. S., Dallaire, J., Sandler, H. M., & Hoover-Dempsey, K. V. (2005). Parental involvement: Model revision through scale development. *Elementary School Journal*, 86, 85-104.
- Wang, L. L. (1995). Lau v. Nichols: History of a struggle for equal and quality education. In D. Nakanishi, & T. Nishida (Eds.), *In the Asian American educational experience: A source book for teachers and students*. New York: Rutledge.
- Washington, J. (2001). Early literacy skills in African-American children: Research considerations. *Learning Disabilities Research and Practice*, 16(4), 213-221.
- Washington State School Directors' Association (n.d.). *Understanding the Achievement Gap*. Retrieved September 9, 2007, from www.wssda.org/wssda/WebForms/EnUs/Publications
- Waters, M. (1991). *Ethnic Options: Choosing Identities in America*. Berkley
- Watts, R. H., Cashwell, C. S., & Schweiger, W. K. (2004). Fostering intrinsic motivation in children: A humanistic counseling process. *Journal of Humanistic Counseling, Education and Development*.
- Weiner, B. (1990). History of motivation research in education. *Journal of Educational Psychology*, 82, 616-622.
- Wikipedia (The Free Encyclopedia). (2009). *Standard Achievement test series*. Retrieved June 13, 2009, from <http://en.wikipedia.org/w/index>
- Wigfield, A. (1997). Reading motivation: A domain-specific approach to motivation. *Educational Psychologist*, 32, 59-68.
- Wigfield, A., Eccles J.S., Yoon K.S., R.D, Harold, & Arbreton, A. (1997). Changes in children's competence beliefs and subjective task values across the elementary school years: A three-year study. *Journal of Educational Psychology*, 89, 451-469.
- Wixson, K. K., & Lipson, M. Y. (1992). *Reading diagnosis and remediation*. Glenview, IL: Scott, Foresman. University of California Press.
- Woodard, S. P. (2003). Race and education: The roles of history and society in educating African American students. In W. H. Watkins, J. H. Lewis, V. Chou (Eds.). Boston: Allyn and Bacon.
- Wolff, E. (2003). The wealth divide: The growing gap in the United States between the rich and the rest. *The Multinational Monitor*, 24(5), 11-15.
- Worrell, F. C., Roth, D. A., & Gabelko, N. H. (2007). Elementary reading attitude surveys (ERAS) scores in academically talented students. *Roeper Review*, 29 (2), 119-125.

- Yegidis, B. L., & Weinbach, R. W. (2002). *Research methods for social workers* (4th ed.). Boston: Allyn & Bacon.
- Yeung, W. J., & Conley, D. (2004). How does wealth matter for young children's cognitive achievement? Retrieved May 21, 2009, from www.allacademic.com/meta/_index.html
- Yu, Y., & Williams, D. R. (1999). Socioeconomic status and mental health. In J. Phelan & Co. Aneshensel (Eds.), *Handbook of the Sociology of Mental Health*. Plenum, 1510166.

APPENDIX A

APPENDIX A

Consent and Assent Forms

UNIVERSITY OF ALABAMA

Informed Consent for a Research Study

Your child is being asked to take part in a research study. This study is called *The academic achievement gap between African Americans and Whites: An exploratory study on reading achievement and motivation*.

The study is being done by La-Monica Herron-McCoy who is a doctoral student at the University. The study is supervised by Dr. Stephen J. Thoma who is a professor of Educational Psychology at the University.

What is this study about?

This study is being done as an attempt to understand children's motivation to read and how motivation may help children do better in reading.

Why is this study important--What good will the results do?

This kind of study is important/useful because there is evidence to suggest that there is a difference or a gap in reading achievement between African American and White students. The current study expects to look beyond the racial difference and provide new information to help out reading achievement for all students, as reading is important for overall academic achievement.

Why has my child being asked to take part in this study?

Your child is being asked to participate in this study because there is very little information on elementary students in relation to reading achievement and motivation. Looking at reading early and promoting reading achievement is expected to improve achievement in later school years as well as adult life.

How many people besides my child will be in this study?

The current study estimates 500 + children will be in this study.

What will my child be asked to do in this study?

If you decide to give your child permission to be in this study, your child will be asked to do these things:

- 1. Obtain consent from you as the parent(s) / guardian (s) to participate**
- 2. Complete 2 assessments during designated classroom time. (see attached)**

How much time will my child spend being in this study?

