

CHALLENGES OF STUDYING ATTRIBUTES ASSOCIATED WITH AFRICAN  
AMERICAN MALES WHO ARE NOT SUCCESSFUL WITH TESTING MEASURES

by

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ABSTRACT

African Americans continue to perform significantly lower on high-stakes measures of educational achievement than do other ethnic groups. Osborn (1997) attributes this low performance by African Americans to their *disidentification* with the academic discourse. Ickes and Layden (1976), Metalsky, Abramson, and Peterson (1982), Finn (1989), and Belgrave, Johnson, and Carey (1992) relate the poor performance of African Americans to the manner in which they internalize/externalize negative and positive outcomes and the longevity of such outcomes being internalized, which they term *locus of control*. This study explores the variables of self-esteem, locus of control, test anxiety, reading ability, testing behaviors and the performance of African American males on high-stakes tests of educational achievement. Simultaneously, the study provides a reflection on the challenges faced by a practitioner when he studies an issue of critical concern in his own community.

## ACKNOWLEDGEMENTS

But thanks be to God, who give us  
victory through our Lord Jesus Christ...that  
we may know that our labor is not in vain.  
I Corinthians 15:57,58

Although it has been a long haul, I want to thank those individuals who walk the long road of progress with me, even when I changed the focus of my dissertation that prolonged my work for an extra year.

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You know the saying: “It takes a village to raise a child.” I say that it takes a loving family to put up an individual participating in a doctoral program. My inspiration and devotion came from my wonderful wife, Pamla, and two sons, Aaron and Marvin. Their smiles, hugs, waiting up late at nights, words of encouragement, and prayers gave me the strength to endure.

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Marvin H. McGinnis  
Bedford, Virginia

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CHAPTER I  
THE STUDY IN PERSPECTIVE

In April of 1983, David Gardner, Chairman of the National Commission on Excellence in Education, delivered a shocking message to the nation about the quality of education in America. In this *Nation-At-Risk* report, Mr. Gardner noted that:

Our society and its educational institutions seem to have lost sight of the basic purposes of schooling, and the high expectations and disciplined effort needed to attain them. This report, the result of 18 months of study, seeks to generate reform of our educational system in fundamental ways and to renew the Nation's commitment to schools and colleges of high quality throughout the length and breadth of our land. (p. 5)

In its report on the state of public education, the *Nation-At-Risk* report addressed student achievement on high-stakes tests. The report proclaimed that: a) high school students on average scored lower on most high-stakes tests compared to performance in the 1950s; b) the verbal and mathematics scores on the Scholastic Aptitude Test (SAT) dropped 50 and 40 points respectively on average, demonstrating a decline in achievement; and c) college graduates also demonstrated an average decline in achievement test scores. The oversight, however, of the commission's report was the fact that gaps existed in achievement scores between African Americans and other ethnic groups. Furthermore, the scores for African Americans were showing continuous decline over time.

Over a decade later, the National Center for Education Statistics (NCES, 2000) reported that gaps between White and African American students remained in several content areas such as mathematics and reading (refer to Figures 1 and 2). African Americans continued



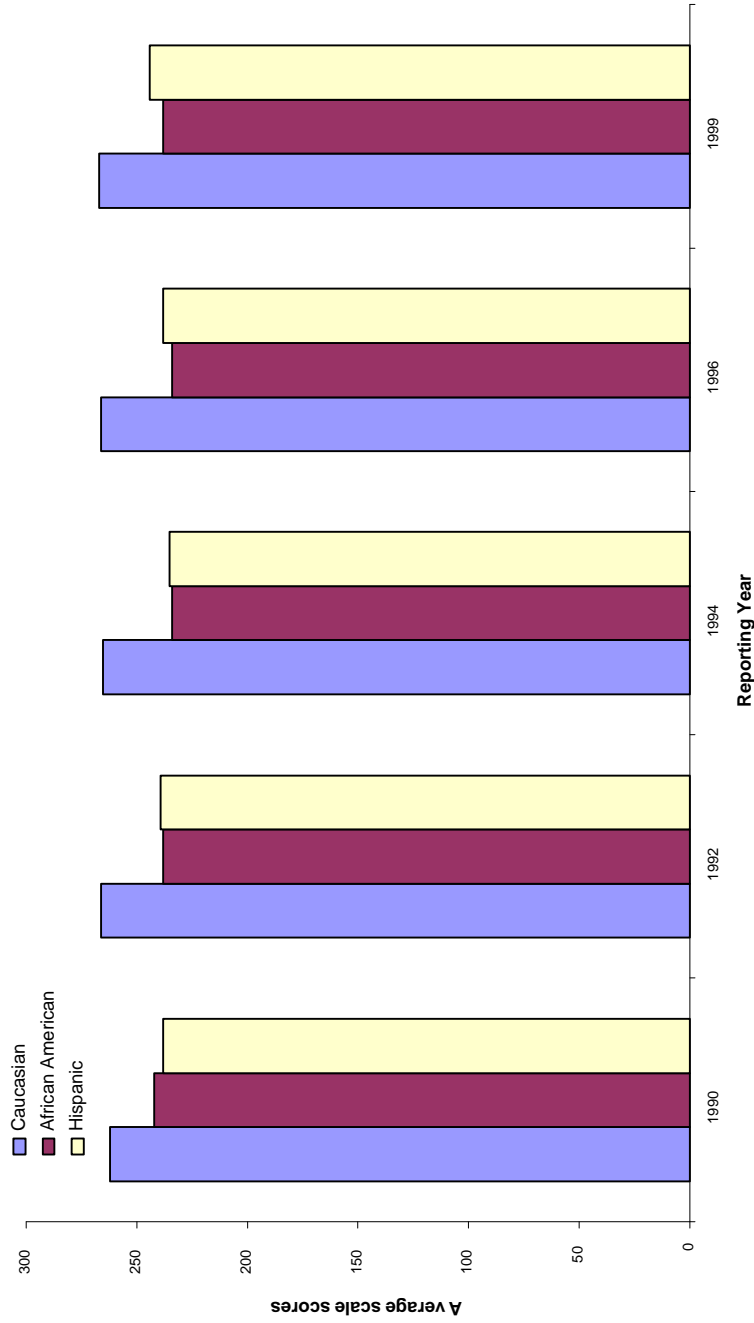


Figure 1: National average reading scale scores for eighth grade students by ethnicity and reporting year (National Center for Education Statistics, 2000)

