The Impact Of Self-Efficacy, Locus Of Control, And Perceived Parental Influence On The Academic Performance Of Low And High Achieving African-American High School Students

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THE IMPACT OF SELF-EFFICACY, LOCUS OF CONTROL, AND PERCEIVED PARENTAL INFLUENCE ON THE ACADEMIC PERFORMANCE OF LOW AND HIGH ACHIEVING AFRICAN-AMERICAN HIGH SCHOOL STUDENTS WITH LOW SOCIOECONOMIC STATUS

by

FRANCES E. CURTIS-FIELDS

DISSERTATION

Submitted to the Graduate School

of Wayne State University,

in partial fulfillment of the requirements

for the degree of

DOCTOR OF EDUCATION

2010

MAJOR: EDUCATIONAL LEADERSHIP AND POLICY STUDIES

Approved by:

______________________________________  __________________________
Advisor                                      Date
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2010
DEDICATION

This dissertation is lovingly dedicated to my father,

the late Mr. Ernest Curtis,

who was always there for me no matter the circumstance, he was faithful to me.

To my mother,

Mrs. Frances A. Curtis,

I can depend on you in daylight, darkness, sunshine, and rain.

My love for you is without end just as yours is for me.
ACKNOWLEDGEMENTS

And lest I should be exalted above measure through the abundance of the revelations, there was given to me a thorn in the flesh, the messenger of Satan to buffet me, lest I should be exalted above measure. For this thing I besought the Lord thrice, that it might depart from me. And he said unto me, My grace is sufficient for thee: for my strength is made perfect in weakness. Most gladly therefore will I rather glory in my infirmities, that the power of Christ may rest upon me. II Corinthians 12: 7-9

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CHAPTER 1
INTRODUCTION

Background

“What a child doesn’t receive, he can seldom later give.”

-P.D. James, 1999

A plethora of research lends itself to the notion that high achievement and high socioeconomic status are positively related. This idea was first introduced formally by the Coleman Report of 1966. This groundbreaking study called, *Equality of Educational Opportunity*, was written by James P. Coleman. The results of this study found that poor African American children performed better academically in integrated, middle-class schools. The report was instrumental in attempting to promote ethnic balance among schools. The now-famous Coleman Report found that socioeconomic factors were the strongest correlates of both Black and White achievement levels (Coleman, 1966).

In part, due to findings of the Coleman Report and others that followed, the federal government introduced policies to racially integrate schools and to end de facto segregation produced by income level and neighborhood ethnic composition. A major result of the report was busing school children to schools outside their neighborhoods. The aim was to achieve racial balance among schools by preventing African American enrollment from exceeding 60% (Unger, n.d.).

In most national studies on student achievement, factors such as parental education, income, and job status appear to be the most documented factors influencing student achievement (Armor, 1992). The works of Johnson and Stafford (1973) and Hauser and Featherman (1976) also recognized the magnitude of the relationship between socioeconomic
status and school achievement. The conditions for low minority achievement are both educational and a combination of social-economic-environmental issues (House, 2005).

In spite of overwhelming research that indicated a relationship between socioeconomic status and student achievement, some students succeed despite the presence of every possible textbook argument that would provide an explanation for failure. Teaching in the urban setting has its own unique set of daily challenges, including increasing gang violence, illiteracy, teacher apathy, and drug abuse. When these increasing social problems are combined with increasing standards for demonstrating student achievement, the task of the urban educator is daunting. Regardless of these challenges, some students are able to master the content. These students perform on standardized tests at levels that meet or exceed the state’s level of competency and their grades in school are substantially higher than those within the same ethnicity and socioeconomic status.

These special cases of academically successful African-American children in spite of their low socioeconomic status need to be examined. The characteristics that students possess that allow them to do well in school despite the many barriers present also need to be the focus of research. From the results of this type of research, urban educators can learn how to replicate the success of these students when working with other students. Although a large body of research exists on the educational plight of the poor, much of it focuses on differences that exist between economically-disadvantaged African-American children and middle-class Caucasian children (Rothstein, 2004). Although less attention has been paid to the variation among members of the same race and socioeconomic status, this topic was a focus of the present study.

*The Achievement Gap*

The achievement gap that exists between African-American children and their Caucasian counterparts has been well documented. According to Walker-Dalhouse (2005), “The
achievement gap between African-American and Caucasian students is a reality” (p.170). Rothstein (2004) stated, “The large achievement gap between White and minority students is generally viewed as a failure of the U.S. educational system” (p.40). Because the number of minorities is increasing, their continued low academic achievement represents a larger portion of those students who are failing within the American society. This inequality in education continues to be a constant unsolved dilemma.

The current federal educational policy, No Child Left Behind (NCLB), puts the focus solely on the problem of at-risk adolescents. Under this policy, only schools that successfully and consistently make strides towards closing the achievement gap are considered flourishing and consequently are allowed to remain open. This measurement of success over time is called adequate yearly progress (AYP). Schools that fail to make AYP, after being given an appointed time in which to improve their students’ achievement, will be restructured. The National Governors’ Association Center for Best Practices (2005) concluded the following with respect to the achievement gap:

By the time minority students reach grade 12, if they do so at all, minority students are about four years behind other young people. Indeed, 17 year-old African-American and Latino students have skills in English, mathematics, and science similar to those of 13-year-old White students. (p. 1)

Another way to measure the achievement gap is to compare the highest level of educational attainment for various groups. Here, too, there are gaps at all levels. Hispanic and African-American high school students are more likely to drop out of high school in every state (Levin, 1986). College matriculation rates for African-American and Hispanic high-school students remain below those of White high-school graduates – although they have risen in recent years (NCES, 2000). Furthermore, of students who enroll in college, Hispanic and Black young adults are only half as likely to earn a college degree as White students.
According to 2006 estimates by the United States Census Bureau (2006), approximately 37 million African-Americans are living in the United States. This number represents 12.4% of the American population, compared to 30 million (12%) estimated prior to the 2000 census (U.S. Census, 2000). In the city of Detroit, the 11th most populated city with 886,675 residents (U.S. Census Bureau, 2005), the African-American community was estimated at approximately 82% of the total population.

The persistent gap in educational attainment is even more pronounced in urban settings because what is considered to be the minority population becomes the majority of students in the schools. In urban settings, minority means “not Caucasian,” with the largest urban school systems now serving a minority of White students. In addition, serious problems facing these school systems that are responsible for educating millions of minority students appear to be of little importance to White policy makers (Orfield, 2000). In an environment that serves a majority of minority students, closing the achievement gap can help to solve existing educational problems and assist in reducing societal differences among ethnic groups.

Self-Efficacy

The term self-efficacy is most readily associated with the scholarship of Bandura (1994), who perceived that self-efficacy is defined as a person’s belief about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives. Self-efficacy is not aligned with the actual skills that are needed to complete a task. Self-efficacy only concerns itself with the belief that individuals have about their capability to perform. These beliefs drive the thoughts, feelings, and behaviors of many. Self-efficacy influences effort, persistence, and choices that people make to complete an act. Self-efficacy is a context-specific assessment of competence to perform a specific task or range of tasks in a given domain (Bandura, 1994).
Personality research generally shows that students who are high achievers possess positive self-perceptions (Yong, 1992). According to Yong, high achievers are more socially, emotionally, and intellectually well-adjusted than their peers. People with a strong sense of self-efficacy are more likely to view failure as a result of diminished effort on their part, rather than some overpowering external force. They do not perceive failure as having any bearing on their intellect. People with high self-efficacy approach difficult tasks as challenges to be conquered rather than avoided. These types of people are strongly committed to task completion. People with high levels of self-efficacy begin with the end in mind, believing that they can exercise control over any given situation.

According to Bandura (1996):

Such beliefs influence aspirations and strength of goal commitments, level of motivation and perseverance in the face of difficulties and setbacks, resilience to adversity, quality of analytic thinking, causal attributions for successes and failures, and vulnerability to stress and depression. (p. 1206)

Conversely, people with low self-efficacy believe that forces outside of their control are the causes for failure. People with diminished self-efficacy consistently look at obstacles that they may encounter as excuses to abandon task completion. According to Bandura (1994), these types of people are not committed to the accomplishment of a goal and shy away from challenges. Because they view insufficient performance as deficient aptitude, it does not require much failure for them to lose faith in their own capabilities. They fall victim rather easily to stress and depression. People with low self-efficacy do not believe in their abilities to organize and execute plans of action to manage situations. Self-efficacy is important in educational situations because it can be used to help predict the likelihood of students remaining committed to complete new learning tasks. Closely related to Bandura’s (1994) theory of self-efficacy is locus of control.
Locus of Control

Locus of control is a concept in psychology developed by Rotter in the 1950s. This concept is concerned with the attitudes of people about the control they have over their life circumstances. According to Rotter (1966), people who believe they can make choices to affect their life circumstances are considered to have an internal locus of control, while people who believe their circumstances are controlled by external forces are said to have an external locus of control. People with an external locus of control often feel that they are the victims of circumstances. They often look outside themselves or believe that their limited intellect is the reason for their failures. Often people with an external locus of control believe that success is a function of chance rather than a predictable result of preparation. They often lack the perseverance needed to complete a task.

Rotter (1966) reported that people with an external locus of control are more apt to respond to stress as they are more likely to concentrate their attention on obstacles rather than opportunities. Many people with an external locus of control often do not take credit for their successes or failures. They are more likely to attribute both of these to favorable pre-existing conditions rather than as a testament to their own ingenuity. They are often inactive in situations, believing that their activities in any given scenario cannot influence the outcome. Many people with an external locus of control lack motivation.

Conversely, people with an internal locus of control tend to be highly motivated (Rotter, 1966). They are more likely to believe that they possess all of the abilities that are necessary to complete a task. They are more apt to consider that it is their action or inaction alone that can determine an outcome. People with an internal locus of control are more likely to pursue challenges and persevere until the task is complete. They are less likely to suffer from stress because they understand that any outcome is a function of their own resourcefulness. Many
people with an internal locus of control view their successes and failures as functions of their own devices and not the result of interference by others. They also are more likely to attribute success or failure to their own behavior. People with an internal locus of control are more comfortable with their ability to affect change in their own lives.

According to Youg (1992), locus of control is also important in educational settings as it can be used as a predictor in determining how likely a student is to respond when learning a new skill. Both self-efficacy and locus on control are indicators of how children view themselves and their feelings about their abilities to be successful. Another major factor that can have an impact on student achievement comes from their parents’ interactions with them.

**Parental Influence**

A large body of literature has determined that student achievement is related to parental behavior (Walker-Dalhouse, 2005). Because parents are a child’s first teachers, many values, behaviors, and learning styles are taught to children before they enter school (Bloom, 1980). Many children enter school with an arsenal of knowledge and attitudes toward education that they have received from home. The challenge of many educators is to re-condition some of those beliefs if they are detrimental to the learning process that is to take place in the classroom. If a child comes from a home where parents have had negative experiences and low-academic performance in school, educators may find teaching this type of student exponentially more challenging.

Research has supported the importance of parental influence on student achievement in African-American children. Comer (1988a) asserted that the development of children in moral, social, psychological, and cognitive areas is important for academic learning. Moreover, this development is influenced by attitudes, values, beliefs, and moral behavior of the family. He further contended that in the educators’ zeal to push content, little attention is given to the
familial relationships that can be most influential in the self-development that is essential to the learning process. Although the number and methods of parental involvement vary by race, the idea that parental involvement can influence student achievement has been found to be independent of ethnicity (Tucker, Harris, Brady & Herman, 1996).

**Socioeconomic Status**

Ideally, a family’s income or the racial/ethnicity of the child should not be related to the ability of the child to learn (Rothstein, 2004). Although, these factors do not influence student achievement directly, they can be used to predict educational success. For example, social class can influence the way parents communicate with their children. On average, professional parents speak 2,000 words per hour to their children; working-class parents speak about 1,300, while the children of parents who received welfare speak only about 600 words (Hart & Risley, 1995). These researchers found that the most important factors to the acquisition of vocabulary are the economic advantages of children's homes and the frequency of language experiences. The basic findings from the study were that children who were born into homes with fewer economic resources learned fewer words. This delay in the attainment of adequate vocabulary skills could influence student achievement because teachers may not be sensitive to such early inequities in teaching these children. From the onset of schooling, these children were likely to face “language barriers” in the classroom. In addition to an increased vocabulary, children from families with a greater amount of economic resources also received a greater frequency of encouraging words from their parents.

Another factor of socioeconomic status that can negatively affect student achievement is health differences. For example, problems with vision, hearing, and dental care can all impact a child’s ability to learn. Each of these problems can be impacted by the parent’s ability to provide adequate health care for their children. Access to appropriate health care, for the most part,
depends on financial resources of the family of which the student is a member. For example, poor children are twice as likely to suffer from vision problems (Starfield, 1997). The causes can range from the quality of prenatal care to nutritional deficiencies. These two reasons may be reflections of the socioeconomic status of the parents.

Vision problems make it difficult to read and can result in larger numbers of low-income African American students being referred into special education programs. Rothstein (2004) states that, “When these [African-American] students have puzzling difficulties learning to read, the explanation is often no more complex than their inability to see well.” Differences in dental care also can influence student achievement. Toothaches negatively influence students’ ability to pay attention in class. These children were more likely to be distracted than students with healthy teeth. Lead in the blood also can diminish cognitive ability (GAO, 1999). Children of poorer families are more likely to live in older homes with flaking paint that can increase the potential for exposure to lead. “The characteristics that define social class differences inevitably influence learning” (Rothstein, 2004).

Statement of the Problem

African American high school students are not graduating in the required four years. As discussed in a recent Detroit News article, the graduation rate for Detroit Public Schools is 24.9% (Thomas & Read, 2008). Students in this school district generally are from families with low incomes, with 70% qualifying for free or reduced lunch programs, a measure of socioeconomic status. The Michigan Merit exam outcomes indicated that the majority of students in the district did not meet state competency levels in mathematics(86.1%), reading (68.1%), or language arts (75.4%), resulting in the school district failing to make adequate yearly progress (AYP; Michigan Department of Education, 2008). Factors, such as self-efficacy, locus of control, and parent involvement that could be contributing to the student’s inability to be
successful in school need to be examined to determine if school personnel can develop programs to help more students become successful in school.

Purpose of the Study

The purpose of this study is to investigate the impact of self-efficacy, locus of control, and perceived parental influence on the academic achievement of African-American high school students.

Research Questions

The following research questions were addressed in the study:

1. What is the relationship between self-efficacy, locus of control, and perceptions of parent involvement on the academic achievement of African American high school students?

2. To what extent do high and low achieving African American high school students differ in their levels of self-efficacy, locus of control, and perceived parent involvement?

3. Do high and low achieving students in different grade levels (tenth, eleventh, and twelfth) differ in their levels of self-efficacy, locus of control, and perceived parent involvement?

4. Does the gender of students in different grade levels (tenth, eleventh, and twelfth) differ in their levels of self-efficacy, locus of control, and perceived parent involvement?

5. Does academic achievement (grade point average) differ between male and female students in the tenth, eleventh, and twelfth grade?
Significance of the Study

Extensive research exists on minority students. However, the amount of literature on minority children that are classified as high achievers is considerably less broad (Langram, 1997). As educators, we have an ethical responsibility to provide effective instruction for all students. A comparison of psychosocial characteristics between high and low achieving African-American students can help urban schools to develop strategies for low achieving students and their parents to develop the beneficial traits.

By investigating relationships among academic achievement, self-efficacy, locus of control, and parental involvement, teachers can improve their instructional practices for students coming from families with economic challenges. Environmental and psychosocial avenues investigated by this study can improve African-American student achievement by identifying practices to enhance students’ self-assessments of their capabilities for learning and increase the likelihood that they can begin to take responsibility for and ownership of their own learning.

Definition of Terms

High Achieving Students with a cumulative grade point average of 3.5 or higher on a 4.0 scale.

Low Achieving Students with a cumulative grade point average below 2.0 on a 4.0 scale.

Locus of Control A personality trait involving the extent to which individuals believe that they can control the outcome(s) of a particular experience.

External Locus of Control A personality trait that denotes an individual’s belief that they can not control the outcome(s) of a particular experience.

Internal Locus of Control A personality trait that denotes an individual’s belief that they can control the outcome(s) of a particular experience.

Parental Involvement The extent to which parents are participating in and contributing to their child’s education by attending programs and conferences at school, providing a place for homework and study, talking to their child about school and the need for education, etc.
Self-Efficacy The extent to which an individual believes that s/he has the ability to complete a task

Low Socioeconomic Status A student who qualifies for free or reduced lunch according to federal guidelines

Assumptions

The following assumptions are made for this proposed study:

- Male and female students are expected to have similar outcomes for self-efficacy, locus of control, and perceptions of parent involvement.
- Students answered the surveys honestly and not as they thought the researcher expected.

Limitations

The following limitations may reduce the ability to make generalizations from the findings of this study. The limitations include:

- The study was conducted in one urban school district. The results may not be generalizable to suburban and rural school districts, nor to other urban districts.
- The study included tenth, eleventh, and twelfth grade high school students. The findings may not be relevant to ninth grade high school students, elementary, or middle school students.
CHAPTER 2
REVIEW OF RELATED LITERATURE

Introduction

This chapter presents an overview of literature that has been published on self-efficacy, locus of control, and parental involvement and their relationships to student achievement in the African-American community. Most discussions on student achievement within the African-American community would be incomplete without first discussing the history of the achievement gap. For this reason, the review of literature begins with a brief history of this phenomenon. The review of literature also explores self-efficacy, locus of control, and parental involvement, as three psychosocial constructs that can address some educational challenges that exist within the African-American community. The role of socioeconomic status is discussed with regard to African-American students’ academic achievement.

Few researchers have focused on the educational climate of the African-American society (Seyfield, 2000). The academically successful, but economically disadvantaged, African-American students are generally excluded from research. The present study attempts to fill this gap in the literature. Additionally, the literature presented in this review can validate the need for the proposed study: the investigation of the impact of self-efficacy, locus of control, and perceived parental involvement on low and high achieving African-American high school students.

History of the Achievement Gap

On May 17, 1954, Chief Justice Earl Warren read the unanimous decision of the U.S. Supreme Court:

We come then to the question presented: Does segregation of children in public schools solely on the basis of race, even though the physical facilities and other "tangible" factors may be equal, deprive the children of the minority group of equal educational opportunities? We believe that it does...We conclude that in the
field of public education the doctrine of 'separate but equal' has no place. Separate educational facilities are inherently unequal. Therefore, we hold that the plaintiffs and others similarly situated for whom the actions have been brought are, by reason of the segregation complained of, deprived of the equal protection of the laws guaranteed by the Fourteenth Amendment (Brown vs. Board of Education of Topeka, KS, 1954).