Being in this study will take about 1 hour. The Elementary Reading Survey will take about 10-15 minutes to complete and the Children's Academic Intrinsic Motivation Inventory should take about 20-30 minutes to complete. Your child will also be asked to complete demographic information such as age, gender, race, and grade in school. This will take place at school.

Will my child be paid for being in this study?

There is no pay for participating in this study. **However if your child participates he or she will enter their name in a drawing to win a cash prize of \$20.00.**

Will being in this study cost my child or me anything?

There will be no cost to your child or you except for your child's time in completing the questionnaires.

Can the researcher take my child out of this study?

The researcher does not foresee any reason to remove any participant from the study. However, participation is strictly voluntary and the participant is free to withdraw at anytime.

What are the benefits (good things) that may happen for my child if he/she is in this study?

Other than the opportunity to win the drawing, there are no direct benefits for example like money, prizes, or gifts for you or your child for participating. I hope you agree that a good thing is that by letting your child participate if he or she wants to, you will help teachers

and researchers learn how to help all children read better. The current research views your child as a vital part of contributing new information to the field, as there is little information on elementary school children relating reading and motivation.

What are the benefits to scientists or society?

New information may assist researchers and teachers in eliminating or decreasing the gap in reading achievement. Decreasing the gap in reading for all students is likely to prepare children for overall academic achievement.

What are the risks (dangers or harm) to my child if he/she is in this study?

There are no risks or penalties involved in this study. All information will be kept confidential. Your child can refuse to answer any questions or terminate his/her participation at any time.

How will my child's confidentiality (privacy) be protected? What will happen to the information the study keeps on my child?

1. Coding study responses by using I.D. numbers on all questionnaires will protect confidentiality. (i.e. your child's real name and school name will not be used) **These I.D. numbers will be randomly generated to ensure anonymity.**
2. Assessments will be kept in a locked cabinet limiting access to the researchers only. The information will remain locked in a cabinet at the University even after the study is over.
3. **The principle investigator and project supervisor will be the only person with access to data collected.**

What are the alternatives to being in this study? Does my child have other choices?

The alternative/other choice is not to participate. **If your child chooses not to participate, their classroom teacher will instruct him or her on how to use this time while others are participating in the study. *This time may include free reading time or study time. This does not mean that your child will be given extra homework or assignments because they choose not to participate.***

What are my child’s rights as a participant?

Taking part in this study is voluntary—it is your and your child’s free choice. You may choose not to allow your child to take part at all and your child may refuse to participate at any time. If your child starts the study, he/she can stop at any time. Leaving the study will not result in any penalty or loss of any benefits your child would otherwise receive.

The University of Alabama Institutional Review Board (IRB) is the committee that protects the rights of people in research studies. The IRB may review study records from time to time to be sure that people in research studies are being treated fairly and that the study is being carried out as planned.

Who do I call if my child or me have questions or problems?

If you or your child have questions about the study at any time please do not hesitate to contact the principle researcher La-Monica Herron-McCoy at 348-7575 or project supervisor Dr. Stephen J. Thoma at 348-8146. If you have any questions about your child’s rights as a research participant you may contact Ms. Tanta Myles, The University of Alabama Research Compliance Officer, at (205)-348-5152.

I have read this consent form. The study has been explained to my child and me. I understand what my child will be asked to do. I freely agree to allow my child to take part in it. I will receive a copy of this consent form to keep.

Permission Page

Signature of Parent

Date

Signature of UA doctoral student

Date

Assent Form

Title: The academic achievement gap between African Americans and Whites: An exploratory study on reading achievement and motivation.

IRB Protocol No.: 07-OR-201

Sponsor: Dr. Stephen J. Thoma

Investigator: La-Monica Herron-McCoy

Sub-Investigators: Dr. Stephen J. Thoma

The investigators named above are doing a research study.

These are some things we want you to know about research studies:

We are asking you to be in a research study. Research is a way to test new ideas. Research helps us learn new things.

Whether or not to be in this research is your choice. You can say Yes or No. Whatever you decide is OK. We will still take good care of you.

Why am I being asked to be in this research study?

You are being asked to be in the study because you are in elementary school and can tell me about your reading habits.

What is the study about?

Researchers need to know why some people do better in reading and others do not. This study would like to know how this can be changed so everybody can do good in reading and in school overall.

What will happen during this study?

If you agree to be in this study, you will

- Answer some questions about reading and if you like to read.
- You will answer questions on 2 different assessments. (see attached)
- You will help researchers and teachers learn more about how to help everybody do well in reading.