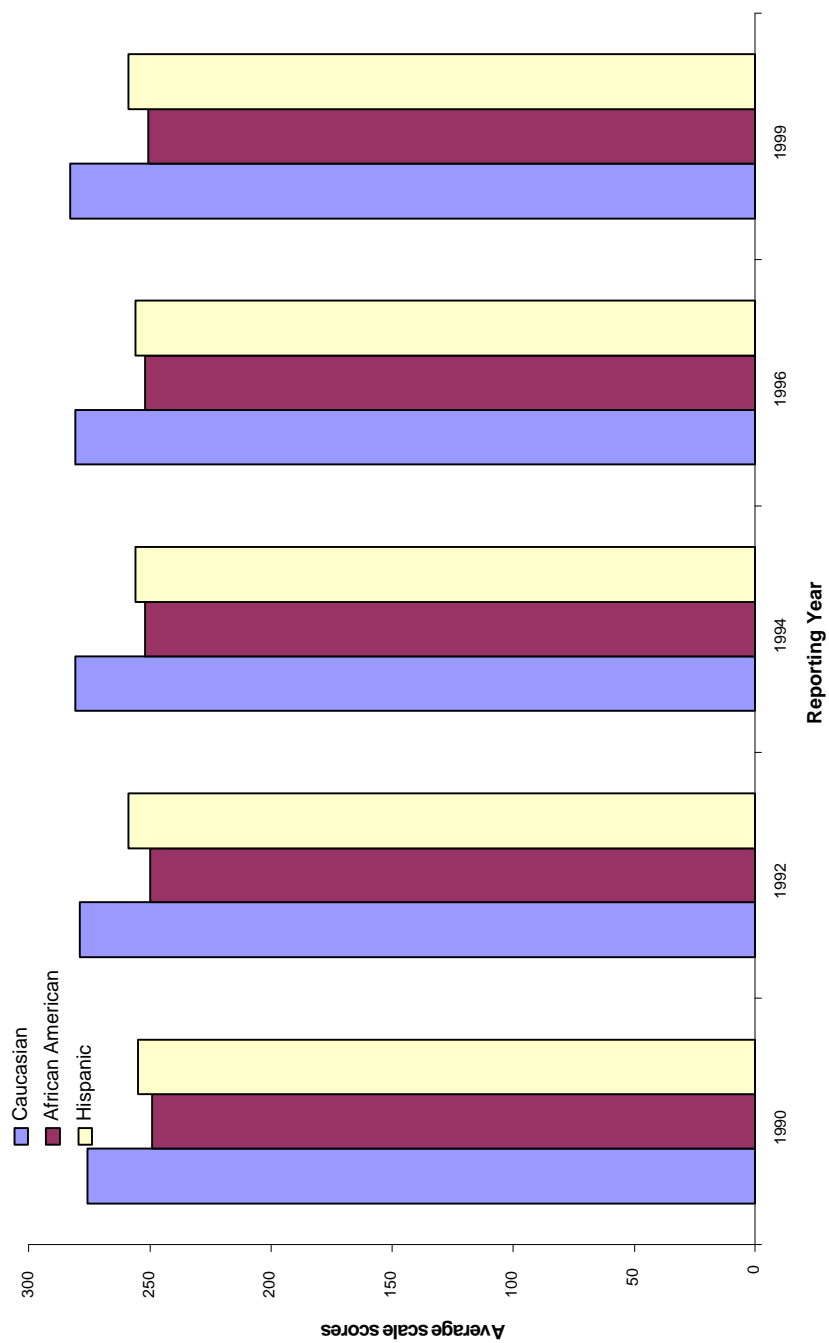


Figure 2: National average mathematics scale scores for eighth grade students by ethnicity and reporting year (National Center for Education Statistics, 2000)

to trail other ethnic groups. This trend of lower African American achievement on high-stakes measures was not new, but rather existed a decade before the *Nation-At-Risk* report. While the trend in lower African American achievement on high-stakes measures continued, the implementation of high-stakes testing gained national and state momentum in public education.

President Clinton expanded the implementation of high-stakes testing by challenging states to set higher standards as a reform measure of education excellence. President Clinton called for more state, district, school, teacher, and student accountability toward excellence in education to ensure that all students were provided the education to compete in the new economy (State of the Union Address, 1999). Perhaps in realizing that the President was making a challenge to reform academic standards, many states implemented reform measures that utilized high-stakes tests as the best means to measure school, teacher, and student accountability. Colorado lawmakers passed legislation that would grade its schools based on state test results. A failing grade would give the state the freedom to replace failing schools with independent charter schools (Sandham, 2000). Georgia, likewise, passed measures to evaluate its schools based on student performance on state tests, with financial rewards given to those schools that excel in performance, and punitive actions in form of personnel firing or relocation to another school imposed on those schools failing to excel (Archer, 2000). Many states such as New York, Massachusetts (Gehring, 2000), and Virginia have tied student performance on high-stakes tests to graduation. In these cases students are required to achieve passing scores on exams in the core subject areas (English, Mathematics, Science and History) to receive a high school diploma. Virginia chose to implement a broader range of the Standards of Learning (SOLs) to ensure district level, students, and teacher accountability. As a result, student performance on the

high-stakes SOL tests will affect local schools' decisions about grade promotion in the elementary and middle schools and will be one determinant for earning a high school diploma beginning with the Class of 2004. By 2007, a school's accreditation will be dependent upon a 70% passing rate (Schroder, 1998). Therefore, Virginia public school divisions will face the challenge of raising academic standards for those students who have historically shown substandard performance, including African Americans.

The Spring 1999 results of the Virginia SOLs indicated that students overall, including African Americans, did better than in 1998. However, this information is misleading when analyzed in reference to the gains made. African Americans continue to trail other ethnic groups in all of the core subject areas. African Americans scored 29 points lower than Caucasians and 16 points lower than Hispanics on the English 8 test. On the Mathematics 8 test, African Americans scored 32 points lower than Caucasians and 21 points lower than Hispanics. Although achievement scores for African Americans increased from 1998 to 1999, they remain lower than other ethnic groups. Figures 3 and 4 show that the achievement gap issue is present, even with the release of the 2000 and 2001 Standards of Learning scores (Virginia Department of Education, 2000, 2002).

#### Statement of the Problem

African Americans, as a group, perform lower than other ethnic groups on high-stakes tests of educational achievement. Many studies have documented explanations and relationships between grades, socioeconomic status, and the performance of ethnic groups on high-stakes tests (Hansford & Hattie, 1982; Timberlake, 1999). Many theories have provided explanations for African Americans' *disidentification* (Steele, 1992 & 1995, Osborne, 1997) with high-stakes

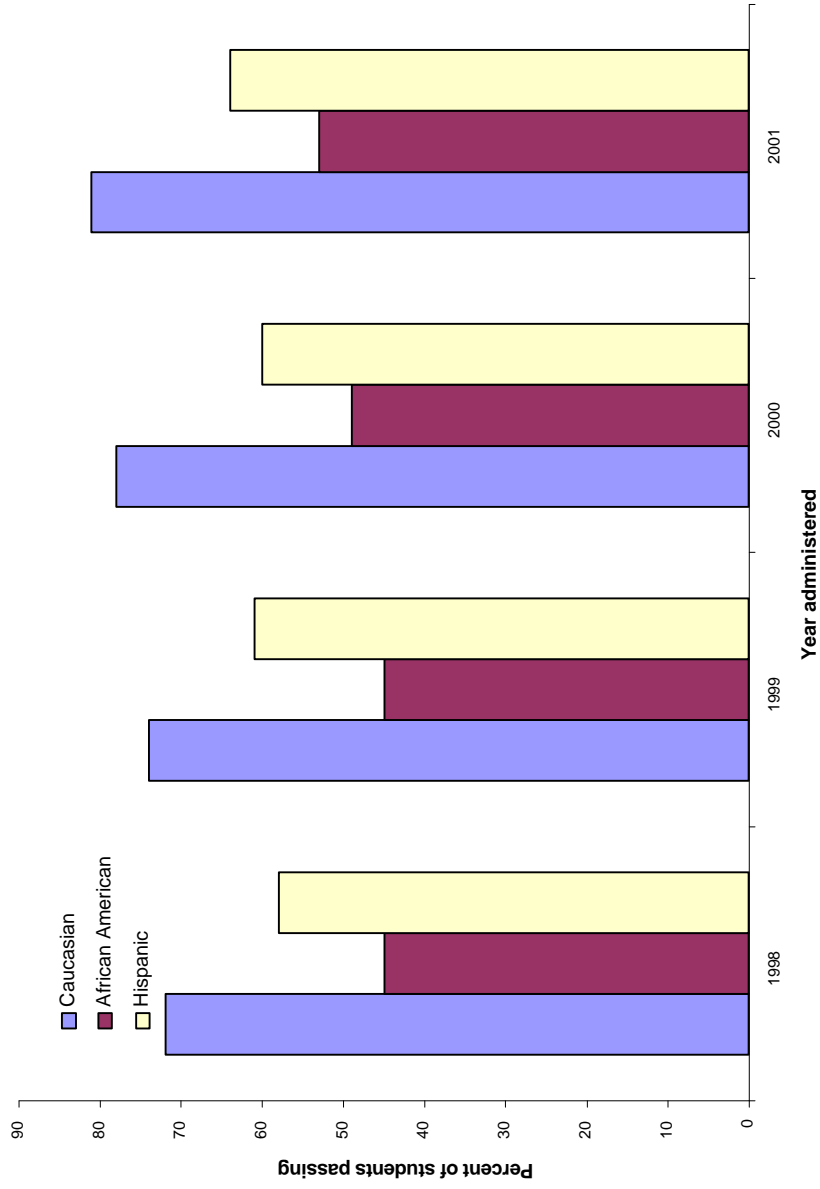


Figure 3: Virginia Standards of Learning Spring scores for English 8 by ethnicity and reporting year (Released by the Virginia Department of Education)