With those words, came the end to the practice of segregation in public schools in the United States provided by Plessy vs. Ferguson. Based on the outcomes of Brown vs. Topeka Board of Education, children could not be excluded from public schools in their districts regardless of their ethnicity. Twelve years after Brown vs. Board of Education, the findings of the Coleman Report (Coleman, 1966) were released. This work was in response to Section 504 of the Civil Rights Act of 1964 that states:

The Commissioner shall conduct a survey and make a report to the President and the Congress, within two years of the enactment of this title, concerning the lack of availability of equal educational opportunities for individuals by reason of race, color, religion, or national origin in the public educational institutions at all levels in the United States, its territories and possessions, and the District of Columbia. (p. iii)

The survey that was used to obtain data for the Coleman Report (Coleman, 1966) had four aims:

1. To determine the magnitude of segregation by race occurring across public schools
2. To determine equity of educational opportunity as evidenced by certain indicators of educational quality
3. To determine the quality of curriculum mastery by student performance on standardized tests
4. To determine the relationship between a particular type of school and the achievement of students that attended that school. (Coleman, 1966)

The conclusion of the Coleman Report (Coleman, 1966) was that “American public education remains largely unequal in most regions of the country including all those where Negroes form any significant proportion of the population” (p. 3).
More than 50 years following that decision, school children in America are still unequal in terms of their access to a quality public education. What seemed in 1954 as the final breakthrough in America’s long struggle against racism now stands as a high mark from which the nation has been retreating steadily in recent years (Pettigrew, 2004). This inequity is referred to as the *achievement gap*. The achievement gap is largely a reflection of race and class (Pettigrew, 2004). According to Rothstein (2004), “The amount of money a family has – or the color of a child’s skin should not determine how well a child learns to read” (p. 40).

In the wake of the achievement gap, countless minorities remain largely less educated than intended by the American educational system. Educational choice and policy changes have been developed to address this disparity. According to Rothstein (2004), “The American public, its political leaders, and professional educators have frequently vowed to close these [achievement] gaps” (p. 27). However, minorities are not the only Americans at risk for not receiving an adequate education. In “A Nation at Risk” (National Commission on Excellence in Education [NCEE], 1983), the underlying premise was that very few students educated in the American school system had been provided with an education that made them able to compete with students throughout the world. According to this report:

We report to the American people that while we can take justifiable pride in what our schools and colleges have historically accomplished and contributed to the United States and the well-being of its people, the educational foundations of our society are presently being eroded by a rising tide of mediocrity that threatens our very future as a Nation and a people. What was unimaginable a generation ago has begun to occur–others are matching and surpassing our educational attainments (NCEE, 1983, ¶ a).

*Self-Efficacy*

Bandura (1991) defined self-efficacy as “…people’s judgment of their capabilities to organize and execute courses of action required to attain designated types of performance. It is not concerned with the skills that one has, but with the judgments of what one can do with
whatever skills one possesses” (p. 257). The importance of self-efficacy in the psychosocial development of children has been documented in the literature. The capacity for self-regulation is a core feature of human agency in social cognitive theory (Bandura, 1999, 2001). The theory underlying self-efficacy is that human beings can attain success if they first possess the belief that they have the capability to succeed. Self-efficacy is the belief of an individual in their ability to complete a task.

Self-efficacy does not address the actual skill a person possesses (Bandura, 1997). Therefore, a person could have high self-efficacy where an assignment is concerned and in actuality be unable to complete it. For this reason, self-efficacy is perceived (Bandura, 2001). High self-efficacy, then, is at work when people can actually feel themselves being successful at a task before it is begun. The idea of self-efficacy is important in predicting if a person attempts to perform an act and determining their feelings after the attempt is made. Self-efficacy is not predicated upon success or failure. Because self-efficacy is a belief system, it contributes to human functioning (Bandura, 2003).

Self-efficacy is an important part of the mechanisms required for self-management and works in concert with other parts of the psyche to influence actions. The amount of self-efficacy that a person has for a particular task influences the amount of effort, time, and perseverance the person can invest. Self-efficacy also can be used to predict resiliency in response to failure or the likelihood of repeated attempts. Personal beliefs of efficacy influence what self-regulative standards people adopt, if they think in an enabling or debilitating manner, and if they are vulnerable to stress and depression (Bandura, 2003). Self-efficacy is context-specific; therefore, the level of self-efficacy changes with the each endeavor. The idea of self-efficacy is pertinent to the educational arena because most learning that occurs is demonstrated by completion of a task.
Self-Efficacy and Student Achievement

Self-efficacy is an important precursor to academic performance, as many students may not attempt an act if they do not believe that they can be successful. Self-efficacy is relevant in a discussion about academic performance, because students’ beliefs influence performance (Bandura, 1997, 2003). Perceived self-efficacy is pivotal to scholastic performance because it affects actions directly and impacts cognitive, motivational, decisional, and affective determinants (Bandura, Caprara, Barbaranelli, Gerbino, & Pastorelli, 2003). Zimmerman, Bandura, and Martinez-Pons (1992) studied effects of self-efficacy on personal goal-setting with a sample of 102 high school students. The goals studied were academic in nature. Parental goals, self-efficacy beliefs, and personal goals at the beginning of the semester served as predictors of final course grades in social studies. Students with higher levels of self-efficacy were significantly more successful at meeting their academic goals than students with lower levels of the same.

According to Bandura (1977), self-efficacy is one of several psychosocial variables that can be associated with academic performance. This academic performance in relationship to self-efficacy has been studied at all levels from kindergarten through college (Multon, Brown, & Lent, 1991; Wilhite, 1990). Because self-efficacy is within the affective domain, it can be used to understand many of the emotional attributes displayed by children in schools. Attentional, cognitive, and psychosocial dysfunction can be explained to some degree by studying self-efficacy in children (Bower, 1992, Larsen 2000). Children’s’ beliefs about their efficacy contribute uniquely to variance in developmental outcomes within the complex interplay of socioeconomic, familial, educational, and peer influences (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996, 2001).
Self-efficacy beliefs are developed and reinforced by mastery, modeling, encouragement during socialization, and reduction of stress reactions (Bandura, 1994). These contributors to student achievement can happen with regularity in an educational setting. Students gain competency through repetitious events when they experience success. For example, students who experience greater frequencies of favorable outcomes are less likely to give in to failure. Students with higher levels of self-efficacy are more likely to try new experiences and are less likely to be discouraged by failure. Students with high self-efficacy are more likely to attribute academic failure to lack of effort than to external sources (Bandura et al., 2003).

A secure sense of academic self-efficacy can reduce vulnerability to depression by promoting academic attainments and altering the control and management of failure (Bandura, Barbaranelli, & Caprara, 1999). Students with higher levels of self-efficacy respond to academic challenges by increasing their efforts and are less likely to perceive failure as an indication of personal deficiency. This method of academic reconditioning is extremely advantageous in experiencing a greater number of successes in schools. Students' beliefs in their capabilities to master academic activities can influence their aspirations, their level of interest in academic activities, and their academic accomplishments (Bandura, 1994). Tuckman and Sexton (1989) found that levels of self-efficacy played a role in distinguishing between high and low performing students.

Achievement of students with lower levels of self-efficacy is less promising as these students are more likely to disengage themselves from educational pursuits and gravitate towards peers who favor risky activities (Dishion, 1990; Jessor, Donovan, & Costa, 1991; Patterson, Capaldi, & Bank, 1991). Students who exhibit low self-efficacy lack beliefs in their academic ability, although these beliefs are not grounded in their actual abilities. The study of the effects of self-efficacy on academic achievement is of great importance, as a strong sense of efficacy to
manage positive and negative emotional life events can contribute to perceived self-efficacy to take charge of one’s academic activities and reduce involvement in risky negative behaviors (Bandura et al., 2003). Students who display behavior that is consistent with low self-efficacy are easily led to participate in negative behaviors and, in many cases, move away from school. In many instances, these students lack motivation to try to be successful in school because they can visualize failure before they begin to be successful. Students with poor self-efficacy are prone to depression, with past failures and setbacks seen as even more reasons not to make an effort (Bandura et al., 2003). Because these students firmly possess an unsubstantiated belief system about their inabilities, they often get into situations that can lead to negative social behaviors, especially in situations they often feel powerless to control.

**Locus of Control**

Locus of control is a personality theory that addresses the causes of events in people’s lives. People with internal locus of control believe that events occur as a result of their own decisions and efforts. In contrast, a person with an external locus of control believes that events occurring in their lives are the result of external forces, powers, or other more powerful people. These events occur and are totally independent of the person’s individual efforts. People with an external locus of control are more likely to believe that fate is guiding their outcomes. This concept was originated by Rotter (1966) and originally was named Locus of Control of Reinforcement. Rotter believed that people behaved as a result of reinforcements. According to Rotter (1966), positive reinforcements, *or rewards*, encourage repetition of desired behaviors. Conversely, negative reinforcement, or punishments, discourages repetition of undesirable behaviors. By negotiation of behaviors with reinforcements that they evoke, people are guided toward what actions and beliefs they espouse (Rotter, 1966). Learning then is the overall result of a person’s history of reinforcements.
Rotter (1966) also discussed locus of control in terms of outcomes. People with an internal locus of control believe that they have control over results of a given situation, because they believe that their actions alone can govern all aspects of an event from start to finish. Therefore, any result is the cumulative affect of what their actions have produced. Failure for people with an internal locus of control is viewed as the result of miscalculation in their approach. For this reason, failure can easily be overcome by an alternative plan of attack. People who have an external locus of control believe that outcomes are predestined (Rotter, 1966).

Consequently, people with external loci of control believe that they are powerless to act in a manner that could influence results of a given situation and neither assume personal fault in failure nor take responsibility for success. Events occur independently of individuals’ actions or inactions, which is why many people with an external locus of control lack motivation and perseverance through adversity (Kalechstein & Nowicki, 1997).

Earlier work on locus of control divided the world into two extremes. People who exhibited an internal locus of control were “good” and those who displayed an external locus of control were “bad.” Lefcourt (1982) investigated cognitive activity and found that internals had more cognitive ability than those found to have an external locus of control. For example, internals had a better memory. However, later studies found that making sweeping generalizations that showed a unilateral preference of internal over external locus of control was inappropriate. Total extremes in either direction could signal a loss of reality (Krampen, 1985).

**Locus of Control and Student Achievement**

The relationship between locus of control and student achievement has been studied widely and locus of control was found to be important for high achievement and strong motivation (Kalechstein & Norwicki, 1997). In their research, Kalechstein and Norwicki used Rotter's (1954) social learning theory to generate predictions regarding relationships between
generalized and specific control expectancies and academic achievement. Their research was based on prior work of Findley and Cooper (as cited in Kalechstein & Norwicki, 1997). Students with an internal locus of control were found to have more favorable school experiences because they perceived that they were responsible for their educational achievement. Uquak, Elias, Uli and Suandi (2007) found that 96% of successful students in their study attributed their academic performance to internal factors. Using correlational analysis, internal locus of control was significant and positively related to academic satisfaction with moderate strength.

Externals preferred highly structured school settings with disciplinary guidelines clearly defined (Parent, Forward, Canter, & Mohling, 1975). Parent et al. investigated the associations between personal locus of control, teaching discipline, student performance, and satisfaction. In this investigation, undergraduate students were randomly assigned to two types of teaching conditions. One environment was highly disciplined and called for students to follow strict rules for completing a computer programming assignment. The second group was given the same task in a low disciplinary setting where the participants were allowed to be self-paced and rules were not enforced. Results indicated that those participants with a high level of internal control performed better when lower levels of discipline were imposed on them. They required less encouragement or interaction with the teacher during the task. In addition, they experienced greater levels of satisfaction with their completed work.

Conversely, participants with an external locus of control performed better in environments that imposed high levels of discipline (Parent, Forward, Canter, & Mohling, 1975). They needed more help and guidance from the teacher to complete their work. Additionally, they saw the completion of their assignment more as a consequence of the teacher’s efforts rather than their own. In addition, they were not as satisfied with their work as those participants who had been identified as having an internal locus of control. One
explanation of this finding is that people having an external locus of control may not possess the ability or motivation to see themselves as the authority figure in regard to their academic experiences. In addition, they had low self-discipline and looked to the outside world to give guidelines for normalcy.

In examining adaptive motivation of high school students and its relationship to mastery learning, locus of control was also studied. Gilman and Anderman (2006) dispensed an array of interpersonal, intrapersonal, and academic measures to over 650 high school students. Although the primary focus of the study was to measure the relationship between motivation and academic performance, locus of control was measured because of its establishment in the literature as relevant to motivation (Anderson & Hamilton, 2005; Kalechein & Norwcki, 1997). Anderson and Hamilton found that students were more likely to be highly motivated if they had an internal locus of control. The results of their work indicated that students with higher motivation were more likely to have an internal locus of control. In addition, these students performed better academically than those with external locus of control.

Chen (2005) also found a correlation between locus of control and student achievement. Chen examined achievement through the engineering mathematics grades and course grades of college students. This class was selected as the setting for the study because the content was likely to be basic knowledge for the engineering students and the science majors. As the content was basic knowledge, students involved in the study were more likely to possess prior knowledge and “feelings” of needing to do well. Achievement in this class was expected to be a good predictor of future success in later science and engineering classes. Higher academic grades have been found to make an important contribution to student retention (Chen & Thomas, 2001; Graham & Caso, 2002; Pascarella, Smart, & Ethington, 1986). Researchers found that students who had an internal locus of control typically had higher achievement levels than those students
with an external locus of control. This achievement was evidenced by higher semester grades and more positive attitudes toward learning that had occurred during the semester. Locus of control appears to influence student achievement. Students with internal locus of control have a greater amount of academic success that those with an external locus of control.

Although African-American children with low socioeconomic status are more likely to have an internal locus of control (Battle & Rotter, 1963; Lefcourt & Ladwig, 1965; Sapp, 1996), parents also have an influence on their children’s locus of control. Datcher-Loury (1989) discussed locus of control in her research with African-American children of low socioeconomic status. In examining why some children achieved and some did not, she stated, “The evidence presented here is consistent with the view that much of the variations on performance between these children is systematic and not simply the random luck or external focus beyond the control of low income parents” (p. 543).

Parental Influence on Student Achievement

Parents can influence the overall development of their children. Seyfried and Chung (2002) stated that, “Parent involvement and parent expectations are fundamental to academic success” (p. 109). Parental influence on student achievement has a large presence in literature (Comer, 1988b; Miedal & Reynolds, 1999; Olmstead & Rubin, 1983). However, parental influence on academic performance of African-American children has not been studied as extensively. African-American parents living in urban environments have high expectations for their children's success in learning to read (Waker-Dalhouse, 2005). Gonzales, Cauce, Friedman, and Mason (1996) examined effects of family, parenting, peer support, and neighborhood risk on the achievement of African-American adolescents. They found that family income, parent education level, and the number of parental figures in the home were not significantly associated
with student achievement. However, maternal support was significantly positively associated with African-American adolescents' grades.

The influence of parent involvement on student achievement can be seen in two contexts. According to Seyfried and Chung (2002), these influences could be observed in the school and at home. Students who are involved in scholastic activities at home have higher levels of achievement. Engagement in academic activities between the parent and child in the home may simply involve parents asking their child to read or helping with homework assignments. Attendance at parent-teacher conferences and chaperoning fieldtrips are examples of types of parental activities that can influence student achievement positively. The value of these activities on improved student achievement can be increased when parents and the school share common expectations for the student (Valdes, 1996).

Motivation expressed and implied by parents also is linked to student achievement positively. Scheinfield (1983) found that parents of high achievers encouraged their children to become involved socially. These parents were able to help their children improve their achievement by identifying what motivated their children to do well. By increasing the frequency with which their children drew upon these motivations, children had greater numbers of experiences associated with academic success. In addition, children’s motivation over time became more intrinsic. The influence of parents on student achievement in the African-American community is more important because of the achievement gap (Seyfried & Chung, 2002). Parents need to communicate their expectations for academic success to their children. These communicated parental perceptions of student educational success have a positive impact on student achievement (Clark, 1983).

Rumberger, Ghatak, Poulos, Ritter, and Dornburch (1990) also found that parents’ motivational behavior was related to improved student achievement. In their study of 114 high
school dropouts, students whose parents were not involved in their education were at a considerably higher risk of not completing high school. Researchers (Rumberger et al., 1990; Vales, 1996) argued that parents of African-American children must become more involved in their children’s education despite the presence of negative experiences the parents may have had in the school.

Seyfield and Chung (2002) investigated parental influence and expectations as a predictor of “later” student achievement in African-American and European American students. In their study, later achievement was measured by grade point average in the eighth grade. Baseline data were obtained from fourth grade achievement. The rationale for choosing fourth grade as the baseline data set was supported by the literature. According to Lucas and Lusthaus (1978), parental involvement declines and peer influences begin to increase at this grade. In addition, Kunjufu (1988) reported on this same phenomenon, calling it the “fourth-grade syndrome.” According to Kunjufu, this syndrome is one reason for dramatic increases in academic failure among African-American children after the third grade.

The aim of research by Seyfield and Chung (2002) was to provide school social workers with a basis to provide interventions that could help them to assist parents in positively influencing the academic performance of their fourth through eighth grade children through increased involvement. The study found that parental involvement was a contributor to academic achievement of African American children. However, the impact was greater among White students than African American children. Earlier educational achievement was the highest contributor to student achievement among Black students. Researchers discussed a need to improve services to African-American parents that help them to provide a greater impact on the academic achievement of their children.
Literature on the motivation of African-Americans indicate similarities between African-American and Caucasian children in locus of control, sense of competence, expectancies for success, and patterns of attribution for success and failure (Graham & Long, 1986; Graham, 1994). In contrast to Caucasian students, African Americans also have been found to consistently maintain a high sense of competence after failing. In spite of these findings, the research indicates that African American and Caucasian students differ in levels of academic achievement.

Low Socioeconomic Status and Student Achievement

Nearly half of all African American children are poor. Approximately 46% percent of African American and Hispanic children live in poverty compared to 8% of Caucasian children (U.S. Census Bureau, 2003). Forty-three percent of African American families are headed by a single parent as opposed to 18% of Caucasian families (McKinnon & Humes, 2000). The poverty rate for African American children in single parent families is 41%. According to the National Center for Education Statistics ([NCES], 2001), 48% of African American children between three and five years of age were read to every day compared to 64% of Caucasian children. Forty-eight percent of children living in single parent homes were read to daily compared to 61% of 3 to 5 year old children in two parent families (NCES, 2001).