Will the study hurt?

No the study will not hurt you or your grade if you choose to or not to participate.

What else should I know about the study?

If you do not want to participate you do not have to and you cannot and will not be punished. **If you choose not to participate, your classroom teacher will instruct you on how to use this time while others are participating in the study. This time may include free reading time or study time. This does not mean that you will be given extra homework or assignments because you choose not to participate.**

What are the good things that might happen?

People may have good things happen to them because they are in research study. These are called “benefits.” You may feel happy about being able to help teachers and researchers figure out a way to help all students do better in reading.

What if I don’t want to be in this study?

You do not have to be in the study if you do not want to.

Who should I ask if I have any questions?

If you have any questions about this study, you or your parents can call Dr. Thoma at 205-348-8146 or La-Monica Herron-McCoy at 205-348-7575.

Do I have to be in the study?

No, you do not have to be in the study. Even if you say yes now, you can change your mind later. It is up to you. No one will be mad at you if you don’t want to do this.

Now that I have asked my questions and think I know about the study and what it means, here is what I decided:

_____ OK, I’ll be in the study. _____ No, I do not want to be in the study.

The researchers have told me about the research. I had a chance to ask questions. I know I can ask questions at any time. I want to be in the research. **If I am in the study I understand that only the researcher and the research supervisor will have access to information completed by me.**

If you sign your name below, it means that you agree to take part in this research study.

Your Name (Printed)

Age

Date

Grade

School

Your Signature

Date

Signature of Witness

Date

Signature of Person Obtaining Consent (parent / guardian)

Date

Remember your name or your school name will not be used in this study. The researcher will use fictional names to protect your identity. Thank you for helping me!

La-Monica

APPENDIX B

APPENDIX B

Research Questionnaire

Demographics

Thank you for your help by participating in this study. I am asking that you please complete the following demographic questions. This should take less than 5 minutes of your time. Thank You.

How old are you? _____

What grade are you in? _____

Are you a male _____ or female _____?

What is your race?

_____ African American or black

_____ Asian or Asian American

_____ Caucasian or white

_____ Hispanic

_____ Other

What is the name of your school? _____

Who lives with you in your house?

_____ Mother

_____ Grandmother

_____ Father

_____ Grandfather

_____ Step Mother

_____ Step Father

_____ Sisters (how many) _____

_____ Brothers (how many) _____

_____ Others (how many) _____

APPENDIX C

APPENDIX C

Table 1
Demographics (Pilot)

<u>4th Grade</u>	<u>African Americans</u>	<u>Whites</u>	<u>Total</u>
Females	4	3	7
Males	2	4	6
			N= 13
5 th Grade			
Females	5	3	8
Males	2	2	4
			N=12
6 th Grade			
Females	8	7	15
Males	5	5	10
			N=25

Participants from a school in Jefferson Co., AL

Table 2
Gender on the ERAS

	<u>Females</u>		<u>Males</u>	
	Mean	Std. Deviation	Mean	Std. Deviation
R	29.8333	3.31229	26.6500	7.76819
A	34.4667	2.80066	32.7000	3.35763
T	65.3000	5.08649	60.3500	8.17103

*R= recreation
A= academic
T= total

Table 3
Ethnicity on the ERAS

	<u>African Americans</u>		<u>Whites</u>	
	Mean	Std. Deviation	Mean	Std. Deviation
R	26.2308	6.29481	31.0833	3.62259
A	32.9615	3.44651	34.6250	2.53347
T	61.1154	7.32299	65.7083	5.55196

*R=recreation
A=academic
T=total

Table 4

CAIMI by gender

<u>Females</u>			<u>Males</u>		
N	Mean	Std. Deviation	N	Mean	Std. Deviation
30	75.8000	7.92377	20	68.1000	5.16975

Table 5

CAIMI by ethnicity

<u>African Americans</u>			<u>Whites</u>		
N	Mean	Std. Deviation	N	Mean	Std. Deviation
26	69.8462	7.82147	24	75.8333	6.79940

APPENDIX D

APPENDIX D

Table 6
Dibels, main effects and interaction

Tests of Between-Subjects Effects						
Dependent Variable: Dibels						
Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	10876.753 ^a	3	3625.584	2.492	.064	.065
Intercept	1796498.888	1	1796498.888	1234.806	.000	.920
Gender	643.652	1	643.652	.442	.507	.004
Ethnicity	6369.312	1	6369.312	4.378	.039	.039
Gender * Ethnicity	4752.577	1	4752.577	3.267	.074	.030
Error	155672.490	107	1454.883			
Total	2514265.000	111				
Corrected Total	166549.243	110				

a. R Squared = .065 (Adjusted R Squared = .039)