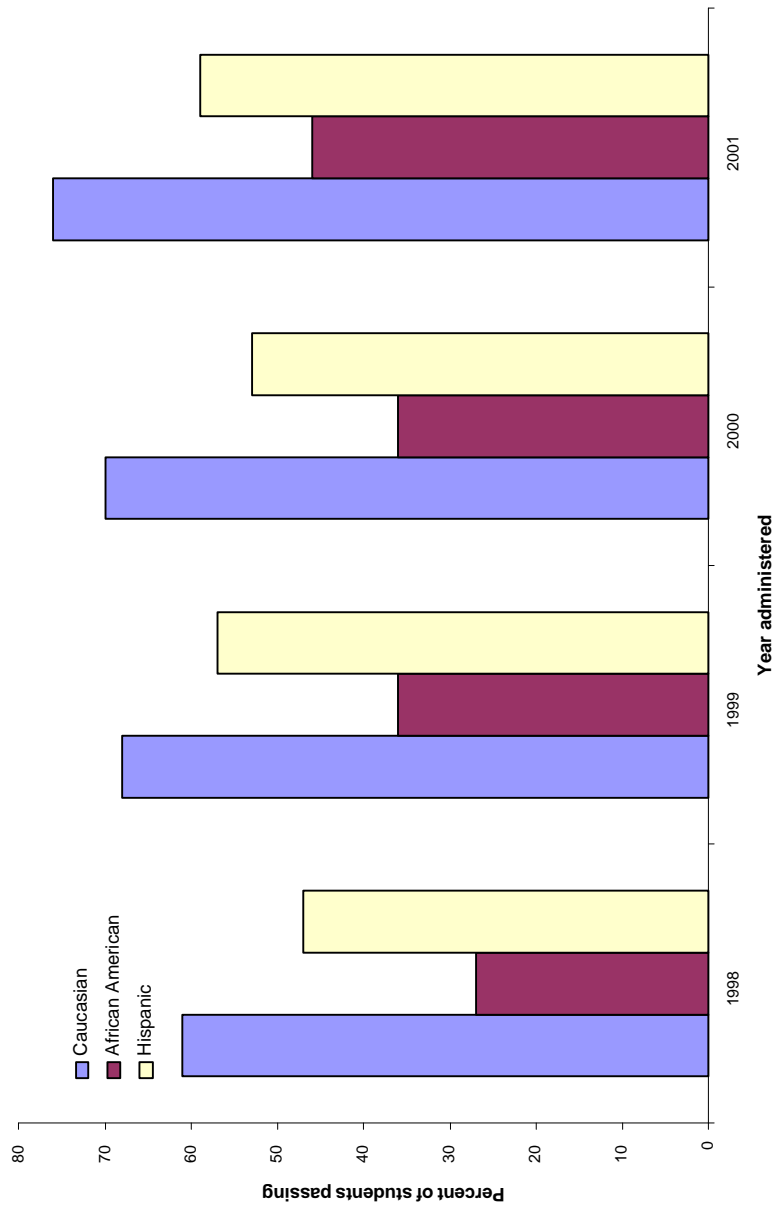


Figure 4: Virginia Standards of Learning Spring scores for Mathematics 8 by ethnicity and reporting year (Released by the Virginia Department of Education)

tests. Further study, however, is needed to examine where the problem resides within the African American group. This study explores the performance of African American males on high-stakes tests and those influential variables that directly affect students.

This study explores those student variables of self-esteem, locus of control, test anxiety, reading ability, and testing behaviors and African American males' performance on high-stakes tests of educational achievement. Simultaneously, the study provides a reflection on the challenges faced by a practitioner when he studies an issue of critical concern in his own racial/ethnic community.

### Research Questions

The study investigated the questions: 1) What is the relationship among the attributes of self-esteem, locus of control, test anxiety, reading ability, test taking behaviors and African American males' performance on high stakes tests of educational achievement (Mathematics 8 and English 8)? and 2) What are the challenges faced by a practitioner when he studies an issue of critical concern in his own racial/ethnic community?

### Significance and Purpose of the Study

The issue of the achievement gap, in retrospect, has been personally and professionally perplexing. I remember the psychological challenges I encountered when I experienced the Scholastic Aptitude Test (SAT) for the first time as a high school junior. Even though, the SAT is an aptitude test, those psychological challenges existed. The beat of my heart accelerated. My left foot shook so uncontrollably that I literally had to hold it down with the other foot. My head began to ache from the constant replay of the voices of teachers and peers saying how hard the tests were, and that to get into college you had to achieve a total score well above 1200. Anything less would mean rejection, denial, and the end of my endeavor to continue on the road

of lifelong learning at an institution of higher education. My mind was preoccupied so much with these thoughts that I developed a mental-block, was unable to concentrate on the test questions, or to recall known information. When attention was given to the questions at hand, I was confronted with the reality that I had not mastered, or at least retained to a degree of applying, those higher-level skills necessary to arrive at the correct answers. I had not been exposed to the format of the test, nor the vocabulary used to construct the questions. I felt defeated prior to the commencement of the test. The consequence, of course, was the experience of failure with high-stakes tests of educational achievement, in spite of excelling academically in high school with regular and advanced academic courses. I found that this personal failure would forever influence my attitude toward and performance on high-stakes tests of educational achievement.

My personal failure with high-stakes tests of educational achievement had long-term impacts. Those psychological challenges experienced during my first exposure to the Scholastic Aptitude Test were rekindled (the headaches, the nervous twitching of my left foot, the mental-block of known information, and the belief that my competence to be academically successful as an African American male was being challenged by those who knew nothing about me) each time I took the test. Although I would achieve a higher score on each administration of the test, the scores were not high enough to meet the expectations deemed necessary to attend an institution of higher education. Over the course of many years and test administrations, I developed a defensive attitude toward high-stakes tests. I saw them as being irrelevant to my academic successes and getting into an institution of higher education, while simultaneously, I maintained positive attitudes toward school and my educational experiences. I merely went through the process of taking the high-stakes test because it was required. More rewarding were the successful experiences with my academic course work and the educational opportunities



provided me to gain exposure, which in turn helped me to gain the knowledge and skills necessary to be personally and professionally successful.

My personal and professional experiences with high-stakes tests of educational achievement humbled me, and I understand what students and parents are going through today with the demands placed on them by the implementation of high-stakes tests. I witnessed students who demonstrated anxiety prior to testing, excelled with their academic course work, but who were unsuccessful with high-stakes tests. They had developed a poor self-concept toward testing, while maintaining the desire to obtain a good education. On the other hand, there were those students who showed no remorse about failures. They came to *disidentify* with both events as important variables to their successes in life. The administration of high-stakes tests, therefore, became a process of marking every question with a “c” to them. Like concerned parents, I was perplexed about the significance of high-stakes used as accountability measures. Were these tests the best measures of student achievement? Or, were they doing more psychological harm to students who prove successful in the classroom, but were poor test takers due to anxiety?

The personal attributions of a student to internalize or externalize life events (especially negative events) can have educational repercussions. Students who experience failure and continue to internalize such failure are prone to succumb to failure when repeatedly faced with the same event, or events. They, therefore, come to *disidentify* with the event in order to avoid the future embarrassment of failure. This *disidentification*, in essence, can lead to the unfortunate result of students’ withdrawing from school activities or dropping out of school as noted by the research of Finn (1989).