Datcher-Loury (1989) stated, “There is a larger amount of empirical evidence that demonstrates the relationship between parents’ socioeconomic status and their child’s school achievement” (p. 528). In her research, she explored the hypothesis that variations in academic achievement among low income African American children could be the result of the behavior and attitudes of the family. She researched their spending habits in terms of purchased items that could either improve or retard children’s quality of life. Her work was based on earlier findings
by Leibowitz (1974) who found that the presence of proxy measures (e.g., encyclopedias and dishwashers) were associated with student achievement in a positive direction.

Datcher-Loury (1989) concluded that “… while there are socioeconomic barriers that constrain these African American families, they do not preclude academic success” (p. 543). The variations in student achievement in these children were due to how families spent their money and time. Parents who spent their resources on items that edified the child academically and spent time teaching them had children who were better able to perform academically than children of those who did not. “Thus, the [parental] attitudes and behaviors have a large and important long-term effect on children’s academic performance” (p. 543). Slaughter and Epps (1987) also found a relationship between socioeconomic status and student achievement. In their study, they found that low-income African American children were able to improve their academic achievement more when clear and consistent standards were established for their behavior.

Summary

The review of the literature listed in this section provided a general overview of the research that currently exists on self-efficacy, locus of control, and parental influence and their relationships to the student achievement of African American children. Because of the lack of equality between African American and Caucasian children’s scholastic achievement, this review of literature presents literature regarding this gap. African American children’s academic achievement has been associated with self-efficacy, locus of control, and parental involvement. Additionally, the role of socioeconomic status was mentioned as a correlate of these constructs. Researchers have made comments and provided empirical results that support the existence of an achievement gap between Caucasian and African American students.

On Self-Efficacy - Self-efficacy is defined as a personality trait involving the extent to which individuals believe that they can control the outcome(s) of a particular experience (Bandura, 1977). People with high levels of self-efficacy are characterized by the belief that they possess the ability to perform a task (Bandura, 1977). Students with high self-efficacy generally have higher levels of academic achievement than students with low self-efficacy (Tuckman & Sexton, 1989; Bandura, 1996).

On Locus of Control - Students with internal locus of control typically have higher academic achievement than students with an external locus of control (Anderson, 2005; Kalechein & Norwicki, 1997). African-American children in families with low socioeconomic statuses are more likely to have an external locus of control (Battle & Rotter, 1963; Lefcourt & Ladwig, 1965; Sapp, 1996).

On Parental Influence - Parents have an influence over their children, especially in regard to their children’s academic achievement (Comer, 1988b; Miedal & Reynolds, 1999; Olmstead & Rubin, 1983; Seyfried & Chung, 2002).

On Socioeconomic Status - Socio-economic status has a role in student achievement (Rothstein, 2004). African-American children who are from families with low socioeconomic statuses are more likely to have low self-efficacy and an external locus of control.
CHAPTER 3

METHODS

The methods that were used in this study are meant to provide an organized manner in which data on self-efficacy, locus of control, and parental influence on the achievement of African-American students were collected and analyzed. The data were used to provide a profile of the students and address the research questions developed for the study. The topics that are included in this section are: research design, a description of the participants and setting, instruments, variables in the study, data collection, and data analysis procedures.

Purpose of the Study

The purpose of this proposed study is to investigate the impact of self-efficacy, locus of control, and perceived parental influence on the academic achievement of low and high performing African-American teenagers.

Research Design

A nonexperimental, descriptive research design using survey techniques was employed in this study. This type of research design is appropriate when the independent variable is not manipulated and no treatment or intervention is provided to the participants. Correlations between student achievement and scores for self-efficacy, locus of control, and parental influence were used to address the research questions. The present study used four instruments: Self in School, Intellectual Academic Responsibility Questionnaire, Student Perceptions of their Parent Involvement in their Education, and a short demographic survey.

The threats to internal and external validity do not apply to nonexperimental research designs. However, the researcher must be aware of uncontrolled extraneous variables and of the need to provide alternate explanations of the findings if these variables are influencing the study.
outcomes. The independent variables in the proposed study are: self-efficacy, locus of control, and parental influence. The dependent variable is student achievement.

Setting for the Study

The setting for the study is a large urban high school that enrolls students in 9th through 12th grade. It is located on the west side of a large urban city in the Midwest. According to the 2006 census estimates, this city has a population of 871,121 (U. S. Census Bureau, 2008). They reported that the ethnic groups included in the city’s population were African-American (83.1%), Caucasian (10.0), Asian (1.1%), Hispanic/Latino (6.2%), and American Indian/Alaska Native (0.3%). The school district had a student population of 105,000 students as of fall 2007 according to the district’s website. Of this number, nearly 70% were eligible for free or reduced lunch. However, only 10% of those eligible for free or reduced lunch actually participate in the program. The state-wide eligibility is nearly 29%.

The school population is nearly 100% African-American and qualifies as a Title 1 school by federal government standards. The school has approximately 1,700 students enrolled. Of this amount, approximately 30% are receiving special education services. The staff consists of 90 adults. The administrative team consists of the principal, four assistant principals, and eight school administrators. The remaining adults are teachers and support staff. The regular education student-teacher ratio is 35:1. In the special education services, the lowest student-teacher ratio is 8:1 and varies with the severity of the students’ disabilities. The students in this school meet one or more of the characteristics of being at-risk students.

The school day is seven and one-half hours long. Students either remain in the building for all of their classes or for half of the day if they are participating in career and technical classes. All classes are 53 minutes long and are held five days a week. Typical extra-curricular activities take place after-school and on the week-ends. The parent group, called the local school
and community school organization (LSCO), meets once a month, and has about 20 active members and includes school personnel who attend the meetings regularly.

Participants

In total, 300 students were included in this study. The students who participated in the study were in 10th through 12th grades. The principal provided mailing labels for the students in these grades. Parents were mailed an information sheet detailing the study. The use of an information sheet allowed parents to deny participation of their student by returning part of the information sheet. All students, except students whose parents denied participation were included in the study.

The students were asked to self-report their academic grades on the demographic survey. They were divided into two groups, high and low achievers, using a median split. The use of self-report of academic achievement eliminated the need for the researcher to access student records to obtain this information.

Instrumentation

Four data collection instruments were used for the study: Self-in-School (Downs, 2005), Intellectual Achievement Responsibility Questionnaire (IAR, Crandall et al., 1965), Parental Influence Scale (PIF), and a short demographic survey. Each of these instruments is discussed in detail.

Self-in-School (SIS).

The SIS is a measure of academic self-efficacy. The scale was originally developed by Smith (1988) and included 19 items to assess levels of academic self-efficacy in adolescents and young adults. Tests of reliability included internal consistency and stability. The internal consistency of the original scale was .89, with a test/retest reliability coefficient of .85 at a 10-day interval, providing assurances that the instrument had adequate reliability. Using a sample of
Navajo American Indians, Bryan (2003) used a sample of 687 high school students to confirm the reliability of the instrument. He obtained an alpha coefficient of .89, which was the same as for the original sample. The instrument was further refined by Downs (2005) to obtain a more accurate assessment of academic self-efficacy. Downs reduced the number of items from 19 to 15 and changed the response format from 9 to 7, with the response options ranging from 1 for completely false to 7 for completely true. The internal consistency for the new instrument increased to .91 and was considered adequate. Downs further tested the instrument for criterion validity by correlating the scores on the SIS with the students’ grade point averages and SAT scores. The obtained correlations were statistically significant, indicating the instrument had good criterion validity.

**Scoring.** In the present study, the rating scale was changed from a 7-point to a 5-point scale. The ratings ranged from 1 for completely false to 5 for completely true. The reason for changing the scale was to create a simpler rating scale. The ratings for each of the 15 items were summed to obtain a total score which was divided by 15 to develop a mean score for each of the participants. The mean scores reflected the original scale of measurement.

**Reliability.** The items on the scale were tested for internal consistency to determine the effects of changing the scale from a 7-point scale to a 5-point scale. The results of this analysis provided a Cronbach alpha coefficient of .96, providing an indication that the instrument using a 5-point scale had excellent internal consistency as a measure of reliability.

**Readability.** To ensure that the instrument and the instructions would be comprehended by the students, the readability was tested using the Flesch-Kincaid readability index. The readability was found to be at a 4.5 grade level which should be easily comprehended by the high school students who participated in the study.
The Intellectual Achievement Responsibility Questionnaire (IAR).

The IAR (Crandall, Katkovsky, & Crandall, 1965) measures beliefs in internal versus external reinforcement responsibility within intellectual-academic achievement situations. According to Crandall et al., external causes are frequently in students’ immediate environment (e.g., teachers, parents, and peers). The IAR uses 34 forced-choice items, with each item describing a positive \((n = 17)\) or negative \((n = 17)\) achievement experience. The item is followed by two alternative responses, one that relates the item to the student’s actions (internal) or the other indicating the situation was the result of an external cause in the child’s environment (external).

**Scoring.** The IAR produces two scores, one for internal responsibility for success (I+) and responsibility for failure (I-). In addition, a total score is obtained that measure internal or self-responsibility. I+ scores are determined by counting all positive events for which the participant assumes credit, with the I-scores determined by counting the total of I-responses on negative events for which the student assumes blame. The total I score is the combination of the I+ and I- scores. Possible scores could range from 0 to 17 on the positive and negative scales, with possible total scores ranging from 0 to 34. Higher scores are more indicative of an internalized locus of control.

**Reliability.** The IAR has been tested for both stability and internal consistency. A study by Crandall, et al. (1965) using 70 ninth grade students completed the IAR twice at two month intervals. The obtained stability coefficients of .65 for I total, .47 for I positive, and .69 for I negative were statistically significant at the .01 level. The correlations did not differ significantly between male and female students. The Spearman-Brown split Prophesy Formula was used to test for internal consistency. The coefficients for both the I+ and I- scales were .60 for high school students.
Validity. Crandall et al. (1965) correlated scores on the IAR with intelligence to determine the criterion validity. Correlations of .16 for Total I, .14 for I+, and .14 for I- were obtained for high school students. These findings indicated that the IAR is able to measure academic responsibility regardless of the intelligence level of the students. Similar results were obtained when academic achievement was correlated with IAR scores for ninth grade students. The resultant correlations of .10 for I+ and .24 for I- provided additional support for the criterion validity of the IAR. Additional support for the criterion validity was obtained by Crandall (1965) who correlated IAR scores with social class as determined by the Hollingshead two-factor index of socioeconomic status. The low correlations for Total I \( r = .11 \), I+ \( r = .04 \), and I- \( r = .14 \) provided support that students’ academic responsibility scores were not associated with their socioeconomic status.

Readability. The readability of the IAR was examined to ensure that the instrument could be easily comprehended by the students who participated in the study. Based on the Flesch-Kincaid readability scale, the IAR is written at a 3.5 grade level. The scale should be easily understood by high school students.

Importance of Parent Involvement

The Importance of Parent Involvement (DePlanty, Coulter-Kern, & Duchane, 2007) was developed to examine student’s perceptions of their parent’s involvement in their education. The scale is one of three complementary instruments that parents, teachers, and students complete to provide information regarding parent involvement from three perspectives. For the purpose of this study, only the student scale was used. The 11 items included on this scale are used to measure three subscales: (a) parent structure, (b) time management, and (c) school attendance. The items are rated by students using a 5-point Likert scale ranging from 1 for strongly disagree to 5 for strongly agree.
**Scoring.** The numeric values associated with the rating for the items on each subscale are summed to obtain a total score. The total score is divided by the number of items on the scale to create a mean score for each student on the three subscales. Using the mean scores provides scores that reflect the original unit of measure and allow direct comparison across scales with different numbers of items.

**Reliability.** DePlasty et al. (2007) tested the instrument for internal consistency as a measure of reliability. The Cronbach alpha coefficient for the student scale was .90, providing support that the instrument has good reliability.

**Validity.** The 11 items on the survey were included in a principal components factor analysis to determine construct validity. Three factors emerged with eigenvalues ranging from 1.06 to 3.69. The three factors, parent structure, time management, and attendance, accounted for 33.53%, 10.12%, and 9.61% of the variance in student’s perceptions of parent involvement.

**Readability.** The items on the Importance of Parent Involvement were tested for readability. The results of the Flesch-Kincaid readability analysis indicated that the 11 items were at a 6.4 grade level. Based on these findings, it appears that the instrument can be read by high school students with ease.

**Demographic Survey**

A demographic survey was completed by participants to obtain information regarding their personal characteristics and background. The items on this survey were either forced choice or short answer. This survey was used to collect data on age, gender, grade level, self-reported academic performance, educational attitude, parental household composition, and attendance in school.
Data Collection Procedures

Following approval from the Human Investigation Committee (HIC) and the school district under which the study was to take place, a packet including all the surveys, an information letter, and a passive assent form were developed by the researcher. The researcher developed a research information sheet that provided parents with information regarding the study and their child’s participation. This research information sheet followed the template provided by the HIC and includes all aspects of a parent consent form. Using mailing labels provided by the principal, the researcher mailed the information sheets to the homes of the students via first-class mail. Parents who chose to allow their child to participate in the study did not have to return a form that indicated their decision. However, if a parent did not want their child to participate, they had to return the attached form that indicated their decision. Those students were not included in the study. All participants in the study were eligible to receive free or reduced lunch.

Students whose parents had not declined permission to participate in the study met with the researcher in the student council room during first hour. Meeting in small groups, the researcher discussed the purpose and importance of the study and distributed passive assent forms for the students to review. The passive assent form included all parts of the assent form, but did not require the student to sign and return it. Instead, completion of the survey provides evidence of the student’s willingness to participate in the study. Students were instructed to retain the assent form for their records.

Survey packets were distributed to the students. The researcher answered any questions that students had both prior to completing the surveys and during the process. They were asked to work independently and not share their answers with other classmates. The students were instructed to not place any identifying information on their surveys (e.g., name, student
identification number, etc.). The survey packets were not coded to provide assurances that all information would be anonymous. The students were instructed to return their surveys in the envelopes in which they were distributed and return them to the researcher. They then were sent to their second hour class.

The small group meetings were held daily until all students with parent approval had completed the surveys. If a student who had parent approval was absent on the day scheduled for his/her participation, the day was rescheduled. No survey packets were allowed out of the student council room and students were asked to refrain from discussing the surveys or their responses with other students.

Data Analysis

Data collected from the surveys were entered into a computer file for analysis using SPSS – Windows, ver. 17.0. The data analyses were divided into three sections. The first section used frequency distributions and measures of central tendency and dispersion to provide a profile of the sample. The second section used descriptive statistics to develop baseline data on the scaled variables. Inferential statistical analyses, including Pearson product moment correlations and multivariate analysis of variance (MANOVA), were used in the third section to address each of the research questions. All decisions on the statistical significance of the findings were made using a criterion alpha level of .05. Figure 1 presents the statistical analyses that were used to address each research question.
<table>
<thead>
<tr>
<th>Research Question</th>
<th>Variables</th>
<th>Statistical Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.</strong> What is the relationship between self-efficacy, locus of control, and perceptions of parent involvement on the academic achievement of African American high school students from low socioeconomic areas?</td>
<td>Academic self-efficacy, Intellectual achievement responsibility (locus of control), Perceived parent involvement</td>
<td>Pearson product moment correlations were used to determine the strength and direction of the relationships among the three variables.</td>
</tr>
<tr>
<td><strong>2.</strong> To what extent do high and low achieving African American high school students differ in their levels of self-efficacy, locus of control, and perceived parent involvement?</td>
<td><strong>Dependent Variables</strong>&lt;br&gt;• Academic self-efficacy&lt;br&gt;• Intellectual achievement responsibility (locus of control)&lt;br&gt;• Perceived parent involvement</td>
<td>One-way multivariate analysis of variance was used to determine if a difference exists in the three dependent variables among students with high and low academic achievement. If a statistically significant difference was found on the omnibus F test, the univariate F tests were interpreted to determine which of the dependent variables were contributing to the statistically significant outcome. To determine the direction of differences in statistically significant univariate F tests, the mean scores for the scales were examined. When the correlations used to address the first research question were not statistically significant, the scales were tested using t-tests for two independent samples.</td>
</tr>
<tr>
<td></td>
<td><strong>Independent Variables</strong>&lt;br&gt;Academic achievement&lt;br&gt;• High&lt;br&gt;• Low</td>
<td></td>
</tr>
<tr>
<td><strong>3.</strong> Do high and low achieving students in different grade levels (tenth, eleventh, and twelfth) differ in their levels of self-efficacy, locus of control, and perceived parent involvement?</td>
<td><strong>Dependent Variables</strong>&lt;br&gt;a. Academic self-efficacy&lt;br&gt;b. Intellectual achievement responsibility (locus of control)&lt;br&gt;c. Perceived parent involvement</td>
<td>One-way multivariate analysis of variance was used to determine when a difference existed in the three dependent variables among students at the three grade levels. When a statistically significant difference was found on the omnibus F test, the univariate F tests were interpreted to determine which of the dependent variables were contributing to the statistically significant outcome. To determine the direction of differences in statistically significant univariate F tests, Scheffé a posteriori tests were used to compare all possible pairwise comparisons to determine which grade level is contributing to the statistically significant difference. When the correlations used to address the first research question were not statistically significant, the scales were tested using one-way analysis of variance. Scheffé a posteriori tests were used to compare all possible pairwise comparisons for the analyses that were statistically significant.</td>
</tr>
<tr>
<td></td>
<td><strong>Independent Variables</strong>&lt;br&gt;Grade Level&lt;br&gt;• Tenth&lt;br&gt;• Eleventh&lt;br&gt;• Twelfth</td>
<td></td>
</tr>
<tr>
<td>Research Question</td>
<td>Variables</td>
<td>Statistical Analysis</td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------</td>
<td>----------------------</td>
</tr>
</tbody>
</table>
| 4. Does the gender of students in different grade levels (tenth, eleventh, and twelfth) differ in their levels of self-efficacy, locus of control, and perceived parent involvement? | Dependent Variables  
a. Academic self-efficacy  
b. Intellectual achievement responsibility (locus of control)  
c. Perceived parent involvement  
Independent Variables  
Grade Level  
• Tenth  
• Eleventh  
• Twelfth  
Gender  
• Male  
• Female | A 3 x 2 factorial multivariate analysis of variance (MANOVA) was used to determine if the three dependent variables differed by grade level and gender of the students. If a statistically significant differences were found on the omnibus F tests, the univariate F tests were examined to determine if the three dependent variables were differing for either the main effects, grade level and gender or the interaction effect between grade level and gender.  
If a statistically significant difference was found for the main effect of grade level, Scheffé a posteriori tests were used to compare all possible comparisons to determine which of the grade levels were contributing to the statistically significant differences.  
If a statistically significant difference was found for the main effect of gender, the mean scores were examined to determine the direction of the difference.  
If a statistically significant difference was found for the interaction, simple effects analysis was used to determine how the groups were differing. |
| 5. Does academic achievement (grade point average) differ between male and female students in the tenth, eleventh, and twelfth grade? | Dependent Variable  
Self-reported academic achievement  
Independent Variables  
Grade Level  
• Tenth  
• Eleventh  
• Twelfth  
Gender  
• Male  
• Female | A 3 x 2 ANOVA was used to determine if self-reported academic achievement was differing by grade level and gender.  
If a statistically significant difference was found for grade level, all possible pairwise comparisons were made using Scheffé a posteriori tests.  
If a statistically significant difference was found for gender, the mean scores were compared to determine the direction of the difference.  
If a statistically significant difference was found for the interaction, simple effects analysis was used to determine how the groups were differing. |
CHAPTER 4
RESULTS OF DATA ANALYSIS

This chapter presents the results of the data analyses that were used to describe the sample and address the research questions developed for this study. The chapter is divided into three sections. The first section uses frequency distributions to provide a profile of the students participating in the study. The second section includes baseline data on the scaled variables, with the results of the inferential statistical tests used to address the research questions presented in the third section.