Table 6a
Profile of Dibels estimated marginal means

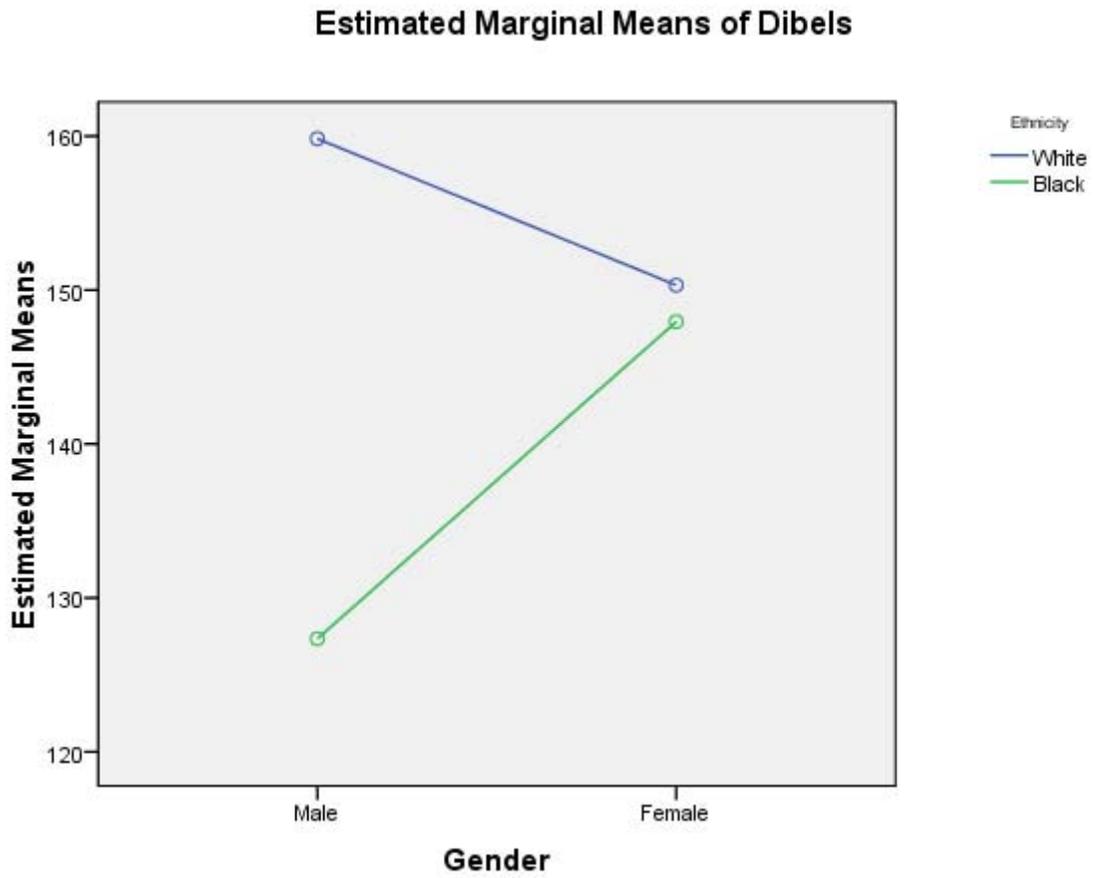


Table 7
 SAT 10, main effects and interaction

Tests of Between-Subjects Effects					
Dependent Variable: Sat 10					
Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	15260.268 ^a	3	5086.756	8.186	.000
Intercept	281719.081	1	281719.081	453.356	.000
Gender	129.256	1	129.256	.208	.649
Ethnicity	14663.361	1	14663.361	23.597	.000
Gender * Ethnicity	2146.932	1	2146.932	3.455	.066
Error	66490.669	107	621.408		
Total	408458.000	111			