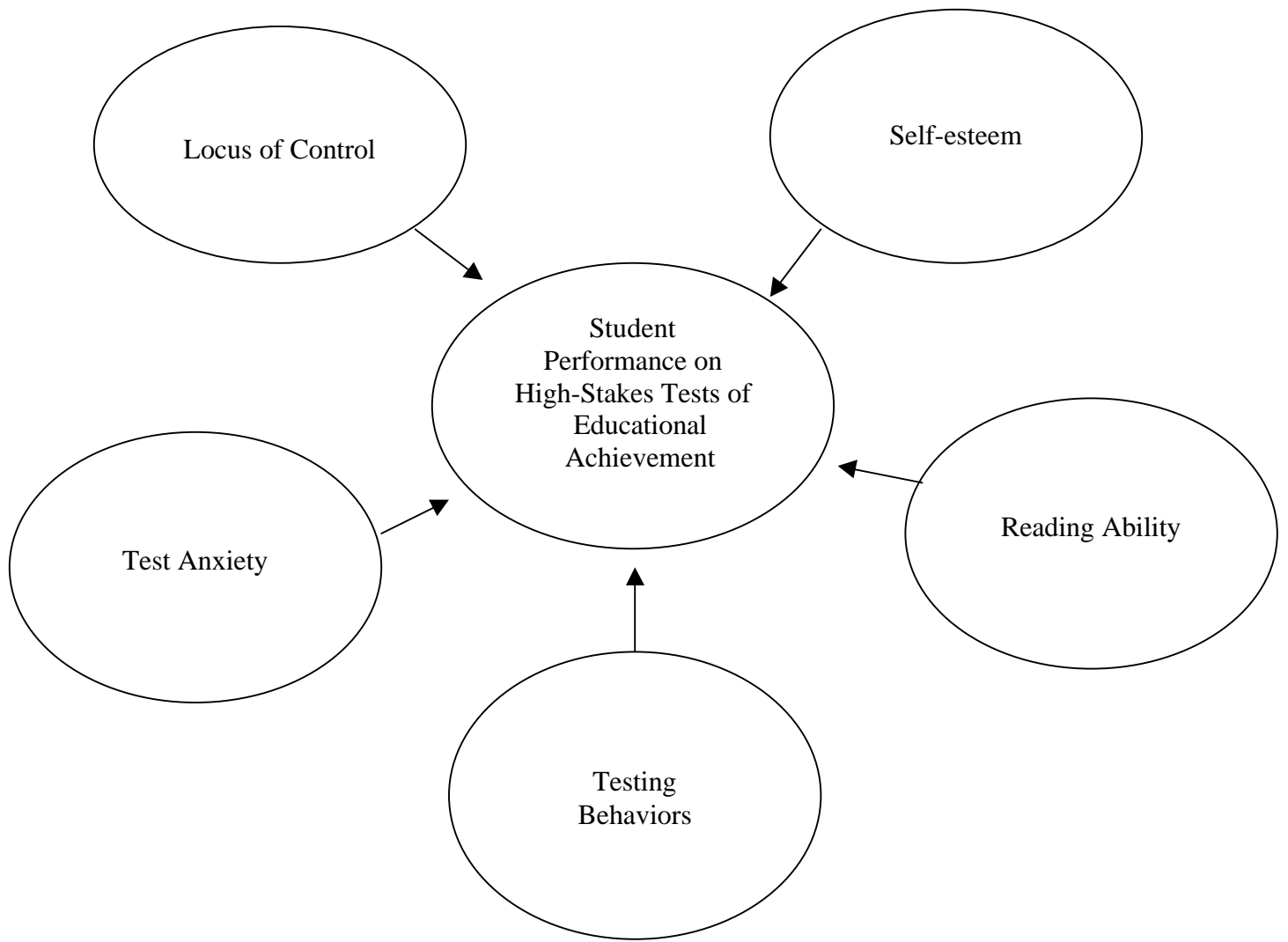
Jeremy Finn (1989) provides a theory on *participation-identification*. Finn's theory relates behavior problems and potential dropouts to "reduced self-esteem" that originates from "unsuccessful school outcomes" (p. 122). Unlike Steele (1989) and Belgrave, Faye, Johnson, Reginald, and Carey's (1992), the variables influencing unsuccessful outcomes are associated with the deficiencies of educational practices (instruction, discipline, and types of programs) as opposed to societal or personal variables. Similarities, however, do exist among the theories of self-esteem, *disidentification*, test anxiety, *attributional* styles, and *participation-identification*. Each suggests that the low academic performance, or achievement, of students is related to a self-esteem that has been damaged by preconceived negativism or previous unsuccessful experiences (causes). African American males' performances on high-stakes tests can be explained in terms of preconceived or experienced failure—whether institutional, societal, or personal—which can pose a detriment to a student's self-esteem and academic performance. African Americans, especially males, come to specifically *disidentify* with high-stakes tests as a way to "protect their self-esteem or self-concept in general" (Osborne, 1997, p. 3).

As a public educator and administrator of ten years, I saw the positive and negative aspects of high-stakes tests. They were beneficial when used to guide instructional decisions. On the other hand, they penalized good students who performed well academically, but were unsuccessful with high-stakes tests. The latter point was obvious during the annual disaggregation of student data after the administration of high-stakes tests. African American students, especially males, were less successful with high-stakes tests of educational achievement than other ethnic and gender groups of the same school, in spite of being successful with academic course work. More perplexing were teachers' comments about these students possessing the capability and ability to perform better. I felt, therefore, the duty as an African

American male, educator, and father of two African American males to explore the perplexity of African American males' performance on high-stakes tests of educational achievement.

High-stakes testing, accountability measures imposed on students as well as school divisions that are linked to students' test performance (i.e., graduation and accreditation restrictions, respectfully), is becoming a trend in American education. The low and declining performance of African Americans on high-stakes tests of educational achievement continues to coincide with the increasing trend toward high-stakes testing. Although researchers have addressed the issue of the achievement gap in terms of ethnic groups as a whole, there exists little or no research that explore the within-ethnic group performance by genders and those variables that directly impact students.

With the implementation of the Standards of Learning (SOL) testing, student performance on these tests will become a prerequisite for grade promotions and, ultimately, for graduation. Furthermore, aggregated student performance will be used to determine the continuation of accreditation for public schools. Studying the variables of self-esteem, locus of control, test anxiety, reading ability, and test taking behaviors of African American males in reference to high-stakes tests (Virginia Standards of Learning) of educational achievement at the middle school level has many benefits. This study will provide information to benefit educators, test makers, and policy makers about possible variables that may influence the performance of African American males on high-stakes tests of educational achievement (refer to Figure 5). The availability of such information will aid in the awareness of psychological variables that educators need to take into consideration when planning and implementing instructional and curriculum designs, developing lesson plans and teacher-made assessments, and delivering instruction. Finally, I hope that parents will come to understand the problems divisions, teachers,



*Figure 5: Attributes associated with student achievement*

and students face when confronted with the pressures imposed on them by high-stakes tests of educational achievement.

### Theories in Review

The literature review emphasizes various theories related to student performance on high-stakes tests of educational achievement. In retrospect, these theories offer possible explanations for why a group, or groups, of students are unsuccessful with high-stakes tests of educational achievement.

#### *Self-esteem and Disidentification*

In *Society and the Adolescent: Self-Image* (1965), Morris Rosenberg studied the self-attitude of over 5,000 junior and senior high school students. Self-esteem is the degree of global positive or negative attitude toward the self. The premise of the study was to determine the attitude of a subject toward him/herself and toward different objects at the stage of life when physiological and psychological changes were commencing. Rosenberg's research exhibited several findings associated with the self-esteem of the adolescent in reference to various circumstances.

According to Rosenberg's findings, self-esteem influenced several factors associated with anxiety. They included: a) instability of self-image; b) how the adolescent presented him/herself; c) vulnerability, and d) a feeling of isolation. Of importance to this study are the findings associated with the instability of self-image. The findings presented an association between subjects with low self-esteem and changing, or unstable, attitudes about him/herself. Of the subjects studied, 42% of those with low self-esteem experienced unstable attitudes about themselves, compared to 9% of those with high self-esteem. Likewise, subjects with low self-esteem presented false pictures of themselves to impress others (34% of the subjects with low

self-esteem agreed, compared to only 6% of those subjects with high self-esteem). Subjects were sensitive (vulnerable) to criticism, such as being laughed at, to poor performance on a task, or to find imperfection with self (68% of subjects with low self-esteem were highly sensitive, compared to 26% of the subjects with high self-esteem). Subjects with low self-esteem felt isolated (22% of those with low self-esteem reported a feeling of loneliness, compared to 1% of those with high self-esteem). Of interest to my study on variables associated with African American males performance on high-stakes tests is Rosenberg's finding on the sensitivity of students with low self-esteem and their attitude about doing poorly on a task. Osborne (1997) found that there existed a decreasing correlation between the achievement of African American males self-esteem over time. The study found that the correlation between academic outcome and self-esteem for African American males decreased over time in all subject areas. Taking Reading and Math as examples, the correlation for self-esteem and achievement during the base-year (8<sup>th</sup> grade) was .26 for Reading and .16 for Math. However, the correlation decreased during the follow-up (12<sup>th</sup> grade) (Reading .05, Math .07). These results led Osborne to observe that African American males *disidentified* with academics over time as their self-esteem with the task declined over time. According to Osborne (1997):