African American high school students are not graduating in the required four years. Michigan Merit exam outcomes indicated that the majority of students in the district did not meet state competency levels in mathematics (86.1%), reading (68.1%), or language arts (75.4%), resulting in the school district failing to make adequate yearly progress (AYP; Michigan Department of Education, 2008). Factors, such as self-efficacy, locus of control, and parent involvement that may be contributing to the student’s inability to be successful in school need to be examined to determine if school personnel can develop programs to help more students become successful in school. The purpose of this study was to investigate the impact of self-efficacy, locus of control, and perceived parental influence on the academic achievement of African-American high school students with low socioeconomic levels.

Description of the Sample

The students were asked to indicate their ages on the survey. Their responses were summarized using frequency distributions. Table 1 presents results of this analysis.
Table 1
Frequency Distributions
Age of Student

<table>
<thead>
<tr>
<th>Age of Students in Years</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>30</td>
<td>11.0</td>
</tr>
<tr>
<td>16</td>
<td>73</td>
<td>26.7</td>
</tr>
<tr>
<td>17</td>
<td>100</td>
<td>36.7</td>
</tr>
<tr>
<td>18</td>
<td>64</td>
<td>23.4</td>
</tr>
<tr>
<td>19</td>
<td>6</td>
<td>2.2</td>
</tr>
<tr>
<td>Total</td>
<td>273</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Missing 3

The largest group of students (n = 100, 36.7%) reported they were 17 years of age, with 73 (26.7%) students indicating they were 16 years of age. Sixty-four (23.4%) students were 18 years of age and 30 (11.0%) students were 15 years of age. Six (2.2%) students reported their ages as 19 years. Three students did not provide a response to this question.

The students were asked to indicate their gender on the survey. Their responses were summarized using frequency distributions for presentation in Table 2.

Table 2
Frequency Distributions
Gender of Student

<table>
<thead>
<tr>
<th>Gender of Student</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>140</td>
<td>52.4</td>
</tr>
<tr>
<td>Female</td>
<td>127</td>
<td>47.6</td>
</tr>
<tr>
<td>Total</td>
<td>267</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Missing 9

The majority of students (n = 140, 52.4%) reported their gender was male, with 127 (47.6%) indicating their gender as female. Nine students did not provide a response to this question.
The students were asked to provide their grade in school. Their responses were summarized using frequency distributions. The results of this analysis are presented in Table 3.

Table 3

Frequency Distributions
Grade in School

<table>
<thead>
<tr>
<th>Grade in School</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenth</td>
<td>100</td>
<td>36.2</td>
</tr>
<tr>
<td>Eleventh</td>
<td>87</td>
<td>31.5</td>
</tr>
<tr>
<td>Twelfth</td>
<td>89</td>
<td>32.2</td>
</tr>
<tr>
<td>Total</td>
<td>276</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The largest group of students (n = 100, 36.2%) reported they were in the tenth grade and 87 (31.5%) students were in the eleventh grade. Eighty-nine (32.2%) students were in the twelfth grade.

The students self-reported their academic achievement. No attempts were made to verify their self-reports. The responses were summarized using frequency distributions. Table 4 presents results of this analysis.
Table 4
Frequency Distributions
Self-Reported Academic Achievement

<table>
<thead>
<tr>
<th>Self-Reported Academic Achievement</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>All As</td>
<td>10</td>
<td>3.6</td>
</tr>
<tr>
<td>Mostly As and some Bs</td>
<td>57</td>
<td>20.7</td>
</tr>
<tr>
<td>Mostly Bs and some As</td>
<td>32</td>
<td>11.6</td>
</tr>
<tr>
<td>All Bs</td>
<td>13</td>
<td>4.7</td>
</tr>
<tr>
<td>Mostly Bs and some Cs</td>
<td>50</td>
<td>18.1</td>
</tr>
<tr>
<td>Mostly Cs and some Bs</td>
<td>26</td>
<td>9.4</td>
</tr>
<tr>
<td>All Cs</td>
<td>5</td>
<td>1.8</td>
</tr>
<tr>
<td>Mostly Cs and some Ds</td>
<td>27</td>
<td>9.8</td>
</tr>
<tr>
<td>Mostly Ds and some Cs</td>
<td>14</td>
<td>5.1</td>
</tr>
<tr>
<td>All Ds</td>
<td>2</td>
<td>.7</td>
</tr>
<tr>
<td>Mostly Ds and some Fs</td>
<td>14</td>
<td>5.1</td>
</tr>
<tr>
<td>Mostly Fs and some Ds</td>
<td>22</td>
<td>8.0</td>
</tr>
<tr>
<td>All Fs</td>
<td>4</td>
<td>1.4</td>
</tr>
<tr>
<td>Total</td>
<td>276</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The largest group of students (n = 57, 20.7%) self-reported their grades were mostly As and some Bs. Fifty (18.1%) of the students indicated they earned mostly Bs and some Cs, while 32 (11.6%) self-reported their grades as mostly Bs and some As. Ten (3.6%) students indicated their grades were all As and 4 (1.4%) indicated all Fs as their earned grades.

The students were asked to indicate their living status. Their responses were summarized using frequency distributions for presentation in Table 5.
Table 5
Frequency Distributions
Students’ Living Status

<table>
<thead>
<tr>
<th>Students’ Living Status</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Both parents</td>
<td>48</td>
<td>17.4</td>
</tr>
<tr>
<td>Mother only</td>
<td>89</td>
<td>32.3</td>
</tr>
<tr>
<td>Father only</td>
<td>24</td>
<td>8.7</td>
</tr>
<tr>
<td>Mother and Stepfather</td>
<td>34</td>
<td>12.3</td>
</tr>
<tr>
<td>Father and Stepmother</td>
<td>24</td>
<td>8.7</td>
</tr>
<tr>
<td>Grandparents</td>
<td>24</td>
<td>8.7</td>
</tr>
<tr>
<td>Other Relatives</td>
<td>8</td>
<td>2.9</td>
</tr>
<tr>
<td>Legal Guardian</td>
<td>12</td>
<td>4.3</td>
</tr>
<tr>
<td>Other</td>
<td>13</td>
<td>4.7</td>
</tr>
<tr>
<td>Total</td>
<td>276</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The largest group of students (n = 89, 32.3%) reported they were living with their mothers and 48 (17.4%) were living with both parents. Thirty-four students indicated they were living with their mothers and stepfathers, while 24 (8.7%) were living with their fathers only. In addition, 24 (8.7%) were living with their fathers and stepmothers and 24 (8.7%) were living with their grandparents. Thirteen (4.7%) students indicated “other” as their living status, but did not provide additional information regarding with whom they were living.

Description of the Scaled Variables

The students completed three instruments, Self-in-School, Importance of Parent Involvement, and the Intellectual Achievement Responsibility Questionnaire. The instruments were scored using the author’s direction. The scores were summarized using descriptive statistics for presentation in Table 6.
Table 6
Descriptive Statistics
Scaled Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number</th>
<th>Mean</th>
<th>SD</th>
<th>Median</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Minimum</td>
</tr>
<tr>
<td>Self-In-School</td>
<td>269</td>
<td>3.97</td>
<td>.97</td>
<td>4.33</td>
<td>1.00 - 5.00</td>
</tr>
<tr>
<td>Importance of Parent Involvement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parent structure</td>
<td>276</td>
<td>2.48</td>
<td>1.26</td>
<td>2.33</td>
<td>1.00 - 5.00</td>
</tr>
<tr>
<td>Time management</td>
<td>276</td>
<td>2.97</td>
<td>1.16</td>
<td>3.00</td>
<td>1.00 - 5.00</td>
</tr>
<tr>
<td>School attendance</td>
<td>275</td>
<td>2.85</td>
<td>1.16</td>
<td>2.75</td>
<td>1.00 - 5.00</td>
</tr>
<tr>
<td>Intellectual Achievement Responsibility</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Questionnaire</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IAR positive</td>
<td>276</td>
<td>11.33</td>
<td>3.88</td>
<td>12.50</td>
<td>1.00 - 17.00</td>
</tr>
<tr>
<td>IAR negative</td>
<td>276</td>
<td>10.09</td>
<td>3.38</td>
<td>11.00</td>
<td>0.00 - 16.00</td>
</tr>
<tr>
<td>IAR total</td>
<td>276</td>
<td>21.42</td>
<td>6.86</td>
<td>23.00</td>
<td>2.00 - 32.00</td>
</tr>
</tbody>
</table>

Self-in-School. The Self-in-School (SIS) is a measure of academic self-efficacy. The scale was originally developed by Smith (1988) to assess levels of academic self-efficacy in adolescents and young adults. The mean for the scale was 3.97 (sd = .97), with a median of 4.33. Actual scores ranged from 1 to 5, with possible scores having the same range. Higher scores were indicative of higher levels of academic self-efficacy.

Importance of Parent Involvement. The Importance of Parent Involvement (DePlanty, Coulter-Kern, & Duchane, 2007) was developed to examine student’s perceptions of their parent’s involvement in their education. The scale has three subscales, parent structure, time management, and school attendance. Possible scores could range from 1 to 5, with higher scores indicating more positive perceptions of the importance of parent involvement.

Parent structure. The mean score for parent structure was 2.48 (sd = 1.26), with a median of 2.33. The range of actual scores for parent structure was from 1 to 5.

Time management. The range of actual scores for time management was from 1 to 5, with a median of 3.00. The mean score on this subscale was 2.97 (sd = 1.16).
School attendance. The mean score for school attendance was 2.85 (sd = 1.16), with a median of 2.75. The actual scores ranged from 1 to 5.

Intellectual Achievement Responsibility Questionnaire. The Intellectual Achievement Responsibility Questionnaire (IAR; Crandall, Katkovsky, & Crandall, 1965) measures beliefs in internal versus external reinforcement responsibility within intellectual-academic achievement situations. According to Crandall et al., external causes are frequently in students’ immediate environment (e.g., teachers, parents, and peers). The scores for internal positive and internal negative can range from 0 to 17, with higher scores indicating students were internal or external.

IAR positive. The mean score for IAR positive was 11.33 (sd = 3.88), with a median score of 12.50. the range of actual scores was from 1 to 17.

IAR negative. The range of actual scores on the IAR negative was from 0 to 16, with a median score of 11.00. The mean score on the IAR negative subscale was 10.09 (sd = 3.38).

IAR total. The mean score for IAR total was 2.42 (sd = 6.86), with a median of 23.00. The range of actual scores ranged from 2.00 to 32.00.

Research Questions

Five research questions were developed for this study. Each of these questions were addressed using inferential statistical procedures. All decisions on the statistical significance of the findings were made using a criterion alpha level of .05.

Research question 1. What is the relationship between self-efficacy, locus of control, and perceptions of parent involvement on the academic achievement of African American high school students from low socioeconomic areas?

Using Pearson product moment correlations, the scores for self-efficacy, locus of control, and perceptions of parent involvement were correlated with self-reported academic achievement. The results of this analysis are presented in Table 7.
Table 7

Pearson Product Moment Correlations
Self-Efficacy, Intellectual Achievement Responsibility, and Perceptions of Parent Involvement in Academic Achievement by Academic Achievement

<table>
<thead>
<tr>
<th>Self-Efficacy, Intellectual Achievement Responsibility, and Perceptions of Parent Involvement in Academic Achievement</th>
<th>n</th>
<th>r</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self in School</td>
<td>269</td>
<td>.74</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Intellectual Achievement Responsibility</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal</td>
<td>276</td>
<td>.27</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>External</td>
<td>276</td>
<td>.20</td>
<td>.001</td>
</tr>
<tr>
<td>Total</td>
<td>276</td>
<td>.25</td>
<td>.001</td>
</tr>
<tr>
<td>Perceptions of Parent Involvement in Academic Achievement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parent structure</td>
<td>276</td>
<td>.46</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Time management</td>
<td>276</td>
<td>.58</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>School attendance</td>
<td>275</td>
<td>.53</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>

The correlation between self in school as a measure of self-efficacy and self-reported academic achievement was statistically significant in a positive direction, \( r (269) = .74, p < .001 \). This finding indicated that students who reported higher academic achievement were more likely to have higher levels of self-efficacy related to school.

The correlations between self-reported academic achievement and internal, \( r (276) = .27, p < .001 \); external, \( r (276) = .20, p = .001 \); and total, \( r (276) = .25, p = .001 \) intellectual achievement responsibility (IAR) were statistically significant in a positive direction. The results of this analysis indicated that students who self-reported higher academic achievement were more likely to have higher scores for internal, external, and total IAR scores.

The three subscales measuring parent involvement in academic achievement; parent structure, \( r (276) = .46, p < .001 \), time management, \( r (276) = .58, p < .001 \), and school attendance, \( r (275) = .53, p < .001 \); were significantly correlated with self-reported academic achievement in a positive direction. Students who had more positive perceptions regarding their parents’ involvement in their academic achievement were more likely to self-report higher academic achievement.
Research question 2. To what extent do high and low achieving African American high school students differ in their levels of self-efficacy, locus of control, and perceived parent involvement?

The students were divided into two groups based on self-reported academic achievement. The students in the low academic achievement group self-reported their grades to be mostly Cs and some Bs and below. The students in the high academic achievement self-reported their grades as mostly Bs and some Cs to all As. The two groups were used as the independent variable in a t-test for two independent samples, with scores on self-efficacy used as the dependent variable. Results of this analysis are presented in Table 8.

<table>
<thead>
<tr>
<th>Group</th>
<th>Number</th>
<th>Mean</th>
<th>SD</th>
<th>DF</th>
<th>t-Value</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Academic Achievement</td>
<td>158</td>
<td>4.46</td>
<td>.99</td>
<td>267</td>
<td>12.58</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Low Academic Achievement</td>
<td>111</td>
<td>3.26</td>
<td>.57</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A statistically significant difference was found between students with high and low academic achievement on self-efficacy as measured by the self in school scale, $t(267) = 12.58, p < .001$. In examining the mean scores, students with high academic achievement ($m = 4.46, sd = .99$) had significantly higher scores than students with low academic achievement ($m = 3.26, sd = .57$).

The internal and external scores for the intellectual achievement responsibility scale were compared by high and low academic achievement using a one-way multivariate analysis of variance procedure. Results of this analysis are presented in Table 9.
Table 9

One-way Multivariate Analysis of Variance
Internal and External Intellectual Achievement Responsibility
by High and Low Academic Achievement

<table>
<thead>
<tr>
<th>Hotelling’s Trace</th>
<th>F Ratio</th>
<th>DF</th>
<th>Sig</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>.06</td>
<td>8.40</td>
<td>2, 273</td>
<td>&lt;.001</td>
<td>.06</td>
</tr>
</tbody>
</table>

The Hotelling’s trace of .06 obtained on the one-way MANOVA was statistically significant, $F(2, 273) = 8.40, p < .001$. The associated effect size of .06 was small, indicating that although the finding was statistically significant, the difference between the two groups did not have substantial practical significance. To determine which of the two subscales, internal and external IAR, were contributing to the significance of the omnibus F ratio, the univariate F tests were examined. Table 10 presents results of this analysis.

Table 10

Univariate F Tests
Intellectual Achievement Responsibility by Academic Achievement

<table>
<thead>
<tr>
<th>Group</th>
<th>Number</th>
<th>Mean</th>
<th>SD</th>
<th>DF</th>
<th>F ratio</th>
<th>Sig</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal Intellectual Achievement Responsibility</td>
<td>162</td>
<td>12.08</td>
<td>3.33</td>
<td>1, 274</td>
<td>15.47</td>
<td>&lt;.001</td>
<td>.05</td>
</tr>
<tr>
<td>High achievement</td>
<td>114</td>
<td>10.26</td>
<td>4.34</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low achievement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>External Intellectual Achievement Responsibility</td>
<td>162</td>
<td>10.72</td>
<td>3.02</td>
<td>1, 275</td>
<td>14.33</td>
<td>&lt;.001</td>
<td>.05</td>
</tr>
<tr>
<td>High achievement</td>
<td>114</td>
<td>9.19</td>
<td>3.68</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low achievement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The comparison between high and low achieving students for internal IAR was statistically significant, $F(1, 274) = 15.47, p < .001, d = .05$. The low effect size indicated that the results while statistically significant had little practical significance. The mean score for the
high achieving students ($m = 12.08, p = 3.33$) was higher than for the low achieving students ($m = 10.26, sd = 4.34$). The result of the comparison for external IAR also was statistically significant, $F (1, 274) = 14.33, p < .001, d = .05$. The small effect size provided evidence that the differences between the students had little practical significance, although they were statistically significant. This finding indicated that high achieving students had significantly higher external IAR ($m = 10.72, sd = 3.02$) than low achieving students ($m = 9.19, sd = 3.68$).

The total mean scores on students’ perceptions of their parents’ involvement were used as the dependent variable in a t-test for two independent samples. The results of this analysis are presented in Table 11.