Table 7a
Profile for SAT 10 Estimated marginal means

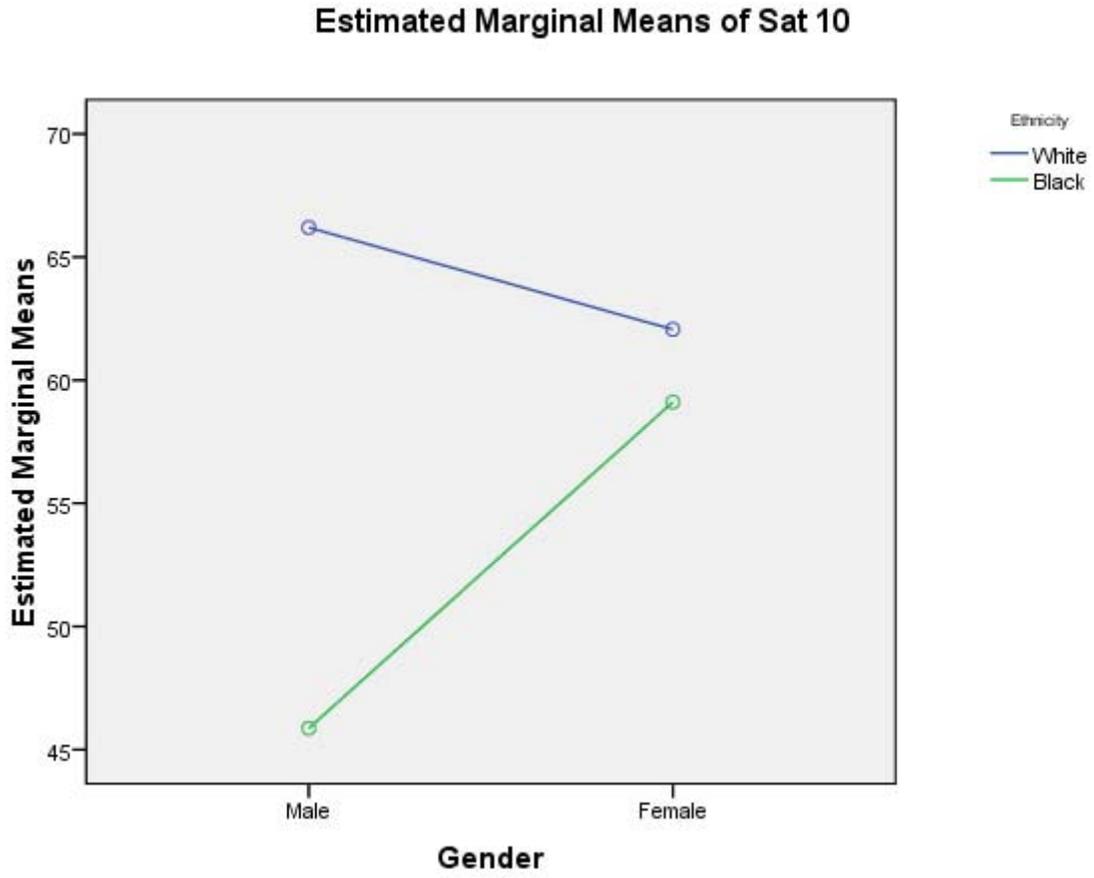


Table 8
Dibels with covariate

Tests of Between-Subjects Effects					
Dependent Variable:Dibels					
Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	20328.972 ^a	4	5082.243	3.684	.008
Intercept	705911.400	1	705911.400	511.739	.000
Sesm	9452.219	1	9452.219	6.852	.010
Ethnicity	2.790	1	2.790	.002	.964
Gender	1019.801	1	1019.801	.739	.392
Ethnicity * Gender	2622.033	1	2622.033	1.901	.171
Error	146220.271	106	1379.437		
Total	2514265.000	111			
Corrected Total	166549.243	110			

a. R Squared = .122 (Adjusted R Squared = .089)

Table 9
SAT 10 and covariate

Tests of Between-Subjects Effects					
Dependent Variable: Sat 10					
Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	26402.160 ^a	4	6600.540	12.641	.000
Intercept	150499.536	1	150499.536	288.226	.000
Sesm	11141.892	1	11141.892	21.338	.000
Gender	343.482	1	343.482	.658	.419
Ethnicity	825.109	1	825.109	1.580	.211
Gender * Ethnicity	756.589	1	756.589	1.449	.231
Error	55348.777	106	522.158		
Total	408458.000	111			
Corrected Total	81750.937	110			