Theoretically, students who are more identified with academics should be more motivated to succeed because their self-esteem is directly linked to academic performance. For these students, good performance should be rewarding and poor performance should be punishing. In contrast, students not identified with academics should experience lower motivation to succeed because there is no contingency between academic outcomes and self-esteem—good performance is not rewarding, and poor performance is not punishing,

leaving those who have disidentified with nocompelling incentives to expend effort in academic endeavors. (p.728)

The relationship between achievement and self-esteem revealed that students with poor self-esteem were less likely to perform well in school. Osborne (1997) analyzed longitudinal data collected by the National Education Longitudinal Study on 24,599 eighth-grade students from 1,052 schools around the nation. Data were collected on gender, race, socioeconomic status (SES), grade point averages, and scores from four achievement tests (reading, math, science, and history). The results of the study was that: a) while grades remained stable over time for White students, they decreased significantly for African Americans; and b) *disidentification* with academics was more evident for African American boys than any other gender or ethnic groups over time. Osborne found the explanation for the *disidentification* of African American males with academics “vexing,” but “clearly an area future research should focus on” (p.734).

Hansford and Hattie (1982) examined the relationship between measures of self and measures of performance/achievement. Examining a total of 1,136 correlations (a degree of relationship between variables) between self and performance, the researchers found that the “relationship between self and performance was associated with an improvement in ability,” giving a correlation ranging from  $-.77$  to  $.96$  (p. 132).

The self-esteem held by an individual when confronting a task can influence whether the outcome is positive or negative. If the task is preceded by a poor self-esteem that stems from previous failure, the outcome is likely to be failure. On the other hand, if a positive self-esteem and previous success with the task precede the task, the outcome is likely to be success. The theories of Rosenberg (1965), Osborne (1997), and Hansford and Hattie (1982) provided self-

esteem as a variable worth exploring in reference to African American males' achievement on high-stakes tests.

I can relate to the findings of Rosenberg (1965), Osborne (1997), and Hansford and Hattie (1982) with respect to high school courses and the Scholastic Aptitude Test (SAT). When I experienced failure with my first high-stakes tests (the SAT) of educational achievement as a student, I found myself sensitive to criticism as a personal attack on my competency to be academically successful. After many unsuccessful attempts, I experienced *disidentification* with failure on the high-stakes tests. Those psychological challenges (headaches, nervousness, and mental blocks) succumbed to an attitude of irrelevancy. I saw no compelling interests to put effort into something that proved unrewarding time and again. In reference to my course work, on the other hand, I saw failure as a punishment, a barrier to getting into an institution of higher education, and a tool to be used by others to prove that I was incompetent. Failure with course work became a motivator, a checkpoint of reality, a beacon to get back on track, and a caution sign of what would happen if I did not get back on track, rather than self-piety. I can sympathize with students when they expressed how much they hate high-stakes tests of educational achievement, but love school.

### *Test Anxiety*

Sarason, Davidson, Lighthall, Waite, and Ruebush (1960) and Steele and Aronson (1995) examined the relationship between test anxiety and performance. Test anxiety is the fear associated with taking a test. The studies indicated that test anxiety, in many situations, was an unpleasant experience held consciously or unconsciously by an individual. This unpleasant experience becomes a barrier to the successful completion of a task. According to Sarason et al.:

The test anxious child [is] one who has self-depreciatory attitudes, anticipates



failure in the test situation in the sense that he will not meet standards of performance of others or himself, and experiences the situation as unpleasant—an affective state which signifies conflict between tendencies which are conscious as well as between conscious and unconscious tendencies. (p. 20)

Sarason et al. provided a multiplicity of research that correlated anxiety with various societal variables. Of importance to the current study is the finding between anxiety in elementary students and achievement/ability. The instruments included the: a) Testing Anxiety Scale for Children; b) Gates Advanced Primary Reading; c) Stanford Achievement; d) Intermediate Battery; e) Pintner-Cunningham, and f) Kuhlmann-Anderson. These instruments were administered to 124 second graders, 138 third graders, 125 fourth graders, and 120 fifth graders from the Milford and Greenwich school systems. I examined the results obtained for the Milford school in order to illustrate the relevance of the findings. Operating from a significance level of .05 by which to reject the null hypothesis of no relationship, any variable with a number larger than the significance level would indicate a relationship. The results of Sarason's study produced a negative correlation between anxiety and achievement/ability at all grade levels, but more so at the earlier grades. In other words, the findings indicated that as the level of anxiety increased the level of achievement/ability decreased.

Similar findings and conclusions were highlighted in the research of Steele and Aronson (1995). Steele and Aronson's research focused on the relationship between *negative stereotype-threats* and the performance of African Americans on intellectual tests. Steele and Aronson defined negative stereotype-threats as the existence of a widely known stereotype about a group that, if conformed to, has the plausibility as "a self-characterization in the eyes of others, and perhaps even in one's own eyes (i.e., yuppie, feminist, or liberal)" (p. 797). The danger of

negative stereotypes to self-esteem and achievement is that they can cause a person to redefine his/her identity with important life events. Such negativism can interfere with educational performances, can hinder motivational efforts to achieve, and can manifest poor performance as a scapegoat.

The study included 114 Stanford undergraduates of different genders and races. The participants were divided among three groups: a) the stereotype-threat group; b) the non-stereotype-threat group, and c) a second non-stereotype-threat group. Each group was given a 30-minute test of verbal ability composed from items taken from the Graduate Record Examination (GRE) under different conditions. The stereotype-threat group was told that the test was diagnostic of their intellectual ability. The first non-stereotype-threat group was told that the test was non-diagnostic of their ability. The second non-stereotype-threat group was told to consider the test as a mere challenge. It was hypothesized that African American participants in the stereotype-threat group would under perform relative to White participants, but not in the two non-stereotype-threat groups.

The findings of the research were that: a) African Americans in the stereotype-threat group performed worse than Whites in all groups and worse than Blacks in the non-stereotype-threat groups; b) African Americans in the stereotype-threat group completed fewer items than participants in other two groups. and c) African American participants in the stereotype-threat group responded more slowly than participants in the other two groups. Sarason et al. (1960) considered the negative stereotype-threats (statements made) unconscious factors that stimulated anxiety when the person was faced with an event that he/she determined unpleasant. As a result of the anxiety, the participants were unable to perform to the level of expectancy. Evidence of

anxiety associated with achievement suggested that where anxiety existed achievement was affected in a negative manner.

Perhaps, what I experienced was a self-depreciatory attitude (Sarason et al., 1960) toward high-stakes tests of educational achievement. The experiences were uncomfortable, nerve racking, and degrading. No matter how hard I tried to ease the discomfort, confidence quickly succumbed to emotions of anxiety. The discomfort was so great that even the mere mention of the letters “SAT” conjured emotions of anxiety (nervous twitching, headaches, mental blocks, and defensiveness) and threatening intentions (the fear of others using my failure to suggest incompetent). High-stakes tests became a plague to avoid at all cost. To get too close meant the stimulation of unpleasant emotions.

The anxiety that I experienced with the Scholastic Aptitude Test (SAT), I can see today in the students taking the Virginia Standards of Learning (SOLs) tests. Some became sick prior to testing due to nervousness, developed headaches during testing, anticipated the worse after testing, and literally cried after receiving failing results. With others, however, no emotions or remorse was displayed in connection with their unsuccessful performances on the SOLs. It appeared that they were content with the experience whether negative or positive, and exhibited no self-depreciatory emotions toward the tests.