**Table 11**  
T-Test for Two Independent Samples  
Student Perceptions of Parent Involvement in Academic Achievement by Academic Achievement

<table>
<thead>
<tr>
<th>Group</th>
<th>Number</th>
<th>Mean</th>
<th>SD</th>
<th>DF</th>
<th>t-Value</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Academic Achievement</td>
<td>162</td>
<td>3.19</td>
<td>1.11</td>
<td>273</td>
<td>8.44</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Low Academic Achievement</td>
<td>113</td>
<td>2.17</td>
<td>.79</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results of the t-test for two independent samples comparing student perceptions of their parents involvement in their education between students with high and low academic achievement was statistically significant, $t (273) = 8.44, p < .001$. Students with high academic achievement ($m = 3.19, sd = 1.11$) had significantly higher scores for parent involvement than students with low academic achievement ($m = 2.17, sd = .79$).

The three subscales, parent structure, time management, and school attendance, were used as dependent variables in a one-way MANOVA. The independent variable was high and low academic achievement. Table 12 presents results of this analysis.
The Hotelling’s trace of .28 obtained on the one-way MANOVA comparing the three subscales measuring student perceptions of parent involvement in academic achievement by high and low academic achievement was statistically significant, $F (3, 271) = 25.60, p < .001, d = .22$. This finding indicated that students with high and low academic achievement differed in their perceptions of parent involvement in their academic achievement. To determine which of the three subscales were contributing to this statistically significant finding, the univariate F tests were examined. Table 13 presents results of this analysis.
Table 13

Univariate F Tests
Student Perceptions of Parent Involvement in Academic Achievement
by Academic Achievement

<table>
<thead>
<tr>
<th>Group</th>
<th>Number</th>
<th>Mean</th>
<th>SD</th>
<th>DF</th>
<th>F ratio</th>
<th>Sig</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent structure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High achievement</td>
<td>162</td>
<td>2.90</td>
<td>1.33</td>
<td>1,273</td>
<td>48.90</td>
<td>&lt;.001</td>
<td>.15</td>
</tr>
<tr>
<td>Low achievement</td>
<td>113</td>
<td>1.90</td>
<td>.88</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High achievement</td>
<td>162</td>
<td>3.43</td>
<td>1.12</td>
<td>1,273</td>
<td>76.00</td>
<td>&lt;.001</td>
<td>.22</td>
</tr>
<tr>
<td>Low achievement</td>
<td>113</td>
<td>2.33</td>
<td>.87</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School attendance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High achievement</td>
<td>162</td>
<td>3.26</td>
<td>1.14</td>
<td>1,273</td>
<td>59.00</td>
<td>&lt;.001</td>
<td>.18</td>
</tr>
<tr>
<td>Low achievement</td>
<td>113</td>
<td>2.27</td>
<td>.91</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The F ratio obtained for the parent structure subscale was statistically significant, $F(1, 273) = 48.90, p < .001, d = .15$. The effect size of .15 provided support that the result had moderate practical significance. This finding indicated that students with high achievement ($m = 2.90, sd = 1.33$) had higher scores on this subscale than students with low achievement ($m = 1.90, sd = .88$).

The results of the comparison of time management, a subscale measuring students’ perceptions of their parent’s involvement in their academic achievement, was statistically significant, $F(1, 273) = 76.00, p < .001, d = .22$. The effect size of .22 obtained for this analysis indicated that the result had moderate practical significance. Students with high achievement ($m = 3.43, sd = 1.12$) had significantly higher scores on this subscale than students with low academic achievement ($m = 2.33, sd = .87$).

The comparison of school attendance, a subscale measuring students’ perceptions of their parent’s involvement in their academic achievement, provided evidence of statistically significant differences between students with high and low academic achievement, $F(1, 273) = $
59.00, \( p < .001, d = .18 \). The effect size of .18 provided support that the finding had moderate practical significance in addition to the statistical significance. Based on these findings, students with high achievement (\( m = 3.26, sd = 1.14 \)) had significantly higher scores on school attendance than students with low achievement (\( m = 2.27, sd = .91 \)).

Research question 3. Do high and low achieving students in different grade levels (tenth, eleventh, and twelfth) differ in their levels of self-efficacy, locus of control, and perceived parent involvement?

The mean scores on the Self-in-School scale measuring self-efficacy were used as the dependent variable in a one-way analysis of variance (ANOVA). The independent variable in this analysis was the grade level of the students. Table 14 presents results of this analysis.

Table 14

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>Number</th>
<th>Mean</th>
<th>SD</th>
<th>DF</th>
<th>F ratio</th>
<th>Sig</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenth</td>
<td>99</td>
<td>3.78a</td>
<td>1.09</td>
<td>2.266</td>
<td>4.39</td>
<td>.013</td>
<td>.03</td>
</tr>
<tr>
<td>Eleventh</td>
<td>81</td>
<td>4.21a</td>
<td>.69</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Twelfth</td>
<td>89</td>
<td>3.95</td>
<td>1.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Means in a column sharing a subscript are significantly different. For all measures, higher scores indicate higher creativity scores.

The results of the one-way ANOVA comparing self-efficacy among students at the three grade levels was statistically significant, \( F (2, 266) = 4.39, p = .013, d = .03 \). The small effect size of .03 provided evidence that the results of the analysis had little practical significance, although the results were statistically significant. To determine which grade levels were contributing to the significant difference on self-efficacy, all possible pairwise comparisons of the mean scores were made using Scheffé a posteriori tests. The results of this analysis indicated
that students in the eleventh grade ($m = 4.21$, $sd = .69$) had significantly higher levels of self-efficacy than students in the tenth grade ($m = 3.78$, $sd = 1.09$). The twelfth grade students ($m = 3.95$, $sd = 1.01$) did not differ significantly from either the tenth or eleventh grade students.

The total scores for intellectual achievement responsibility were used as the dependent variable in a one-way ANOVA. The grade levels of the students were used as the independent variable in this analysis. Table 15 presents results of this analysis.

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>Number</th>
<th>Mean</th>
<th>$SD$</th>
<th>$DF$</th>
<th>$F$ ratio</th>
<th>Sig</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenth</td>
<td>100</td>
<td>19.63</td>
<td>7.40</td>
<td></td>
<td>2.273</td>
<td>.004</td>
<td>.04</td>
</tr>
<tr>
<td>Eleventh</td>
<td>87</td>
<td>22.34</td>
<td>4.40</td>
<td>2,273</td>
<td>5.53</td>
<td>.004</td>
<td>.04</td>
</tr>
<tr>
<td>Twelfth</td>
<td>89</td>
<td>22.53</td>
<td>7.80</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Means in a column sharing a subscript are significantly different. For all measures, higher scores indicate higher creativity scores.

The comparison of the mean scores for intellectual achievement responsibility by grade level of the students was statistically significant, $F (2, 273) = 5.53, p = .004, d = .04$. The small effect size on this analysis indicated that the results had little practical significance although the statistical findings were significant. To determine which of the grade levels were contributing to the statistically significant results, all possible pairwise comparisons were made using Scheffé a posteriori tests. The findings indicated that students in the tenth grade ($m = 19.63$, $sd = 7.40$) had significantly lower scores than students in either the eleventh grade ($m = 22.34$, $sd = 4.40$) or students in the twelfth grade ($m = 22.53$, $sd = 7.80$). Students in the eleventh and twelfth grades did not differ significantly in their levels of self-efficacy.
The two subscales on the IAR, internal and external, were compared across the three grade levels of the students using a one-way MANOVA. Results of this analysis are presented in Table 16.

Table 16
One-way Multivariate Analysis of Variance
Internal and External Intellectual Achievement
by Grade Level of the Student

<table>
<thead>
<tr>
<th>Hotelling’s Trace</th>
<th>F Ratio</th>
<th>DF</th>
<th>Sig</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>.07</td>
<td>4.77</td>
<td>4,542</td>
<td>.001</td>
<td>.03</td>
</tr>
</tbody>
</table>

The results of the comparison for internal and external intellectual achievement by grade level was statistically significant, Hotelling’s trace = .07, F (4, 542) = 4.77, p = .001, d = .03. While results of this comparison were statistically significant, the effect size of .03 provided evidence that the findings had little practical significance. To determine which of the grade levels were contributing to the statistically significant difference obtained on the MANOVA, the univariate F tests were examined. Table 17 presents results of this analysis.
Table 17
Univariate F Tests
Positive and Negative Intellectual Achievement by Grade Level of the Student

<table>
<thead>
<tr>
<th>Group</th>
<th>Number</th>
<th>Mean</th>
<th>SD</th>
<th>DF</th>
<th>F ratio</th>
<th>Sig</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tenth grade</td>
<td>100</td>
<td>10.37</td>
<td>4.31</td>
<td>2,273</td>
<td>5.20</td>
<td>.006</td>
<td>.04</td>
</tr>
<tr>
<td>Eleventh grade</td>
<td>87</td>
<td>12.08</td>
<td>2.82</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Twelfth grade</td>
<td>89</td>
<td>11.67</td>
<td>4.08</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tenth grade</td>
<td>100</td>
<td>9.26</td>
<td>3.48</td>
<td>2,273</td>
<td>5.57</td>
<td>.004</td>
<td>.04</td>
</tr>
<tr>
<td>Eleventh grade</td>
<td>87</td>
<td>10.26</td>
<td>2.28</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Twelfth grade</td>
<td>89</td>
<td>10.85</td>
<td>3.95</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Means in a column sharing a subscript are significantly different. For all measures, higher scores indicate higher creativity scores.

Statistically significant differences were found for both the positive, $F(2, 273) = 5.20, p = .006, d = .04$, and negative, $F(2, 273) = 5.57, p = .004, d = .04$ subscales on the Intellectual Achievement Responsibility Scale. Scheffé a posteriori tests were used to compare all possible pairwise comparison for the two scales. Tenth grade students ($m = 10.37, sd = 4.31$) had significantly lower scores on the internal subscale than eleventh grade ($m = 12.08, sd = 2.82$). The twelfth grade students ($m = 11.67, sd = 4.08$) did not differ significantly from either the tenth or twelfth grade students.

The twelfth grade students ($m = 10.85, sd = 3.95$) had significantly higher scores than tenth grade students ($m = 9.26, sd = 3.48$) on the external subscale. The eleventh grade students ($m = 10.26, sd = 2.28$) did not differ significantly from the tenth or twelfth grade students.

The three subscales measuring parent involvement were used as dependent variables in a one-way MANOVA. The grade level of the students was used as the independent variable in this analysis. Table 18 presents results of this analysis.
Table 18

One-way Multivariate Analysis of Variance
Student Perceptions of Parent Involvement in Academic Achievement
by Grade Level of the Student

<table>
<thead>
<tr>
<th>Hotelling’s Trace</th>
<th>F Ratio</th>
<th>DF</th>
<th>Sig</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>.03</td>
<td>1.50</td>
<td>6, 538</td>
<td>.175</td>
<td>.02</td>
</tr>
</tbody>
</table>

The Hotelling’s trace of .03 obtained on the comparison of the three subscales measuring student perceptions of parent involvement in academic achievement by grade level was not statistically significant, $F (6, 538) = 1.50, p = .175, d = .02$. This result indicated that students in the three grade levels did not differ in their perceptions of their parent involvement in their academic achievement. To further explore this lack of statistically significant differences, descriptive statistics were obtained for the three subscales by grade level. Table 19 presents results of this analysis.

Table 19

Descriptive Statistics
Student Perceptions of Parent Involvement in Academic Achievement
by Grade Level in School

<table>
<thead>
<tr>
<th>Group</th>
<th>Number</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent structure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tenth grade</td>
<td>100</td>
<td>2.68</td>
<td>1.49</td>
</tr>
<tr>
<td>Eleventh grade</td>
<td>86</td>
<td>2.40</td>
<td>.93</td>
</tr>
<tr>
<td>Twelfth grade</td>
<td>89</td>
<td>2.35</td>
<td>1.26</td>
</tr>
<tr>
<td>Time management</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tenth grade</td>
<td>100</td>
<td>3.13</td>
<td>1.41</td>
</tr>
<tr>
<td>Eleventh grade</td>
<td>86</td>
<td>2.86</td>
<td>.85</td>
</tr>
<tr>
<td>Twelfth grade</td>
<td>89</td>
<td>2.92</td>
<td>1.09</td>
</tr>
<tr>
<td>School attendance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tenth grade</td>
<td>100</td>
<td>3.08</td>
<td>1.33</td>
</tr>
<tr>
<td>Eleventh grade</td>
<td>86</td>
<td>2.67</td>
<td>.88</td>
</tr>
<tr>
<td>Twelfth grade</td>
<td>89</td>
<td>2.76</td>
<td>1.15</td>
</tr>
</tbody>
</table>
The mean scores were similar for the students at all grade levels. Based on this finding, it appears that students’ perceptions of their parents’ involvement in their academic achievement did not differ across the three grade levels.

Statistically significant differences were found for self-efficacy and internal and external intellectual achievement responsibility across grade levels. Eleventh grade students had significantly higher levels of self-efficacy than tenth graders. Tenth grade students had the lowest mean scores for internal and external intellectual achievement responsibility. No statistically significant differences were found among the three grade levels for perceptions of parent involvement in academic achievement.

*Research question 4.* Does gender of students in different grade levels (tenth, eleventh, and twelfth) differ in their levels of self-efficacy, locus of control, and perceived parent involvement?

The scores for self-efficacy were used as the dependent variable in a 2 x 3 factorial analysis of variance. The independent variables in this analysis were gender of the study and grade level. The results of this analysis are presented in Table 20.

### Table 20

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F ratio</th>
<th>Sig</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>6.69</td>
<td>1</td>
<td>6.70</td>
<td>7.45</td>
<td>.007</td>
<td>.03</td>
</tr>
<tr>
<td>Grade Level</td>
<td>8.88</td>
<td>2</td>
<td>4.44</td>
<td>4.94</td>
<td>.008</td>
<td>.04</td>
</tr>
<tr>
<td>Gender x Grade Level</td>
<td>5.84</td>
<td>2</td>
<td>2.92</td>
<td>3.25</td>
<td>.040</td>
<td>.03</td>
</tr>
<tr>
<td>Error</td>
<td>228.33</td>
<td>254</td>
<td>.90</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The results of the 2 x 2 factorial analysis of variance for gender was statistically significant, $F (1, 254) = 7.45$, $p = .007$, $d = .03$. This result indicated that male and female students differed on their levels of self-efficacy. Self-efficacy also differed significantly by grade level, $F (2, 254) = 4.94$, $p = .008$, $d = .04$, providing support of statistically significant differences among students at the three grade levels. The interaction effect between gender and grade level also was statistically significant, $F (2, 254) = 3.25$, $p = .040$, $d = .03$. This finding provided support of a statistically significant difference in levels of self-efficacy between 10\textsuperscript{th}, 11\textsuperscript{th}, and 12\textsuperscript{th} grade students. The effect sizes for the main effects and the interaction were small, indicating that although the findings were statistically significant, they had little practical significance. To further explore these results, all possible pairwise comparisons for grade level were made using Scheffé a posteriori tests. Descriptive statistics were obtained for the main effects of gender and grade level and for the interaction effect, gender x grade. Table 21 presents results of this analysis.
Table 21
Descriptive Statistics
Self-Efficacy by Students’ Grade Level

<table>
<thead>
<tr>
<th>Gender and Grade Level</th>
<th>Number</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>138</td>
<td>3.81</td>
<td>1.04</td>
</tr>
<tr>
<td>Female</td>
<td>122</td>
<td>4.13</td>
<td>.89</td>
</tr>
<tr>
<td>Grade Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tenth</td>
<td>93</td>
<td>3.77</td>
<td>1.11</td>
</tr>
<tr>
<td>Eleventh</td>
<td>80</td>
<td>4.21</td>
<td>.69</td>
</tr>
<tr>
<td>Twelfth</td>
<td>87</td>
<td>3.94</td>
<td>1.02</td>
</tr>
<tr>
<td>Gender x Grade Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male Tenth Grade</td>
<td>52</td>
<td>3.80</td>
<td>1.09</td>
</tr>
<tr>
<td>Female Tenth Grade</td>
<td>41</td>
<td>3.72</td>
<td>1.15</td>
</tr>
<tr>
<td>Male Eleventh Grade</td>
<td>42</td>
<td>4.00</td>
<td>.77</td>
</tr>
<tr>
<td>Female Eleventh Grade</td>
<td>38</td>
<td>4.43</td>
<td>.53</td>
</tr>
<tr>
<td>Male Twelfth Grade</td>
<td>44</td>
<td>3.63</td>
<td>1.18</td>
</tr>
<tr>
<td>Female Twelfth Grade</td>
<td>38</td>
<td>4.25</td>
<td>.72</td>
</tr>
</tbody>
</table>

Note: Means in a column sharing a subscript are significantly different. For all measures, higher scores indicate higher creativity scores.

Female students ($m = 4.13, sd = .89$) had significantly higher mean scores for self-efficacy than male students ($m = 3.81, sd = 1.04$). The comparisons among students at the three grade levels provided evidence that tenth grade students ($m = 3.77, sd = 1.11$) had significantly lower scores for self-efficacy than eleventh grade students ($m = 4.21, sd = .89$). Twelfth grade students ($m = 3.94, sd = 1.02$) did not differ significantly from tenth and eleventh grade students. The interaction effect provide support that female eleventh grade students ($m = 4.43, sd = .53$) had the highest scores followed by female twelfth grade students ($m = 4.25, sd = .72$). Male twelfth grade students ($m = 3.63, sd = 1.18$) and female tenth grade students ($m = 3.72, sd = 1.15$) had the lowest scores for self-efficacy. Figure 2 presents a graphical representation of the statistically significant interaction by grade and gender for self-efficacy.
An interaction effect appears to between tenth and eleventh grade students, with male twelfth grade students having significantly lower scores than female twelfth grade students. Male and female eleventh grade students had the highest scores and were not crossed with the other grade levels.