APPENDIX E

APPENDIX E

Table 1

ERAS, main effects and interaction

Tests of Between-Subjects Effects						
Dependent Variable: ERAS						
Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	6654.501 ^a	3	2218.167	2.813	.043	.073
Intercept	289688.912	1	289688.912	367.402	.000	.774
Gender	3907.031	1	3907.031	4.955	.028	.044
Ethnicity	2902.339	1	2902.339	3.681	.058	.033
Gender * Ethnicity	2675.235	1	2675.235	3.393	.068	.031
Error	84367.247	107	788.479			
Total	524678.000	111				
Corrected Total	91021.748	110				

a. R Squared = .073 (Adjusted R Squared = .047)

Table 1a

Profile of ERAS estimated marginal means

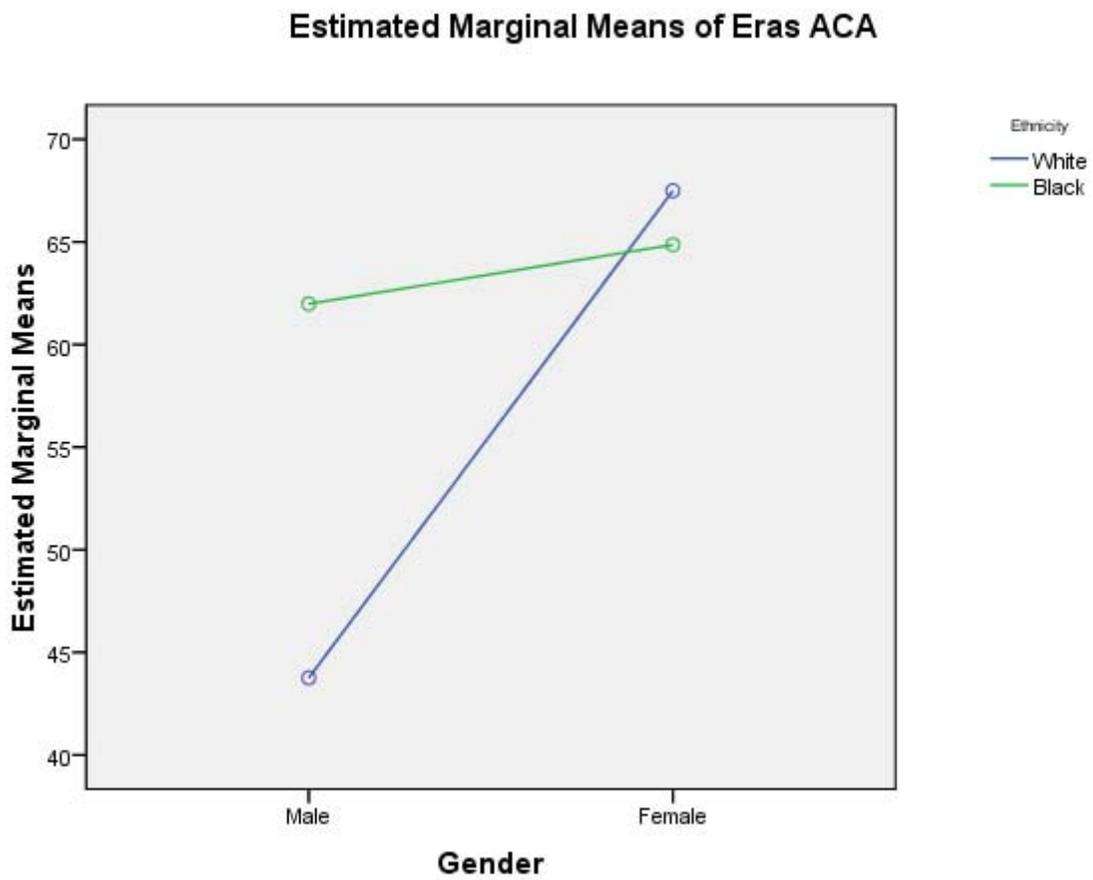


Table 2

CAIMI, main effects, interaction

Tests of Between-Subjects Effects					
Dependent Variable: CAIMI					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2540.028 ^a	3	846.676	3.054	.032
Intercept	649431.560	1	649431.560	2342.577	.000
Gender	1480.801	1	1480.801	5.341	t .023
Ethnicity	995.944	1	995.944	3.592	.061
Gender * Ethnicity	86.852	1	86.852	.313	.577
Error	29663.558	107	277.230		
Total	945217.000	111			
Corrected Total	32203.586	110			

a. R Squared = .079 (Adjusted R Squared = .053)