### *Locus of Control*

Weiner (1986) provided an attribution theory on motivation, emotion, and achievement (see Figure 6). The model depicts the theory as a sequential process initiated by the outcome of a certain event. The process involves several steps. The first step commences with the realization of the outcome. The second step is determining if the outcome is negative or positive. Specific information about the outcome is gathered and analyzed to become more knowledgeable of the

event (third step). The search for a cause of the negative or positive effect represents the fourth step of the sequential process and involves depicting those *causal ascriptions* (ability, effort, strategy, task or luck) as explaining achievement-related or affiliation-related success or failure. The fifth step of the sequential process involves the description of achievement-related or affiliation-related success or failure on the properties of causal dimensions. The properties of causal dimension include locus (events internal or external to the person), stability (unstable or enduring), and controllability (controllable or uncontrollable). The final step (step 6) of the sequential process is the affective (psychological consequences) linked to the causal reason. The affective consequence is either positive or negative and is ascribed to an internal or external locus of cause. The “internal ascriptions elicit greater self-esteem for success and lower self-esteem for failure than do external attributions” (Weiner, 1986, p. 163).

Similarly to Weiner’s (1983) causal model, the cognitive model involves the outcome of an event ascribed to some mediating cause. Lochel (1983) studied the relationship between sex difference and the causal explanation of four-year-olds. The subjects included 50 students (25 males, 25 females) from various backgrounds and nursery schools around Oxford. Independent variables were outcome (success or failure) and sex-linkage of the task (preference or performance) that included *building and manipulating, spatial skills, fine motor and artistic play, and verbal skills*. Eight tasks were administered to each individual followed with the question: Do you think that you will be able to do that? Each response was categorized as *can/know, difficult, I don’t know, learned, or can’t learn*. The finding of the research was that four-year-olds attribute their performance with certain tasks to various factors such as *can, difficulty, or learned behavior*. It was found that boys made *can* attributions as many times under success as they did under failure (33:35). Girls made more *can* attributions under failure (33) than under

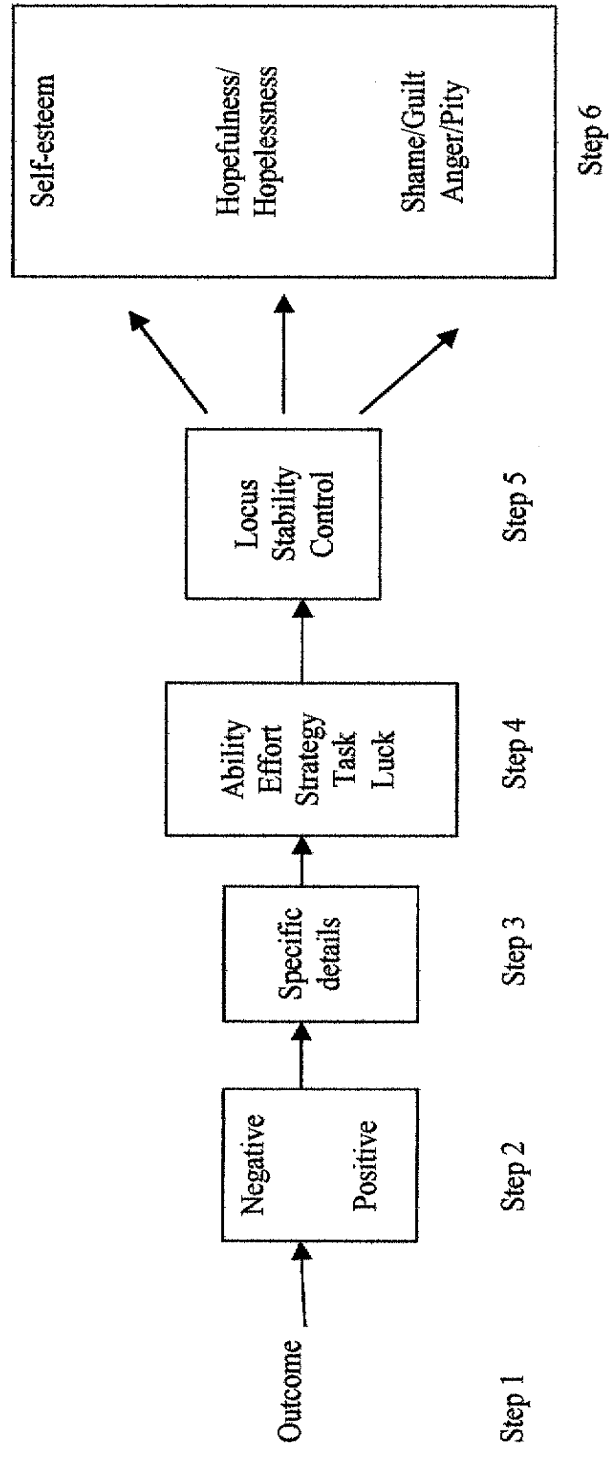


Figure 6: Attributional model of achievement and emotion. Weiner (1986)

success (23). Lochel concluded that failure or success was related to the individual's self-concept. Ickes and Layden (1978) of the University of Wisconsin studied the independent relationships between self-esteem, sex, and *attributional* style on performance. For the purpose of this study, I will focus on the results reported on *attributional* styles and performance.

Forty subjects composed of males and females were subdivided into a factorial design of eight groups (high and low self-esteem, male and female, and internal and external *attributional* styles). Standardized measurement of anagrams was selected as the performance variable, along with timed pre and posttest trials. The findings of the study showed: a) that subjects who tended to internalize negative outcomes, or failure, and who showed difficulty with solving insolvable anagrams became slower and less accurate; b) that there were no impairment or performance deficits for those subjects who were predisposed to externalize their negative outcomes; and c) that no relationship was available for self-esteem. In sum, whether a subject internalizes or externalizes negative or positive events (*attributional* styles) had an impact on how he/she performed academically as measured by high-stakes tests. One explanation was that subjects who internalize failure might simply stop trying due to a lack of motivation.

Belgrave, Johnson, and Carey (1992) found that the relationships between *attributional* styles and self-esteem and *attributional* styles and student performance were related to the academic performance of African Americans on certain academic tasks. They studied the relationship between *attributional* styles and self-esteem and attributional styles and academic performance in African American high school and college students. Belgrave et al. defined *attributional* styles as “a general tendency to make internal (verses external), stable (verses temporary), and global (verses specific) attributions for positive and negative events” (p. 173). The samples of the study included 46 students enrolled in the University of Virginia's Upward

Bound Program and 43 college students enrolled in three classes at the University of Virginia. Each sample population was given the *Attributional Style Questionnaire*, the *Rosenberg's Self-esteem Scale*, and a personal data sheet that contained demographic information such as grade level and grade point average. Their findings concluded that there were particular *attributional* styles related to self-esteem and academic performance in African American high school and college students. The study showed that African American students tended to internalize negative events and to develop a poor self-esteem over time. These students performed less well academically than those students who externalized such events.

Analyzing student performance from the perspective of how a student internalized or externalized real life events (whether negative or positive) could provide insight into the vexing dilemma of why African American males *disidentify* with high-stakes testing. Specifically, African American males perform poorly on high-stakes measures because many have experienced previous failure with the tests, have internalized this failure for many years, have developed a poor self-esteem in face of this failure, and, thereby, have come to *disidentify* with high-stakes measures rather than academics in general.

The internalization of negative events for an extensive length of time was discovered to be associated with a depressive, unmotivated, mood of learning. Metalsky, Abramson, Seligman, Semmel, and Peterson (1982) studied 227 undergraduates at the State University of New York at Stony Brook enrolled in psychology. Students completed the *Attributional Style Questionnaire* that measured student's tendencies to attribute negative and positive outcomes to internal, stable, and global factors; the *Multiple Affect Adjective Checklist* used to measure the degree of depressive state (motivation, or lack of motivation); and a third questionnaire used to measure

what students thought their grade should be for a midterm. The findings of the study led to the conclusion that the longer students internalized failure, the more depressed they became.

The theory of locus of control emphasized the conscious and unconscious motive that stimulates the possible longevity of anxiety with an event. The experience of failure with the Scholastic Aptitude Test (SAT) was that attribute that initiated self-depreciation of taking high stakes tests of educational achievement for me. My first exposure to failure was uncomfortable, unforgettable, and stirred anxiety each time I was confronted with the SAT. The impact of failure with high-stakes tests of educational achievement placed me on the defensive by viewing them without relevancy to my goals. Fortunately, my internal will to be academically successful was not tarnished by the experience. Failure was a temporary setback, which I gave no merit. My success with academic achievement was dependent more on an attitude to do well with course work than with my performance on high-stakes tests. Unlike the African American males of Belgrave, Faye, Johnson, Reginald, and Carey's (1992) study, who developed poor self-esteem from internalizing negative events, I came to *disidentify* with the experience of failure associated with the SAT as less pertinent than achieving good grades and getting into an institution of higher education. I maintained a positive self-concept about school.