The total scores for the intellectual achievement responsibility scale were used as the dependent variable in a 2 x 2 factorial analysis of variance. The gender and grade level of the students were used as the independent variables in this analysis. Table 22 presents results of this analysis.
Table 22
2 x 3 Factorial Analysis of Variance
Intellectual Achievement Responsibility Scale by Students’ Gender and Grade Level

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F ratio</th>
<th>Sig</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>25.31</td>
<td>1</td>
<td>25.31</td>
<td>.55</td>
<td>.460</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Grade Level</td>
<td>537.80</td>
<td>2</td>
<td>268.90</td>
<td>5.81</td>
<td>.003</td>
<td>.04</td>
</tr>
<tr>
<td>Gender x Grade Level</td>
<td>58.73</td>
<td>2</td>
<td>29.36</td>
<td>.63</td>
<td>.531</td>
<td>.01</td>
</tr>
<tr>
<td>Error</td>
<td>12086.01</td>
<td>261</td>
<td>46.31</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

One main effect, grade level, produced a statistically significant difference in total scores for the Intellectual Achievement Responsibility as a measure of locus of control, $F (2, 261) = 5.81, p = .003, d = .04$. Although the difference among the grade levels was statistically significant, the effect size of .04 indicated that the difference has little practical significance. The other main effect, gender, and the interaction effect between grade and gender did not differ. To determine which of the grade levels were contributing to the statistically significant result, Scheffé a posteriori tests were used to compare all possible pairwise comparisons, Table 23 presents descriptive statistics for both main effects and the interaction, along with the results of the a posteriori tests.
Table 23

Descriptive Statistics
Intellectual Achievement Responsibility by Students’ Grade Level

<table>
<thead>
<tr>
<th>Gender and Grade Level</th>
<th>Number</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>140</td>
<td>20.94</td>
<td>7.05</td>
</tr>
<tr>
<td>Female</td>
<td>127</td>
<td>21.71</td>
<td>6.78</td>
</tr>
<tr>
<td><strong>Grade Level</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tenth</td>
<td>94</td>
<td>19.31</td>
<td>7.47</td>
</tr>
<tr>
<td>Eleventh</td>
<td>86</td>
<td>22.34</td>
<td>4.43</td>
</tr>
<tr>
<td>Twelfth</td>
<td>87</td>
<td>22.44</td>
<td>7.87</td>
</tr>
<tr>
<td><strong>Gender x Grade Level</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male Tenth Grade</td>
<td>52</td>
<td>18.50</td>
<td>7.86</td>
</tr>
<tr>
<td>Female Tenth Grade</td>
<td>44</td>
<td>22.57</td>
<td>4.09</td>
</tr>
<tr>
<td>Male Eleventh Grade</td>
<td>44</td>
<td>22.18</td>
<td>7.70</td>
</tr>
<tr>
<td>Female Eleventh Grade</td>
<td>42</td>
<td>20.31</td>
<td>6.92</td>
</tr>
<tr>
<td>Male Twelfth Grade</td>
<td>42</td>
<td>22.10</td>
<td>4.79</td>
</tr>
<tr>
<td>Female Twelfth Grade</td>
<td>43</td>
<td>22.70</td>
<td>8.12</td>
</tr>
</tbody>
</table>

*Note: Means in a column sharing a subscript are significantly different. For all measures, higher scores indicate higher creativity scores.*

The results of the a posteriori tests found that tenth grade students ($m = 19.31$, $sd = 7.47$) had significantly lower scores than either the eleventh grade students ($m = 22.34$, $sd = 4.43$) or the twelfth grade students ($m = 22.44$, $sd = 7.87$). The difference between the eleventh and twelfth grade students was not statistically significant. Based on the findings of these analyses, it appears that locus of control for intellectual achievement did not differ between male and female students, but did differ by their grade level.

The two subscales from the Intellectual Achievement Responsibility scale, positive and negative, were used as the dependent variables in a 2 x 2 factorial MANOVA. The gender and grade level of the students were used as the independent variables in this analysis. Table 24 presents results of this analysis.
The comparison of positive and negative intellectual achievement responsibility as a measure of locus of control produced a Hotelling’s trace of .08 for grade level which was statistically significant, $F(4, 518) = 5.27, p < .001, d = .04$. The small effect size indicated that although the difference among the three grade levels was statistically significant, the finding had little practical significance. The main effect of gender and the interaction effect between grade and gender did not produce statistically significant differences. To determine which of the two subscales were contributing to the statistically significant results, the univariate F tests were examined. Table 25 presents results of this analysis.
Table 2

Univariate F Tests
Internal and External Intellectual Achievement
by Gender and Grade Level of the Student

<table>
<thead>
<tr>
<th>Group</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Squares</th>
<th>F ratio</th>
<th>Sig</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive</td>
<td>.79</td>
<td>1,261</td>
<td>.79</td>
<td>.05</td>
<td>.816</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Negative</td>
<td>17.14</td>
<td>1,261</td>
<td>17.14</td>
<td>1.52</td>
<td>.218</td>
<td>.01</td>
</tr>
<tr>
<td>Grade</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive</td>
<td>173.36</td>
<td>2,261</td>
<td>86.68</td>
<td>5.89</td>
<td>.003</td>
<td>.04</td>
</tr>
<tr>
<td>Negative</td>
<td>123.45</td>
<td>2,261</td>
<td>61.73</td>
<td>5.49</td>
<td>.005</td>
<td>.04</td>
</tr>
<tr>
<td>Gender x Grade</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive</td>
<td>33.53</td>
<td>2,261</td>
<td>16.76</td>
<td>1.14</td>
<td>.321</td>
<td>.01</td>
</tr>
<tr>
<td>Negative</td>
<td>5.05</td>
<td>2,261</td>
<td>2.53</td>
<td>.23</td>
<td>.799</td>
<td>&lt;.01</td>
</tr>
</tbody>
</table>

Note: Means in a column sharing a subscript are significantly different. For all measures, higher scores indicate higher creativity scores.

The results of the comparison of positive IAR among the three grade levels was statistically significant, $F(2, 261) = 5.89$, $p = .003$, $d = .04$. This result indicated that positive IAR differed significantly among the three grade levels. The negative IAR scores differed significantly among the three grade levels, $F(2, 261) = 5.49$, $sd = .005$. The effect sizes of .04 and .04 respectively for positive and negative IAR scores were small, indicating that the results had little practical significance, although they were statistically significant. To determine which of the grade levels were contributing to the statistically significant result, Scheffé a posteriori tests were used to compare all possible pairwise comparisons. Table 26 presents results of this analysis.
Table 26

Descriptive Statistics
Intellectual Achievement Responsibility by Students’ Grade Level

<table>
<thead>
<tr>
<th>Positive Intellectual Achievement Responsibility</th>
<th>Number</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>140</td>
<td>11.16</td>
<td>4.08</td>
</tr>
<tr>
<td>Female</td>
<td>127</td>
<td>11.36</td>
<td>3.72</td>
</tr>
<tr>
<td>Grade Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tenth</td>
<td>94</td>
<td>10.16&lt;sub&gt;a,b&lt;/sub&gt;</td>
<td>4.34</td>
</tr>
<tr>
<td>Eleventh</td>
<td>86</td>
<td>12.10&lt;sub&gt;a&lt;/sub&gt;</td>
<td>2.82</td>
</tr>
<tr>
<td>Twelfth</td>
<td>87</td>
<td>11.61&lt;sub&gt;b&lt;/sub&gt;</td>
<td>4.10</td>
</tr>
<tr>
<td>Gender x Grade Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male Tenth Grade</td>
<td>52</td>
<td>9.75</td>
<td>4.56</td>
</tr>
<tr>
<td>Female Tenth Grade</td>
<td>44</td>
<td>12.50</td>
<td>2.74</td>
</tr>
<tr>
<td>Male Eleventh Grade</td>
<td>44</td>
<td>11.50</td>
<td>4.16</td>
</tr>
<tr>
<td>Female Eleventh Grade</td>
<td>42</td>
<td>10.67</td>
<td>4.03</td>
</tr>
<tr>
<td>Male Twelfth Grade</td>
<td>42</td>
<td>11.69</td>
<td>2.88</td>
</tr>
<tr>
<td>Female Twelfth Grade</td>
<td>43</td>
<td>11.72</td>
<td>4.09</td>
</tr>
<tr>
<td>Negative Intellectual Academic Responsibility</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>140</td>
<td>9.77</td>
<td>3.34</td>
</tr>
<tr>
<td>Female</td>
<td>127</td>
<td>10.35</td>
<td>3.46</td>
</tr>
<tr>
<td>Grade Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tenth</td>
<td>94</td>
<td>9.15&lt;sub&gt;a&lt;/sub&gt;</td>
<td>3.51</td>
</tr>
<tr>
<td>Eleventh</td>
<td>86</td>
<td>10.23</td>
<td>2.28</td>
</tr>
<tr>
<td>Twelfth</td>
<td>87</td>
<td>10.83&lt;sub&gt;a&lt;/sub&gt;</td>
<td>3.99</td>
</tr>
<tr>
<td>Gender x Grade Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male Tenth Grade</td>
<td>52</td>
<td>8.75</td>
<td>3.61</td>
</tr>
<tr>
<td>Female Tenth Grade</td>
<td>44</td>
<td>10.07</td>
<td>2.02</td>
</tr>
<tr>
<td>Male Eleventh Grade</td>
<td>44</td>
<td>10.68</td>
<td>3.80</td>
</tr>
<tr>
<td>Female Eleventh Grade</td>
<td>42</td>
<td>9.64</td>
<td>3.35</td>
</tr>
<tr>
<td>Male Twelfth Grade</td>
<td>42</td>
<td>10.40</td>
<td>2.54</td>
</tr>
<tr>
<td>Female Twelfth Grade</td>
<td>43</td>
<td>10.98</td>
<td>4.23</td>
</tr>
</tbody>
</table>

Note: Means in a column sharing a subscript are significantly different. For all measures, higher scores indicate higher creativity scores.

Students in the tenth grade (m = 10.16, sd = 4.34) had significantly lower scores for positive intellectual achievement responsibility than students in the eleventh grade (m = 12.10, sd = 2.82) and students in the twelfth grade (m = 11.61, sd = 4.10). The difference between the eleventh grade students and twelfth grade students was not statistically significant. When the scores for negative intellectual achievement responsibility were compared among the three grade
levels, students in the tenth grade \((m = 9.15, sd = 3.51)\) had significantly lower scores than students in the twelfth grade \((m = 10.83, sd = 3.99)\). Students in the eleventh grade \((m = 10.23, sd = 2.28)\) did not differ significantly from either the tenth grade students or the twelfth grade students. Based on these findings, it appears that students in the tenth grade had lower scores for both positive and negative intellectual achievement responsibility than students in the eleventh and twelfth grades.

**Research question 5.** Does academic achievement (grade point average) differ between male and female students in the tenth, eleventh, and twelfth grade?

The students’ self-reported academic achievement was used as the dependent variable in a 2 x 3 factorial ANOVA. The independent variables in this analysis was the gender and grade of the students. Table 27 presents results of this analysis.
Table 27
2 x 3 Factorial Analysis of Variance
Self-reported Academic Achievement
by Gender and Grade Level of the Student

<table>
<thead>
<tr>
<th>Group</th>
<th>Number</th>
<th>Mean</th>
<th>SD</th>
<th>DF</th>
<th>F ratio</th>
<th>Sig</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>140</td>
<td>7.97</td>
<td>3.42</td>
<td>1, 261</td>
<td>5.23</td>
<td>.023</td>
<td>.02</td>
</tr>
<tr>
<td>Female</td>
<td>127</td>
<td>8.91</td>
<td>3.18</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tenth</td>
<td>94</td>
<td>7.60a</td>
<td>3.91</td>
<td>2, 261</td>
<td>6.91</td>
<td>.001</td>
<td>.05</td>
</tr>
<tr>
<td>Eleventh</td>
<td>86</td>
<td>9.38a</td>
<td>2.25</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Twelfth</td>
<td>87</td>
<td>8.34</td>
<td>3.35</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender x Grade Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male Tenth Grade</td>
<td>52</td>
<td>7.58</td>
<td>3.85</td>
<td>2, 261</td>
<td>1.76</td>
<td>.175</td>
<td>.01</td>
</tr>
<tr>
<td>Female Tenth Grade</td>
<td>42</td>
<td>8.98</td>
<td>4.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male Eleventh Grade</td>
<td>44</td>
<td>7.43</td>
<td>2.46</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female Eleventh Grade</td>
<td>42</td>
<td>7.62</td>
<td>1.94</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male Twelfth Grade</td>
<td>44</td>
<td>9.81</td>
<td>3.57</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female Twelfth Grade</td>
<td>43</td>
<td>8.91</td>
<td>2.87</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note:* Means in a column sharing a subscript are significantly different. For all measures, higher scores indicate higher creativity scores.

The difference in self-reported academic achievement between male (m = 7.97, sd = 3.42) and female (m = 8.91, sd = 3.18) students was statistically significant, F (1, 261) = 5.23, $p = .023$, $d = .02$. While female students had significantly higher self-reported academic achievement than the male students, the effect size indicated the finding had little practical significance.

The differences among the students on their self-reported academic achievement was statistically significant, F (2, 261) = 6.91, $p = .001$, $d = .05$. This finding indicated a difference among the students in the three grades on their self-reported academic achievement. The small effect size indicated that while the finding was statistically significant, it has little practical significance. To determine which grade levels were contributing to the significant result, Scheffé a posteriori tests were used to compare all possible pairwise comparisons among the three grade
levels. Students in the eleventh grade \( (m = 9.38, sd = 2.25) \) had significantly higher scores than students in the tenth grade \( (m = 7.60, sd = 3.91) \). Students in the twelfth grade \( (m = 8.34, sd = 3.35) \) did not differ from students in either the tenth or eleventh grades. The interaction effect between gender and grade level did not provide evidence of a statistically significant difference.

**Summary**

The results of the statistical analyses used to describe the sample and address the research questions have been presented in this chapter. The conclusions and recommendations based on these findings can be found in Chapter V.
CHAPTER 5
SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The purpose of this study was to investigate the impact of self-efficacy, locus of control, and perceived parental influence on the academic achievement of African-American high school students.

African American high school students are not graduating in the required four years. According to a Detroit News article, the 2008 graduation rate for Detroit Public Schools was 24.9% (Thomas & Read, 2008). Students in this school district generally are from families with low incomes, with 70% qualifying for free or reduced lunch programs, a measure of socioeconomic status. The Michigan Merit exam outcomes indicated that the majority of students in the district did not meet state competency levels in mathematics (86.1%), reading (68.1%), or language arts (75.4%), resulting in the majority of schools in the district failing to make adequate yearly progress (AYP; Michigan Department of Education, 2008). Detroit schoolchildren ranked lowest in the nation on the National Assessment of Educational Progress (NAEP, 2009) mathematics test. In terms of performance levels, 69% fourth grade students in Detroit scored at a below basic level on the mathematics test. In terms of performance levels for eighth grade students, 77% were below basic. In 2009, students who were eligible for free/reduced-price school lunch, an indicator of low income, had scores that were an average of 10 points lower than that of students who were not eligible for free/reduced-price school lunch.

Factors, such as self-efficacy, locus of control, and parent involvement, playing in concert with socioeconomic status that may be contributing to the student’s inability to be successful in school, need to be examined to determine if school personnel can develop programs to help more students become successful in school.
African American children’s academic achievement has been associated with self-efficacy, locus of control, and parental involvement. Additionally, the role of socioeconomic status was mentioned as a correlate of these constructs. Researchers have made comments and provided empirical results that support the existence of an achievement gap between Caucasian and African American students.

A substantial achievement gap exists between African-American children and Caucasian children in the United States (Coleman, 1966; Rothstein, 2004; NGA, 2005). This achievement gap has been well documented in research. The current federal educational policy, No Child Left Behind (NCLB), puts the focus on this problem. Under this policy, only schools that successfully and consistently make strides towards closing the achievement gap are considered flourishing and consequently are allowed to remain open. Olson (2005) concluded the following with respect to the achievement gap:

High school achievement has barely budged over the past decade. Just 36 percent of seniors are proficient in reading, according to the National Assessment of Educational Progress, the federal testing program, and only 17 percent are proficient in mathematics. Near the end of high school, African-American and Latino students have reading skills virtually the same as those of white 8th graders. (p. 18)

Self-efficacy is defined as a personality trait involving the extent to which individuals believe that they can control the outcome(s) of a particular experience (Bandura, 1977). People with high levels of self-efficacy are characterized by the belief that they possess the ability to perform a task (Bandura, 1977). Students with high self-efficacy generally have higher levels of academic achievement than students with low self-efficacy (Bandura, 1996; Tuckman & Sexton, 1989). Self-efficacy is not aligned with the actual skills that are needed to complete a task. Self-efficacy only concerns itself with the belief that individuals have about their capability to perform.
Conversely, students with low levels of self-efficacy believe that they are powerless to control the outcomes of their experiences. These types of students tend to believe that good luck is the determinant of their successes and bad luck is the determinant for their failures. Students with low self-efficacy generally have lower levels of student achievement (Margolis & McCabe, 2004). Additionally, these types of students put forth little effort in their schoolwork.

Students with internal locus of control typically have higher academic achievement than students with an external locus of control (Anderson, 2005; Kalechein & Norwicki, 1997). African-American children in families with low socioeconomic statuses are more likely to have an internal locus of control (Battle & Rotter, 1963; Lefcourt & Ladwig, 1965; Sapp, 1996). Locus of control is a psychological concept developed by Rotter in the 1950s. This concept is concerned with attitudes of people about the control they have over their life circumstances. According to Rotter (1966), people who believe they can make choices to affect their life circumstances are considered to have an internal locus of control, while people who believe their circumstances are controlled by external forces are said to have an external locus of control. People with an external locus of control often feel that they are the victims of circumstances. They often look outside themselves or believe that their limited intellect is the reason for their failures. Often people with an external locus of control believe that success is a function of chance rather than a predictable result of preparation. They often lack the perseverance needed to complete a task. Many people with an external locus of control lack motivation.

Parents have an influence over their children, especially in regard to their children’s academic achievement (Comer, 1988b; Miedal & Reynolds, 1999; Olmstead & Rubin, 1983; Seyfried & Chung, 2002). A large body of literature has determined that student achievement is related to parental behavior (Walker-Dalhouse, 2005). Because parents are a child’s first teachers, many values, behaviors, and learning styles are taught to children before they enter
school (Bloom, 1980). Many children begin school with an arsenal of knowledge and attitudes toward education that they have received from home. The challenge of many educators is to re-condition beliefs that are detrimental to the learning process that occurs in the classroom. Educators may find teaching a child who comes from a home where parents have had negative experiences and low-academic performance in school challenging.

Research has supported the importance of parental influence on student achievement in African-American children. Comer (1988a) asserted that raising children in moral, social, psychological, and cognitive environments is important for academic learning. Moreover, this development is influenced by attitudes, values, beliefs, and moral behavior of the family. He further contended that in the educators’ zeal to push content, little attention is given to the familial relationships that can be essential to the learning process. Although the number and methods of parental involvement vary by race, the idea that parental involvement can influence student achievement has been found to be independent of ethnicity (Tucker, Harris, Brady, & Herman, 1996).