Table 2a

Profile of CAIMI estimated marginal means

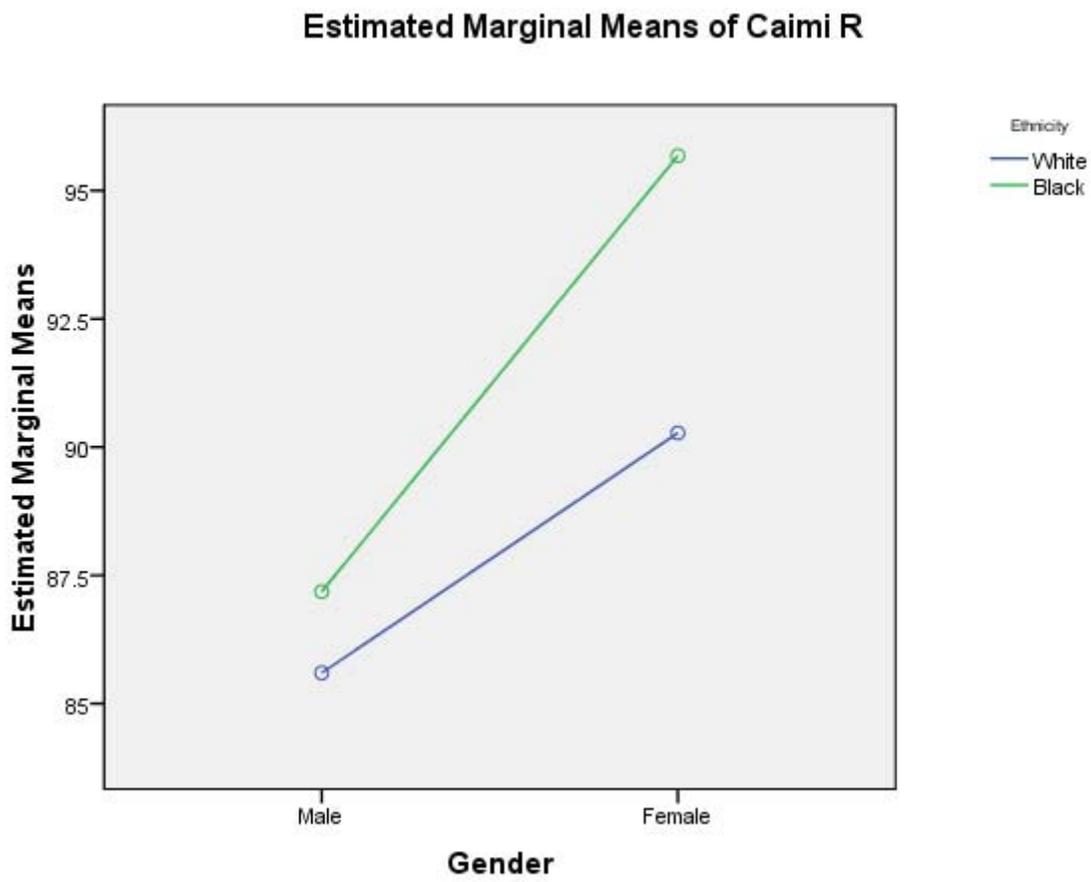


Table 3

ERAS and covariates

Tests of Between-Subjects Effects						
Dependent Variable: ERAS						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	7172.507 ^a	4	1793.127	2.267	.067	.079
Intercept	12340.263	1	12340.263	15.600	.000	.128
SESM	518.006	1	518.006	.655	.420	.006
Gender	3697.931	1	3697.931	4.675	.033	.042
Ethnicity	777.574	1	777.574	.983	.324	.009
Gender * Ethnicity	2212.948	1	2212.948	2.798	.097	.026
Error	83849.241	106	791.031			
Total	524678.000	111				
Corrected Total	91021.748	110				

a. R Squared = .079 (Adjusted R Squared = .044)

Table 4

CAIMI and covariates

Tests of Between-Subjects Effects					
Dependent Variable: CAIMI					
Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	2638.219 ^a	4	659.555	2.365	.058
Intercept	201467.679	1	201467.679	722.317	.000
SES	98.191	1	98.191	.352	.554
Gender	1422.554	1	1422.554	5.100	.026
Ethnicity	341.197	1	341.197	1.223	.271
Gender * Ethnicity	55.919	1	55.919	.200	.655
Error	29565.366	106	278.919		
Total	945217.000	111			
Corrected Total	32203.586	110			

a. R Squared = .082 (Adjusted R Squared = .047)