### *Reading Ability*

The following section explores research dedicated to study reading ability as a factor associated with African Americans' performance on high-stakes tests of educational achievement. A review of the literature showed that a deficiency in reading ability lead to poor academic performance and self-concept of academic ability. It is not merely enough to be able to read. Today's student faced with high-stakes testing "must be able to sort, analyze, compare, and synthesize from texts to draw conclusions, make decisions, and use information meaningfully"



(Wasserstein, 2000, p. 74). They must possess critical thinking skills.

According to the National Adult Literacy Survey (1994), 47 % of the adult population in the United States functions on lower levels of literacy. A break down of the statistics revealed that Whites scored an average 49 points higher on prose, 50 points higher on document, and 63 points higher on quantitative than did Blacks. There was a profound difference in the scores obtained by ethnicity on high-stakes tests in the area of literacy. Lee (1951), Boykin (1955), Mangieri and Olsen (1977), Hood (1992), and Rosa (1994) explored factors associated with African Americans' performance on high-stakes tests of educational achievement and reading ability.

Maurice Lee (1951), an associated professor of English at Morgan State College, studied the influence that reading ability had on the interpretative tasks assigned to high school African Americans in the content of English, History, Science and Mathematics. In reference to my study, the findings relevant to reading ability and African American's competence to interpret written text are of significance. Lee's study involved 1,012 ninth (630) and twelfth (382) grade African Americans attending twelve high schools in Georgia, Alabama, and Florida. Participants in the study were administered the *Traxler Silent Reading Test* for Grades 7, 8, 9 and 10 to measure general reading ability (rate of reading, comprehension, and word meaning). The study disclosed various discrepancies in students' abilities to grasp the meaning of key words, to sense appropriate meaning of general words (word meaning skills), to infer a cause, to propose a hypothesis, to make generalizations, to note sensory appeals, to detect tone, and to sense the intention of the author (comprehension skills). However, students were stronger in inferring a characteristic and an outcome, in sensing the author's mood, in fusing separate word meanings, and in relating ideas in sentences. Successful academic performance of African Americans in English depended strongly on their general reading ability. According to Lee:

Since pupils who do well in general reading can be expected to do well also in complex interpretative tasks, it appears that the important task faced is to promote competence among pupils in general reading ability. Special attention should be directed toward developing power of comprehension and rate of reading. (p. 509)

Boykin (1955) found similar findings in the reading performance of African American freshmen attending the Southern University. The *Reading Comprehension Test* was administered to 596 freshmen (241 men and 355 women). The *Reading Comprehension Test* was used to measure vocabulary, comprehension, speed of comprehension, and total reading composite. The mean score (average score) for the *Reading Comprehension Test* was 55.1. The findings of the study indicated that African American freshman students scored 17.1 (37.72) points below the average. In reference to the specific categories, African American freshman students also fell 15.1 points (35.5) below the average (50.6) in vocabulary skills, 8.5 points (47.2) below the average (55.7) in comprehension, and 16.6 points (41.1) below the average (57.7) in speed of comprehension. Furthermore, freshman students scored the lowest on the vocabulary subtest as compared to the other two subtests. The findings showed that African Americans enter their freshman year of college with below average reading ability at Southern University. Mangieri and Olsen (1977) found that poor reading skills could effect a person's self-concept-of achievement and, consequently, a person's academic performance.

Mangieri and Olsen (1977) explored the influence of self-concept-of-achievement and the reading ability of black and white males. The study included 188 black and white males enrolled in an adult education program in southeastern Ohio. Participants were administered the *Nelson-Denny Reading Test (Form B)* to determine the grade level (above, on, or below) on which the

subjects were reading, and the *Michigan State Self-Concept of Academic Ability Scale (SCOAA)* to measure the perceptions of their reading levels (below, average or above average). The results of the statistical two-tailed t-test used to analyze the influence of self-concept on reading ability and the influence of ethnicity on reading ability revealed that: a) males reading above grade level had a favorable self-concept-of-academic achievement (N=79, Mean SCOAA = 27.5); b) black males (N = 101) had a higher mean (SCOAA = 27.5) than white males (N = 87, SCOAA = 24.5); c) black males reading above grade level had a more favorable mean than blacks reading below grade level (above N = 40, SCOAA = 30, below N = 61, SCOAA = 23 respectfully); and d) whites reading above grade level had a more favorable mean than whites reading below grade level (above N = 39, SCOAA = 26, below N = 48, SCOAA = 21 respectfully). The results led to the conclusions that a relationship between reading success and self-concept-of-academic ability, ethnicity and the self-concept-of-academic ability, and self-concept-of-academic ability of subjects who read above grade level with those who read below grade level. Regardless of ethnicity, the more proficient the subject was in reading, the higher was his self-concept-of-academic-ability on the SCOAA scale (pp. 458-460). The relevance of reading ability as a factor of influence to explain the continuous poor academic performance of African American males was revisited decades later by the research of Hood (1992) and Rosa (1994).

Hood (1992), a professor at Arizona State University-Tempe, studied academic (i.e., grade point average, credit hours completed, and the composite results from the *American College Test*) and non-cognitive (i.e., campus support, faculty expectation, campus fit, social control, and family support) factors that influenced the retention of African American men at a predominantly white university. The study included 409 freshmen taken part in a special program designed to assist those students academically unprepared for higher education. In

reference to those academic factors, specifically English, that influenced the retention of black men at predominantly white university, it was concluded that African American males performed below males of other ethnicities (African American- 15.3, White- 18.8, Hispanic- 15.4, and Asian- 16.3) on the ACT- English subtest. Although non-cognitive factors were studied also, the academic performance of African American males (grade point average and ACT scores) proved to be strong indicators to predict the retention of black males at predominantly white universities. African American males were dismissed at a higher number than males of other ethnicities (African American - 7, White- 3, Hispanic- 1, and Asian- 1).

Rosa (1994), however, attributed the poor academic performance of African American males to a discrepancy in cognitive processing and the expectations of high-stakes testing. Rosa, a professor at Wayne State University, explored the relationship between cognitive styles and reading comprehension of expository text of African American male students. Cognitive styles studied by Rosa were the means by which an individual process information. Field-independent individuals were more object-oriented, analytical, linear thinkers in their processing of information. Field-dependent individuals, on the other hand, were more global and people-oriented in their processing of information. In the area of text processing, Rosa hypothesized that field-independent African American males would out perform field-dependent African American males on a test of comprehension of expository prose.

Rosa's (1994) study involved 43 fourth-grade African American males attending three elementary schools in southeast Michigan. The subjects were administered the *Group Embedded Figures Test (GEFT)* to measure cognitive styles and the *Essential Skills Reading Test (ESRT)*, a subtest of the Michigan Educational Assessment Program, to measure comprehension skills. Participants were categorized into low field-independent and high field-independent groups from

the scores received. One-way analysis of variance was performed on the data collected from the instruments (GEFT and ESRT) to determine if there existed a statistical difference between the performance of low field-independent and high field-independent African American males in comprehending expository text.

The findings of the study led to the conclusion that there was a difference in reading comprehension of expository text between low and high field-independent subjects (between groups variance of 55.71;  $p < .05$ , and a Mean comparison of 7.68 for low field-independent subjects and 13.55 for high independent subjects). Worth noting was the fact that African American males were categorized as low field-independent subjects ( $N = 25$ ) more often than high field-independent subjects ( $N = 18$ ). According to Rosa:

The low field-independent African American males were more likely to focus and retain material of low structural importance because they were less able to analyze, organize, and reorganize information of high and low importance. Thus, they most probably ignored some of the high structural importance information when constructing hypotheses about a concept definition, and, as a result, scored poorly on the subtest. (p. 551)

If high-stakes tests of educational achievement are developed with questions that require the reader to retain, reorganize and conceptualize information from a lengthy passage, then individuals who process information, as do low field-independent readers, are doomed to fail. Such could be the case in math, also. Students who are low field-independent processors are doomed to fail when given a test that require high field-independent processing skills. Such is the case with high-stakes testing of educational achievement that neglect student diversity for the sake of accountability.