Socioeconomic status plays a role in student achievement (Rothstein, 2004). African-American children who are from families with low socioeconomic statuses are more likely to have low self-efficacy and an external locus of control. Ideally, a family’s income or the racial/ethnicity of the child should not be related to the ability of the child to learn (Rothstein, 2004). However, socioeconomic status plays a part in the way that parents communicate with their children. These communication patterns often can have a positive or negative effect on the acquisition of skills that can ultimately determine how a child flourishes in school. For example, professional parents speak 2,000 words per hour to their children; working-class parents speak about 1,300, while the children of parents that received welfare speak only about 600 words (Hart & Risley, 1995). These researchers found that the most important factors to the acquisition
of vocabulary are the economic advantages of children's homes and the frequency of language experiences. “The characteristics that define social class differences inevitably influence learning” (Rothstein, 2004).

Methods

A non-experimental, descriptive research study was used to collect the data needed to address the research questions posed for this study. High school students enrolled in one high school in a large urban school district were asked to participate in the study. These students completed three instruments, Self in School, Importance of Parent Involvement, and the Intellectual Achievement Responsibility questionnaire (IAR), along with a short demographic survey developed by the researcher. The 276 students who participated in the study were in the tenth (n = 100, 36.2%), eleventh (n = 87, 31.5%), and twelfth (n = 89, 32.2%) grades. Ninth grade students had not had sufficient experience in a high school setting to participate in the study.

Findings

The students ranged in age from 15 to 19 years of age, with both males and females included in the sample. The students self-reported their academic grades, with most of the students indicating they had grades higher than Cs. Eighty-three percent of students were living with a single adult.

Research questions.

Five research questions were developed for the study. Each of these questions were addressed using inferential statistical analyses. All decisions on the statistical significance of the findings were made using an alpha level of .05.

Research question 1. What is the relationship between self-efficacy, locus of control, and perceptions of parent involvement on the academic achievement of African American high school students from low socioeconomic areas?
Pearson product moment correlations were used to test the relationship between self-reported academic achievement and self-efficacy, locus of control, and perceptions of parent involvement in academic achievement. Statistically significant correlations in a positive direction were obtained for self-efficacy, internal and external intellectual achievement responsibility as a measure of locus of control, and parent structure, time management, and school attendance as measures of perceptions of parent involvement. The positive correlations indicated that students with higher self-reported academic achievement were likely to have higher levels of self-efficacy, more positive and negative locus of control, and more positive perceptions of parent involvement in their academic achievement.

Research question 2. To what extent do high and low achieving African American high school students differ in their levels of self-efficacy, locus of control, and perceived parent involvement?

The students were divided into two groups, high and low achievement, based on their self-reported academic grades using a median split. The scores for self-efficacy were compared by the two groups, with high achieving students having significantly higher levels of self-efficacy than low achieving students. The students’ scores for positive and negative locus of control were compared by academic achievement. Students with high academic achievement had significantly higher scores for both positive and negative locus of control than students with low academic achievement. Statistically significant differences were obtained for the three measures of parent involvement (parent structure, time management, and school attendance), with high achieving students having higher scores than students in the low achieving group.

Research question 3. Do high and low achieving students in different grade levels (tenth, eleventh, and twelfth) differ in their levels of self-efficacy, locus of control, and perceived parent involvement?
The students’ scores for self-efficacy were compared by grade level using a one-way analysis of variance. The results of this analysis were statistically significant, with eleventh grade students having significantly higher levels of self-efficacy than tenth grade students. No significant differences were found between the eleventh and twelfth grade students. The multivariate analysis of variance (MANOVA) was used to compare positive and negative locus of control among students at the three grade levels. Statistically significant differences were found for positive locus of control, with eleventh grade students having significantly higher scores than tenth grade students. The comparison of negative locus of control among the three grade levels was statistically significant, with tenth grade students having significantly lower scores than twelfth grade students. Students in the three grade levels did not differ on the three subscales, parent structure, time management, and school attendance, measuring student perceptions of parent involvement in academic achievement.

Research question 4. Does the gender of students in different grade levels (tenth, eleventh, and twelfth) differ in their levels of self-efficacy, locus of control, and perceived parent involvement?

A 2 x 3 factorial analysis of variance was used to determine if self-efficacy differed by gender and grade level, and for the interaction between gender and grade level. The results of this analysis indicated statistically significant differences for both main effects of gender and grade level, as well as for the interaction between gender and grade level. An examination of the mean scores for gender found that females had significantly higher levels of self-efficacy, with a statistically significant difference found between the tenth and eleventh grade students. Although a statistically significant difference was found for the interaction on the MANOVA, comparisons of the gender-grade level groups were not statistically significant. The 2 x 3 factorial MANOVA used to examine differences in positive and negative locus of control by gender and grade was
not statistically significant for gender or the interaction between grade and gender. The significant difference in positive and negative locus of control by grade level has been discussed in research question 3.

Research question 5. Does academic achievement (grade point average) differ between male and female students in the tenth, eleventh, and twelfth grade?

A 2 x 3 factorial ANOVA was used to compare self-reported academic achievement by gender and grade. The results of this analysis indicated that female students had significantly higher academic achievement than male students. Students in the eleventh grade had significantly higher self-reported academic achievement than tenth grade students, but did not differ significantly from twelfth grade students. The interaction between gender and grade level was not statistically significant.

Conclusions

The intention of this study was to explore the impact of self-efficacy, locus of control, and perceived parental influence on the academic achievement of African-American high school students from low socioeconomic levels. Research has shown that students who have strong self-efficacy, an internalized locus of control, and support from parents are positively associated with doing well in school.

Research question 1 investigated the relationship between self-efficacy, locus of control, and perceptions of parent involvement on the academic achievement of African American high school students from low socioeconomic areas. The outcomes suggested that self-reported academic achievement was significantly related in a positive direction to self-efficacy, locus of control, and perceptions of parent involvement. The positive correlations indicated that students with higher levels of self-efficacy were more likely to have higher self-reported academic
achievement. The order of influence on student achievement from greatest to least was self-efficacy, perceptions of parental involvement, with the least impact belonging to locus of control.

Self-efficacy is defined as a person’s belief about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives (Bandura, 1994). Students who believe that they can be successful in school are more likely to be successful in school. Beliefs that students have about their ability to succeed drive the thoughts, feelings, and behaviors. High levels of self-efficacy influence effort, persistence, and choices that the students make in order to complete a desired act, in this case, doing well in school. Higher levels of self-efficacy mean that these students are more likely to perceive that they have the ability to achieve academic success as a function of their own efforts. Students who reported higher grades, scored higher on all three instruments.

Research question 2 examined the extent to which high and low achieving African American high school students differed in their levels of self-efficacy, locus of control, and perceived parent involvement. A median split was used to place students into high and low academic achievement groups. A statistically significant difference was found in mean scores of self-efficacy in participants with high academic performance when compared to students with low academic performance. Students who start their academic careers successfully tend to remain so over time. Conversely, those students who are unsuccessful also remain so over time.

In the investigation of locus of control, a statistically significant difference was found in high and low performing students’ scores for intellectual achievement responsibility. The most surprising finding of the study was that students with high academic achievement had significantly higher scores for both internal and external locus of control. This is a considerable contribution to the current literature on the topic because much of the existing research supports an internal locus of control for high academic achievers. Students with higher self-reported
student achievement were more likely to assume personal responsibility for their success. Locus of control is defined as a personality trait involving the extent to which individuals believe that they can control the outcome(s) of a particular experience. Students with higher academic performance are more likely to have an internal locus of control meaning they were more likely to attribute their success and failures to circumstances over which they have control. If they passed a test, it is because they studied. If they did not pass a test, they were more likely to attribute their lack of success to not studying. In each case, higher performing students took responsibility for their academic achievement, while students in the low performing group were more likely to attribute their success and failure to luck or circumstances for which they had no control.

Additionally, students with higher self-reported student achievement also were more likely to have an external locus of control. One possible explanation of this unexpected finding may be that because they used items over which they had no control as resources to further improve their student achievement. For example, a high achieving student would use teachers, school library, and other peers, all of which are external to assist the furthering their success in school. While these items are not internal, the student controls how these resources are used to assist them. A high achiever has found a way to use both internal and external resources in a manner that is most beneficial to them.

Students with high academic achievement have higher perceptions of their parents’ involvement in their schooling. The research suggested that parents are key in helping the students to be successful in school. Parent structure, time management, and school attendance as measures of parent involvement in their children’s academic achievement differed significantly between high and low achieving students. Parents of high achieving students assist with homework by setting times and places for quiet study time, and make sure that they attend school
daily. These parents make sure activities and time with friends are not interfering with schoolwork. High achieving students were more likely to report that their parents talk to them about school and regularly attend parent-teacher conferences. The parents of high achievers push their children in addition to the children pushing themselves.

Research question 3 focused on differences in self-efficacy, locus of control, and perceived parent involvement relative to the grade level of the students. Significant differences were found for self-efficacy by grade level. Eleventh graders exhibited the highest level of self efficacy and differed significantly from tenth graders. The lowest scores on self efficacy were seen amongst twelfth graders. This difference may be because seniors are of the age where they are becoming more aware of their shortcomings and the reasons behind them.

On the Intellectual Achievement Responsibility instrument, 10th graders had the lowest scores. These scores could be an indication that sophomores were not taking school seriously. They need to develop the maturation necessary to take control of their academic achievement. Tenth graders also differed from eleventh graders for positive intellectual achievement. Tenth and twelfth graders differed negatively on intellectual achievement. These results may be due to seniors finally learning to negotiate external resources to their advantage.

No significant differences were found for parent involvement by grade level. This finding may indicate that the level of involvement of parents by the students’ grade level does not change once that level of commitment has been established. The parents of high achievers continue to be involved in the educational process with their children. Their level of commitment does not wane as their children advance from grade to grade. Conversely, the parents of low achievers exhibit behavior that is consistent with a lack of interest in their child’s behavior and this, too, does not change over time.
Research question 4 investigated if the gender of students in different grade levels (tenth, eleventh, and twelfth) differed in their levels of self-efficacy, locus of control, and perceived parent involvement. According to the analysis of the data, a statistically significant difference was found for gender, grade, and the interaction of gender and grade. Females scored higher on self efficacy than males. Eleventh graders scored higher on self efficacy than tenth graders. An interaction effect was found to exist between tenth and twelfth graders. This interaction effect exists in the eleventh grade and is verified by the analysis of the data. There is no difference in gender, grade, or the interaction between gender and grade as discussed in research question 3.

Research question 5, does academic achievement (grade point average) differ between male and female students in the tenth, eleventh and twelfth grade? According to the analysis, eleventh grade females had the highest self reported grades. This finding may be an indication that eleventh grade students in the district under study are currently taking classes that are of particular interest to the colleges. In the eleventh grade, these students are more likely to be co-enrolled in their third year of foreign language, trigonometry, and chemistry. In the eleventh grade, the students seem to now grasp the “now or never” concept in terms of doing their best in school to make a good showing on their college transcripts. These students are also taking college entrance exams and seem to come to the conclusion that content knowledge gleaned in their classes are paramount for success on these exams. In addition, a growing body of research provides support that girls have higher academic achievement than boys (Klecker, 2006; Ding, Song, & Richardson, 2007).

The research presented in this study indicated that a relationship exists between self efficacy, locus of control, and parental involvement. Students that self-reported higher academic achievement also were more likely to have high self efficacy, indicating that high achievers were more likely to feel that they could do well in school. High achieving students’ belief about their
ability has an effect on how they behave. These positive thoughts influence the way that these students pursue their education and differs from the level of self-efficacy that low achievers are more likely to exhibit. Low achievers were more likely to have low levels of self efficacy and believe that they are pre-disposed to failure. Therefore, they tend to exhibit behavior that is consistent with this belief. This belief, whether or not grounded in truth, may have an effect on the effort that those students put forth in school. A low achiever may not study simply because they feel that it will no do any good anyway.

Because self-efficacy is a belief system and not grounded in fact, educators have a means to enhance it. By providing students with positive experiences where they have greater opportunities to experience success, educators can counter some of the belief systems that low achieving students continue to hold. Teachers need to provide experiences that help these students build on prior knowledge that can reinforce their beliefs about their abilities to achieve educational success.

In this study, 83% of students reported living a home with a single adult. This would certainly reflect the socioeconomic status of the family. Upon investigation of the study, the researcher was surprised to find that only 10% of students who were eligible for free and reduced lunch actually took advantage of those services. The state eligibility rate is 29%. Students were not filling out free-and reduced lunch applications to have those services provided for them. This finding also could be an indication of low-self-efficacy. Because this service is linked to supplementary resources for the school (e.g., Title 1 funding, after-school tutorial services, etc.), another possible study could be completed to improve participation of eligible students for free and reduced lunch services. This increase in participation could also help increase revenues for the school to purchase materials to increase student achievement.
**Recommendations for Practice**

Central office administrators, teachers, parents and all stakeholders in the educational process need to adopt changes in the curriculum that address student’s self-efficacy, locus of control, and parental involvement. Because these factors have been shown to have significant positive correlations with student achievement, schools could benefit by providing students with opportunities to develop an internal locus of control, increase their levels of self-efficacy, and provide opportunities for parents to become more constructively involved in their child’s education. These ideas should be emphasized in professional development programs for new and existing academic programs. Students need to be provided with opportunities to increase their achieve academic success early, often, and repeatedly, and programs should be initiated to increase self-efficacy and locus of control. Additionally, student achievement can be improved with increased parent involvement. Teachers should be provided with professional development on how to instruct students in using external resources to improve academic achievement. Schools can apply this knowledge to create an environment where students and parents are both held responsible to helping students to achieve. Training is needed to improve student achievement and to assist parents in what to do to provide a home environment that is conducive to educational attainment.

**Recommendations for Further Research**

To further examine the influence of self-efficacy, locus of control, and parental involvement on student achievement, the following recommendations for additional research are suggested:

1. Replicate the study using a larger, more diverse sample of students from urban, suburban, and rural schools to determine if self-efficacy, locus of control, and perceptions of parent involvement are related to academic achievement in general.
2. Investigate the relationship between parental involvement and student achievement to
determine if positive parental involvement at the secondary level makes a difference
over four years of high school.

3. Use a longitudinal research design to follow students from sixth grade through twelfth
grade to investigate changes in locus of control over time. Younger students are
expected to have an external locus of control, with this changing to an internal locus
of control as they mature.

4. Compare parent and student perceptions of the importance of parent involvement in
academic achievement to determine if gaps exist between the two groups that may
support the importance of parent involvement in students becoming academically
successful.
### APPENDIX A

### INSTRUMENTS

**Self-in-School**

<table>
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<th>4</th>
<th>5</th>
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<tbody>
<tr>
<td></td>
<td>Completely False</td>
<td>Somewhat False</td>
<td>Neither True or False</td>
<td>Somewhat True</td>
<td>Completely True</td>
</tr>
</tbody>
</table>

Place a check mark (✓) in the column that most closely how true or false each statement is about you.

<table>
<thead>
<tr>
<th></th>
<th>I have the ability to do well in my school work.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<tbody>
<tr>
<td>1</td>
<td>I have the ability to do well in my school work.</td>
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<tr>
<td>2</td>
<td>I put forth my best effort in all of my classes.</td>
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<tr>
<td>3</td>
<td>I know how to study for each of my classes.</td>
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<tr>
<td>4</td>
<td>I am a good student.</td>
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<tr>
<td>5</td>
<td>I expect to gain a great deal from my school experience.</td>
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<tr>
<td>6</td>
<td>I am as capable of succeeding as most students.</td>
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<tr>
<td>7</td>
<td>I have the skills I need to do well in school.</td>
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<tr>
<td>8</td>
<td>I am doing a good job in my classes.</td>
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<tr>
<td>9</td>
<td>I expect that school will be rewarding to me.</td>
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<tr>
<td>10</td>
<td>I am confident I will do well when I take tests.</td>
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<tr>
<td>11</td>
<td>I am confident that I will succeed in school.</td>
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<tr>
<td>12</td>
<td>I expect that I will graduate from school.</td>
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<tr>
<td>13</td>
<td>I am confident that I will reach my academic goals.</td>
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<tr>
<td>14</td>
<td>I am the type of person who does well in school.</td>
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<tr>
<td>15</td>
<td>School is a good experience for me.</td>
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</table>
Intellectual Achievement Responsibility Questionnaire

Place an X in front of the statement that best describes you. There are no right or wrong answers. Please answer all questions and be as honest as possible.

1. If a teacher passes you to the next grade, would it probably be
   ___a. because the teacher liked you, or
   ___b. because of the work you did?

2. When you do well on a test at school, it is more likely to be
   ___a. because you studied for it, or
   ___b. because the test was especially easy?

3. When you have trouble understanding something in school, is it usually
   ___a. because the teacher didn’t explain it clearly, or
   ___b. because you didn’t listen carefully?

4. When you read a story and can’t remember much of it, is it usually
   ___a. because the story wasn’t well written, or
   ___b. because you weren’t interested in the story?

5. Suppose your parents say you are doing well in school, is it likely to happen
   ___a. because your school work is good, or
   ___b. because they are in a good mood?

6. Suppose you did better than usual in a subject at school. Would it probably happen
   ___a. because you tried harder, or
   ___b. because someone helped you?

7. When you lose at a game of cards or checkers, does it usually happen
   ___a. because the other player is good at the game, or
   ___b. because you don’t play well?

8. Suppose a person doesn’t think you are very bright or clever
   ___a. can you make him/her change his/her mind if you try to, or
   ___b. are there some people who will think you’re not very bright no matter what you do?

9. If you solve a puzzle quickly, is it
   ___a. because it wasn’t a very hard puzzle, or
   ___b. because you worked on it carefully?

10. If a boy or girl tells you that you are dumb, is it more likely that they say that
    ___a. because they are mad at you, or
    ___b. because what you did really wasn’t very bright?

11. Suppose you study to become a teacher, scientist, or doctor and you fail. Do you think this would happen
    ___a. because you didn’t work hard enough
    ___b. because you needed some help, and other people didn’t give it to you?

12. When you learn something quickly in school, is it usually
    ___a. because you paid close attention, or
    ___b. because the teacher explained it clearly?

13. If a teacher says to you, “Your work is find,” is it
    ___a. something teachers usually say to encourage pupils, or
    ___b. because you did a good job?