APPENDIX F

APPENDIX F

Table 1
SAT 10 and main effects and cross products model

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.460 _a	.212	.190	24.542	.212	9.575	3	107	.000
2	.492 _b	.242	.198	24.412	.030	1.383	3	104	.252

a. Predictors: (Constant), CAIMI , ethnicity, ERAS

b. Predictors: (Constant), CAIMI, ethnicity, ERAS, ethnicity by ERAS, ERAS by CAIMI, ethnicity by CAIMI

Table 2
SAT 10 and Coefficients

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	33.225	13.572		2.448	.016		
Etnred	-25.339	5.138	-.430	-4.932	.000	.967	1.034
Eras ACA	-.068	.112	-.072	-.608	.544	.524	1.909
Caimi R	.473	.190	.297	2.485	.014	.517	1.935
2 (Constant)	21.535	29.794		.723	.471		
Etnred	10.219	30.552	.174	.334	.739	.027	36.943
Eras ACA	-.553	.452	-.584	-1.225	.223	.032	31.146
Caimi R	.770	.411	.483	1.872	.064	.110	9.132
ethnicitybyCaimi	-.702	.422	-1.163	-1.663	.099	.015	67.118
Ethnicitybyeras	.442	.229	.609	1.936	.056	.074	13.564
Erasbycaimi	.003	.005	.311	.523	.602	.021	48.493

Table 3
SAT 10 and control variables

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.556 ^a	.309	.296	22.875	.309	24.117	2	108	.000
2	.615 ^b	.378	.348	22.007	.069	3.894	3	105	.011
3	.645 ^c	.416	.370	21.643	.038	2.189	3	102	.094

a. Predictors: (Constant), SES, sex

b. Predictors: (Constant), SES, sex, ERAS, ethnicity, CAIMI

c. Predictors: (Constant), SES, sex, ERAS, ethnicity, CAIMI, ethnicity*ERAS, ERAS*CAIMI, ethnicity*CAIMI

Table 4
SAT 10, control variables and coefficients

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	73.566	5.076		14.492	.000
	Sex	6.043	4.676	.103	1.292	.199
	SES	-32.950	4.797	-.550	-6.869	.000
2	(Constant)	39.984	12.270		3.259	.002
	Sex	2.999	4.609	.051	.651	.517
	SES	-30.823	5.868	-.514	-5.253	.000
	ethnicity	-7.157	5.769	-.122	-1.241	.217
	CAIMI	.449	.172	.282	2.602	.011
	ERAS	-.025	.101	-.027	-.249	.804
3	(Constant)	2.702	26.662		.101	.919
	Sex	4.334	4.614	.074	.939	.350
	SES	-31.904	5.897	-.533	-5.410	.000
	ethnicity	43.963	27.822	.747	1.580	.117
	CAIMI	1.062	.368	.667	2.883	.005
	ERAS	-.260	.404	-.275	-.645	.521
	ethnicity*CAIMI	-.880	.376	-1.458	-2.341	.021
	Ethnicity*ERAS	.454	.206	.625	2.209	.029
	ERAS*CAIMI	.000	.004	-.064	-.119	.905

a. Dependent Variable: Sat 10

Table 5
Dibels, main effects and cross products model

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.221 ^a	.049	.022	38.475	.049	1.836	3	107	.145
2	.289 ^b	.083	.030	38.315	.034	1.299	3	104	.279

a. Predictors: (Constant), CAIMI, ethnicity, ERAS

b. Predictors: (Constant), CAIMI, ethnicity, ERAS, ethnicity*ERAS, ERAS*CAIMI, ethnicity*CAIMI

Table 6
Dibels, control variables and coefficients

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	117.168	21.277		5.507	.000
	ethnicity	-14.214	8.055	-.169	-1.765	.080
	ERAS	-.115	.176	-.085	-.655	.514
	CAIMI	.500	.298	.220	1.676	.097
2	(Constant)	63.759	46.763		1.363	.176
	ethnicity	65.588	47.952	.781	1.368	.174
	ERAS	-.475	.709	-.351	-.670	.505
	CAIMI	1.338	.645	.588	2.073	.041
	Ethnicity*CAI MI	-1.264	.663	-1.467	-1.908	.059
	Ethnicity*ERA S	.531	.359	.512	1.480	.142
	ERAS*CAIMI	.000	.008	.026	.039	.969

a. Dependent Variable: Dibels