14. When you find it hard to work arithmetic or math problems at school, is it
    ___a. because you didn’t study well enough before you tried them, or
    ___b. because the teacher gave problems that were too hard?
15. When you forget something you heard in class, is it
   _____a. because the teacher didn’t explain it very well, or
   _____b. because you didn’t try very hard to remember?

16. Suppose you weren’t sure about the answer to a question your teacher asked you, but your answer turned out
to be right. Is it likely to happen:
   _____a. because she wasn’t as particular as usual, or
   _____b. because you gave the best answer you could think of?

17. When you read a story and remember most of it, is it usually
   _____a. because you were interested in the story, or
   _____b. because the story was well written?

18. If your parents tell you that you are acting silly and not thinking clearly, is it more likely to be
   _____a. because of something you did, or
   _____b. because they happen to be feeling cranky?

19. When you don’t do well on a test at school, is it
   _____a. because the test was especially hard, or
   _____b. because you didn’t study for it?

20. When you win at a game of cards or checks, does it happen
   _____a. because you play real well, or
   _____b. because the other person doesn’t play well?

21. If people think you are bright or clever, is it
   _____a. because they happen to like you, or
   _____b. because you usually act that way?

22. If a teacher didn’t pass you to the next grade, would it probably be
   _____a. because the teacher “had it in for you,” or
   _____b. because your school work wasn’t good enough?

23. Suppose you don’t do as well as usual in a subject at school. Would this probably happen
   _____a. because you weren’t as careful as usual, or
   _____b. because somebody bothered you and kept you from working?

24. If a boy or girl tells you that you are bright, is it usually
   _____a. because you thought up a good idea, or
   _____b. because they like you?

25. Suppose you became a famous teacher, scientist, or doctor. Do you think this would happen
   _____a. because other people helped you when you needed it, or
   _____b. because you worked very hard?

26. Suppose your parents say you aren’t doing well in your school work. Is this likely to happen more
   _____a. because your work isn’t very good, or
   _____b. because they are feeling cranky?

27. Suppose you are showing a friend how to play a game and he has trouble with it. Would it happen
   _____a. because he wasn’t able to understand how to play, or
   _____b. because you couldn’t explain it well?

28. When you find it easy to work arithmetic or math problems at school, is it usually
   _____a. because the teacher gave you especially easy programs, or
   _____b. because you studied your book well before you tried them?

29. When you remember something you heard in class, is it usually
   _____a. because you tried hard to remember, or
   _____b. because the teacher explained it well?
30. If you can’t work a puzzle, is it more likely to happen
   ____a. because you are not especially good at working puzzles, or
   ____b. because the instructions weren’t written clearly enough?

31. If your parents tell you that you are bright or clever, is it more likely
   ____a. because they are feeling good, or
   ____b. because of something you did?

32. Suppose you are explaining how to play a game to a friend and she/he learns quickly. Would it happen more
   often
   ____a. because you explained it well, or
   ____b. because she/he was able to understand it.

33. Suppose you are not sure about the answer to a question your teacher asks you, and the answer you give turns
   out to be wrong. Is it likely to happen
   ____a. because the teacher was more particular than usual, or
   ____b. because you answered too quickly?

34. If a teacher says to you, “Try to do better,” would it be
   ____a. because this is something she might say to get students to try harder, or
   ____b. because your work wasn’t as good as usual?
## Importance of Parent Involvement

Please rate each of the items using the following scale:

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<th>1</th>
<th>2</th>
<th>3</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

Place a check mark (✓) in the column that most closely matches your agreement with each of the following statements:

1. My parent makes sure that I have done my homework.
2. My parent reviews my school planner on a regular basis.
3. My parent sets a time for me to do my homework.
4. My parent makes sure my activities and time with friends are not interfering with schoolwork.
5. My parent talks to me about my classes and grades.
6. My parent limits the time I watch television.
7. My parent talks with my teachers about classes and grades.
8. My parent attends activities at school.
9. My parent talks with my friend’s parents about school.
10. My parent makes sure that I am at school everyday.

### Demographic Questionnaire

- **Age:**
  - ______ years

- **Gender:**
  - Male
  - Female
  - Twelfth

- **Grade:**
  - Tenth
  - Eleventh
  - Twelfth

- **Academic Achievement:**
  - All As
  - Mostly As and Some Bs
  - Mostly Bs and Some As
  - Mostly Cs and Some Bs
  - Mostly Ds and Some Cs
  - Mostly Fs and Some Ds
  - All Fs
  - Mostly Cs and Some Ds
  - Mostly Bs and Some Cs
  - Mostly As and Some Bs
  - All As

- **Who do you live with?**
  - Both parents
  - Mother only
  - Father only
  - Mother & Stepfather
  - Father & Stepmother
  - Grandparents
  - Other __________________
PARENT CONSENT FORMS AND STUDENT ASSENT FORMS

Parental Informed Consent Form

Title of Study: The Impact of Self-Efficacy, Locus of Control, and Perceived Parental Influence on the Academic Performance of Low and High Achieving African American High School Students

Principal Investigator (PI): Frances Curtis-Fields

Purpose:
You are being asked to allow your child to be in a research study at your child’s school that is being conducted by Frances Curtis-Fields, a student from Wayne State University to study to find out how self-efficacy, locus of control, and parent influence affects academic achievement.

Study Procedures:
If you decide to allow your child to take part in the study, he/she will be asked to complete three short surveys, Self-in-School, Intellectual Achievement Responsibility Questionnaire, and Importance of Parent Involvement. In addition, you will be asked to complete a short demographic survey.

Examples of items from the Self-in-School include:

1. I have the ability to do well in my school work.
2. I am a good student.
3. I expect that school will be rewarding to me.

You will be asked to rate each item on the survey from 1 indicating completely false to 5 for completely true. There are no right or wrong answers.

Samples of items from the Intellectual Achievement Responsibility Questionnaire include:

1. If a teacher passes you to the next grade, would it probably be:
   a. Because the teacher liked you?
   b. Because of the work you did?
2. When you lose at a game of cards or checkers, does it usually happen
   a. Because the other player is good at the game?
   b. Because you don’t play well?
3. When you learn something quickly in school, is it usually
   a. Because you paid close attention, or
   b. Because the teacher explained it well.

You will select the response (either a or b) that most closely describes you. There are no right or wrong answers.
Parent Consent Form

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Principal Investigator (PI): Frances Curtis-Fields

Sample items from the Importance of Parent Involvement survey include:

1. My parent makes sure that I have done my homework.
2. My parent sets a time to do my homework.
3. My parent limits the time I watch television.

You will rate each item on the survey using a 5-point scale ranging from 1 for strongly disagree to 5 for strongly agree. There are no right or wrong answers on this survey.

The demographic survey is used to obtain information from the student about his/her age, grade in school, ethnicity, gender, and self-reported academic achievement.

Students will be able to skip any items with which they are uncomfortable.

The surveys will be available in the school office if you would like to review them prior to returning this informed consent form.

Benefits:
No known benefits to students. Parents, teachers and administrators in the school district can benefit by understanding how high school students with high and low academic achievement differ on self-efficacy, locus of control, and perceptions of the importance of parent involvement.

Costs
There is no cost for participating in this study.

Risks:
There are no known risks at this time to participation in this study.

Compensation:
You or your child will not be paid for your child’s participation in this research study.

Confidentiality:
All information collected about your child during the course of this study will be kept confidential to the extent permitted by law. However, the study sponsor, the Human Investigation Committee (HIC) at Wayne State University or federal agencies with appropriate regulatory oversight, may review student responses.
Parent Consent Form

Title of Study: The Impact of Self-Efficacy, Locus of Control, and Perceived Parental Influence on the Academic Achievement of African American Students with Low Socioeconomic Status

Principal Investigator (PI): Frances Curtis-Fields

Voluntary Participation /Withdrawal:
Your child’s participation in this study is voluntary. You may decide that you do want your child to take part in this study, or if you decide to take part, you or your child can change your minds later and withdraw from the study. You are free to withdraw your child at any time. Your decision will not change any present or future relationships with Wayne State University or its affiliates, your child’s school or other services you are entitled to receive.

Questions: If you have any questions now or in the future, you may contact Frances Curtis-Fields at the following phone number or by email at . If you have questions or concerns about your rights as a research participant, the Chair of the Human Investigation Committee can be contacted at (313) 577-1628.
Parent Consent Form

Title of Study: The Impact of Self-Efficacy, Locus of Control, and Perceived Parental Influence on the Academic Performance of Low and High Achieving African American High School Students

Principal Investigator (PI): Frances Curtis-Fields

Participation:

X. Consent to Participate in a Research Trial

Regardless of whether you choose to allow your child to participate in this study, the informed consent form should be returned to the researcher in the enclosed preaddressed, postage-paid envelope via the United States Postal Service. Please indicate your agreement/disagreement to allow your child to participate in the study on “The Impact of Self-Efficacy, Locus of Control, and Perceived Parental Influence on the Academic Achievement of African American Students with Low Socioeconomic Status” by placing a check mark in the appropriate box. Sign and return one copy of the informed consent form to the researcher in the enclosed envelope. Retain the second copy for your records.

☐ I agree to allow my child to participate in the study on “The Impact of Self-Efficacy, Locus of Control, and Perceived Parental Influence on the Academic Achievement of African American Students with Low Socioeconomic Status”

☐ I do not agree to allow my child to participate in the study on “The Impact of Self-Efficacy, Locus of Control, and Perceived Parental Influence on the Academic Achievement of African American Students with Low Socioeconomic Status”

______________________________________________
Child’s Name

______________________________________________
Signature of Participant/ Legally Authorized Representative ____________________________ Date __________

______________________________________________
Printed Name of Participant/ Legally Authorized Representative

______________________________________________
Signature of Person Obtaining Consent ____________________________ Date __________

______________________________________________
Printed Name of Person Obtaining Consent
Adolescent Assent Form

Title of Study: The Impact of Self-Efficacy, Locus of Control, and Perceived Parental Influence on the Academic Performance of Low and High Achieving African American High School Students

Principal Investigator (PI): Frances Curtis-Fields

Why am I here?
This is a research study. Only people who choose to take part are included in research studies. You are being asked to take part in this study because you are a student at Henry Ford High School. Please take time to make your decision. Be sure to ask questions about anything you don’t understand.

Why are they doing this study?
This study is being done to find out how self-efficacy, locus of control, and parent influence affects academic achievement.

What will happen to me?
If you decide to participate in the study, you will be asked to complete three short surveys, Self-in-School, Intellectual Achievement Responsibility Questionnaire, and Importance of Parent Involvement. In addition, you will be asked to complete a short demographic survey.

Examples of items from the Self-in-School include:

1. I have the ability to do well in my school work.
4. I am a good student.
5. I expect that school will be rewarding to me.

You will be asked to rate each item on the survey from 1 indicating completely false to 5 for completely true. There are no right or wrong answers.

Samples of items from the Intellectual Achievement Responsibility Questionnaire include:

3. If a teacher passes you to the next grade, would it probably be:
   a. Because the teacher liked you?
   b. Because of the work you did?
4. When you lose at a game of cards or checkers, does it usually happen
   a. Because the other player is good at the game?
   b. Because you don’t play well?
3. When you learn something quickly in school, is it usually
   a. Because you paid close attention, or
   b. Because the teacher explained it well.
Adolescent Assent Form

Title of Study: The Impact of Self-Efficacy, Locus of Control, and Perceived Parental Influence on the Academic Performance of Low and High Achieving African American High School Students

Principal Investigator (PI): Frances Curtis-Fields

You will select the response (either a or b) that most closely describes you. There are no right or wrong answers.

Sample items from the Importance of Parent Involvement survey include:

4. My parent makes sure that I have done my homework.
5. My parent sets a time to do my homework.
6. My parent limits the time I watch television.

You will rate each item on the survey using a 5-point scale ranging from 1 for strongly disagree to 5 for strongly agree. There are no right or wrong answers on this survey.

The demographic survey is used to obtain information from the student about his/her age, grade in school, ethnicity, gender, and self-reported academic achievement.

Students will be able to skip any items with which they are uncomfortable.

How long will I be in the study?
Your participation should not take more than 30 minutes.

Will the study help me?
You may not benefit from being in this study; however information obtained from the surveys will help parents, administrators, and teachers understand how high school students with high and low academic achievement differ on self-efficacy, locus of control, and perceptions of the importance of parent involvement.

Will anything bad happen to me?
Nothing bad will happen to you or any other students who participate in the study.

Do my parents know about this study?
This study information has been given to your parents/guardian and they said that you could participate in the study.
Adolescent Assent Form

Title of Study: The Impact of Self-Efficacy, Locus of Control, and Perceived Parental Influence on the Academic Achievement of African American Students with Low Socioeconomic Status

Principal Investigator (PI): Frances Curtis-Fields

What about confidentiality?
Every reasonable effort will be made to keep your responses confidential. Your name and other identifying information will not be on the survey.

What if I have any questions?
For questions about the study, please call Mrs. Frances Curtis-Fields at (313) 850-7460. If you have questions or concerns about your rights as a research participant, the Chair of the Human Investigation Committee can be contacted at (313) 577-1628.

Do I have to be in the study?
You do not have to be in this study if you do not want to or you can stop being in the study at any time. Please discuss your decision with the research assistant. No one will be angry if you decide to stop being in the study.
Adolescent Assent Form

Title of Study: The Impact of Self-Efficacy, Locus of Control, and Perceived Parental Influence on the Academic Performance of Low and High Achieving African American High School Students

Principal Investigator (PI): Frances Curtis-Fields

Agreement to be in the Study

Your signature below means that you have read the above information about the study and have had a chance to ask questions to help you understand what you will do in this study. Your signature also means that you have been told that you can change your mind later and withdraw if you want to. By signing this assent form you are not giving up any of your legal rights. You will be given a copy of this form.

☐ I agree to participate in the study on “The Impact of Self-Efficacy, Locus of Control, and Perceived Parental Influence on the Academic Achievement of African American Students with Low Socioeconomic Status”

☐ I do not agree to participate in the study on “The Impact of Self-Efficacy, Locus of Control, and Perceived Parental Influence on the Academic Achievement of African American Students with Low Socioeconomic Status”

____________________________________________  ________________________
Signature of Participant (13 yrs. and older) Date

____________________________________________
Printed name of Participant (13 yrs. and older)

____________________________________________  ________________________
Signature of Person who explained this form Date

____________________________________________
Printed Name of Person who explained this form
NOTICE OF EXPEDITED APPROVAL

To: Frances Curtis-Fields
College of Education

From: Elisa Shuster, Ph.D.
Chairperson, Behavioral Institutional Review Board (BIRB)

Date: October 02, 2003

ID #: 0003047
Protocol Title: A Study of the Differences in Social Networking, Level of Control, and Perceived Parental Influence on Low and High Achieving African American Students with Low Socioeconomic Status

Expiration Date: October 01, 2010
Risk Level / Category: IRB 40404 - Research not involving greater than minimal risk

The above-referenced protocol and items listed below (if applicable) were APPROVED (following Expedited Review (Category 7)) by the Chairperson and members of the Wayne State University Behavioral Institutional Review Board (BIRB) for the period of 10/02/2003 through 10/01/2010. This approval does not replace any department or other approvals that may be required.

- Assent Form
- Parental Information Sheet

1. Relevant regulations mandate that all research be reviewed and approved. The procedures "Consent Form Template" (below) must be used prior to the beginning of research. The consent form must be reviewed and approved by the Department of Behavioral Sciences.

2. All cases involving this study are confidential, and data will be de-identified. All data will be stored securely and will only be made available to authorized personnel.
REFERENCES


ABSTRACT

THE IMPACT OF SELF-EFFICACY, LOCUS OF CONTROL, AND PERCEIVED PARENTAL INFLUENCE ON THE ACADEMIC PERFORMANCE OF LOW AND HIGH ACHIEVING AFRICAN-AMERICAN HIGH SCHOOL STUDENTS WITH LOW SOCIOECONOMIC STATUS

by

FRANCES E. CURTIS-FIELDS

AUGUST, 2010

Advisor: Dr. Roger DeMont

Major: Educational Leadership and Policy Studies

Degree: Doctor of Education

The purpose of this study was to investigate the impact of self-efficacy, locus of control, and perceived parental influence on the academic achievement of African-American high school students from low socioeconomic levels. A nonexperimental, descriptive research study was used to collect the data needed to address the research questions posed for this study. High school students enrolled in one high school in a large urban school district were asked to participate in the study. These students completed three instruments, Self in School, Importance of Parent Involvement, and the Intellectual Achievement Responsibility questionnaire (IAR), along with a short demographic survey developed by the researcher.

The outcomes suggested that self-reported academic achievement was significantly related in a positive direction to self-efficacy, locus of control, and perceptions of parent involvement. A statistically significant difference was found in mean scores of self efficacy in participants with high academic performance when compared to students with low academic performance. Students who started their academic careers successfully tended to remain so over time. Conversely, those students who were unsuccessful also remained so over time. Significant
differences were found for self-efficacy by grade level. Eleventh graders exhibited the highest level of self efficacy and differed significantly from tenth graders. A statistically significant difference was found for gender, grade, and the interaction of gender and grade. Females scored higher on self efficacy than males. Eleventh grade females had the highest self reported grades. The research presented in this study indicated that a relationship existed between self efficacy, locus of control, and parental involvement. Students who self-reported higher academic achievement also were more likely to have high self efficacy, internal and external locus of control, and the perception that their parents were very involved in their schooling.
AUTOBIOGRAPHICAL STATEMENT

FRANCES E. CURTIS-FIELDS

Education:
2010: Doctor of Education
Wayne State University, Detroit, MI
Major: Educational Leadership and Policy Studies

2005: Education Specialist
Wayne State University, Detroit, MI
Major: Educational Leadership and Policy Studies

1999: Master of Arts in Teaching
Wayne State University, Detroit, MI
Major: Mathematics Education

1993: Bachelors of Science
Lincoln University, Jefferson City, MO
Major: Mathematics

Certification: State of Michigan: Mathematics and Science 6th through 12th grades

Professional Experience
1994 to Present
   2009 to present Teacher: Renaissance High School
   2008 to 2009 Teacher: Henry Ford High School
   2005 to 2008 Dean of Students: Henry Ford High School
   2004 to 2005 Teacher: Henry Ford High School
   2002 to 2004 Curriculum Leader: Henry Ford High School
   2001 to 2002 Assistant Principal: Henry Ford High School
   1994 to 2001 Teacher: Henry Ford High School

Memberships
   National Science Teacher Association
   National Council of Teachers of Mathematics
   National Association of Black School Educators
   Phi Delta Kappa
   Alpha Kappa Alpha Sorority, Inc.