The theory of reading ability showed a discrepancy between cognitive processing and the expectations of high-stakes tests of educational achievement. I have disaggregated student performance data on many high-stakes tests as a public school administrator. The analyses indicated that those students who were unsuccessful with reading lacked critical thinking skills (i.e., the ability to analyze, compare, and synthesize information). In contrast, running records and other informal assessments administered by teachers in the classroom suggested that these same students were on grade level reading ability, read with consistent fluency, and comprehended the material with average or above average intelligence. Discrepancy existed in the content covered on the high-stakes tests and that taught by the classroom teacher in the area of reading. While the creators of high-stakes tests expected students to possess those higher-level thinking skills, classroom teachers were more concerned with the basics skills (i.e., word knowledge, fluency, and comprehension) required to be successful readers.

#### *Impact of Discrepant Expectations in Testing*

Discrepancies in expectations in high-stakes testing have very specific effects or results. First, failure with high-stakes tests of educational achievement is not uncommon when the expectations of testing are not aligned and relevant to curriculum and instruction. I, like many others, experienced the repercussion of such misalignment when faced with the high-stakes tests for college admission. I excelled with my regular and advanced English courses because I performed to those curriculum and instruction expectations deemed relevant by the educators. I was a good reader. But, I failed on the English portion of the college admission exam because I lacked those critical thinking skills (i.e., the ability to compare, to contrast, and to analyze information) beyond being just a good reader. Second, first time failure leads to anxiety and a poor self-concept of high-stakes tests of educational achievement. I experienced the challenges

of test anxiety (i.e., headaches, nervousness, and the blocking of information) each time I was confronted with the high-stakes test. Each time the anxiety would impact my performance. Although I enjoyed learning, I came to disapprove of the testing process as an irrelevant measure or predictor of my future successes. Third, if students, like myself, develop a poor self-concept because of an event that weighs heavily on their future goals; then, over time, they will seek other means to prove to themselves that they are worthy individuals. On the other hand, some students will develop an attitude from the experience of failure that they are unworthy. Consequentially, they will withdraw from active participation, develop poor self-esteem, recant the challenges of anxiety, and avoid future contact with the event to escape embarrassment. Educators have a duty to ensure that the content being tested by high-stakes tests correlates with curriculum and instruction expectations mandated by division and school professionals, and that our students are equipped with a combination of basic and critical thinking skills to be successful readers and confident test takers.

The experience with an event can have positive or negative repercussions. When negative, such experience can lead to poor self-esteem, anxiety, self-depreciation, avoidance, and repeated failure. In addition, the attitude molded from the experience of failure influences the degree of future involvement (i.e., the amount of time spent on the task, the means of preparing for the task, and problems with the task). I mentioned before the fact that I saw the SAT as being irrelevant to my successes in life. The experience of failure and my poor self-concept of the test lead to a lack of involvement--less time and effort. I see the same, today, with students enrolled in remedial classes for the Standards of Learning (SOLs). They are not sincere about putting forth effort to prepare for something they believe they will fail. The testing behavior section of this study is qualitative and is intended to explore the impact of student testing behaviors (time

on task, preparation, and problems) on achievement from the perspectives of students. By becoming familiarized with those variables that function as barriers to achievement, educators can gain an understanding of how to assist African American males with experiencing success with high-stakes measures.

### Summary

The theories of self-esteem, locus of control, test anxiety, reading ability, and testing behaviors are hypothesized to relate to the performance of African American males on high-stakes tests of educational achievement. The internalization of previous experienced failures can lead to a poor self-esteem, a lack of motivation toward learning, or the misconception of appearing incompetent. Thus begins the long haul of a student's *disidentification* with high-stakes tests of educational achievement. Is it fair under the preceding circumstances to hold students accountable based on a single criterion of performance, or to mandate accreditation based on performance of a group, or groups, prone to performance below the set benchmark? Is the benchmark that defines success or failure reasonable without doubt? This study will examine self-esteem, locus of control, text anxiety, reading ability, testing behaviors, and African American males performance on high-stakes of educational achievement.



## CHAPTER TWO

### METHODOLOGY

This study was intended to investigate the variables of self-esteem, locus of control, test anxiety, reading ability, testing behaviors, and African American males' performance on high stakes tests of educational achievement (Mathematics 8 and English 8 tests). Eighth grade adolescents were chosen for further research to provide insight into the achievement gap issue at the middle school level. The locations chosen to conduct the research are unique in demographic make up and provide district-wide feedback about student performance on high-stakes tests of educational achievement. It was anticipated that the subjects would be relatively easy to access due to the researcher's connections with the schools and the school district.

#### Population

The target population for this study was composed of eighth grade students who failed either the Mathematics 8 and/or the English 8 Virginia Standards of Learning examinations for the Spring 2000 administration. The potential sample size could have been 537 students (245 females, 292 males). However, only those students who gave their consents (see Appendix C) and obtained parental permission (see Appendix B) to participate in this study made up the sample. The actual sample was composed of 39 students (22 females, 17 males) and was assumed to be representative of the target population.

#### Instrumentation

##### *Rosenberg Self-esteem Scale*

Rosenberg's self-esteem scale is a 10-item scale using the Guttman scale. Participants are presented with ten statements answered on a four-point scale-- from *strongly agree*, *agree*, *disagree* to *strongly disagree*. Each statement is scored with a 0 for low self-esteem and a 1 for

high self-esteem. The 1s are tallied for an overall score (0 being the lowest and 10 being the highest). The original sample for which the scale was developed consisted of 5,024 juniors and seniors from 10 randomly selected schools in New York State. Rosenberg's self-esteem scale has been utilized in research conducted with eighth graders as well (Osborne, 1997).

The Journal of Counseling and Development (February 1988) reported the validity and reliability of Rosenberg's self-esteem scale. Tested on over 5,000 adolescents and high school students, a test-retest reliability of .85 was obtained with a reproducibility index of .93 and validity ranging from .56 to .83 (p. 299). The Self-esteem scale is intended to measure global self-esteem utilizing the Guttman model (strongly agree, agree, disagree, and strongly disagree). Rosenberg's self-esteem scale was strongly recommended for research associated with self-esteem. Permission to use Rosenberg's self-esteem scale was granted by the University of Maryland's Department of Sociology (see Appendix A).

#### *Rotter's Locus of Control Scale*

Rotter's locus of control scale is a 29-item scale. Participants are given statements that require a forced response of A or B. Twenty-three of the 29 statements are scored with a point in accord with the appropriate response. One point is given for the following questions with the following responses (2. a, 3. b, 4. b, 5. b, 6. a, 7. a, 9. a, 10. b, 11. b, 12. b, 13. b, 15. b, 16. a, 17. a, 18. a, 20. a, 21. a, 22. b, 23. a, 25. a, 26. b, 28. b, and 29. a). A high score (11-23) equals external locus of control, and a low score (0-10) represents internal locus of control. Participants with a high internal locus of control believe that events result primarily from their own behaviors and actions. Those with a high external locus of control believe that powerful others, fate, or chance primarily determine events. Rotter's locus of control scale is widely used in psychological research with adolescents.

Rotter's locus of control scale (1966) is used to determine if an individual believes that control in a learning environment is due to self-behaviors or to external forces. The scale consists of 29 items requiring a forced choice between two statements. A low score indicates more internal control by the individual and vice-versa. Rotter's locus of control scale is widely used in psychological research and has a reliability of .88 as a self-appraisal scale to measure internal/external control behaviors. Permission for use was obtained from Dr. Julian Rotter, a Professor of Psychology at the University of Connecticut (see Appendix A).

#### *Mandler-Sarason Test Anxiety Scale*

Mandler-Sarason's test anxiety scale is a 37-item scale that requires the participant to read a question and respond with *true* or *false*. The true responses are tallied to determine the test anxiety score (a score of 15 or greater indicates considerable discomfort about taking tests). Crocker (1982) found that Mandler-Sarason's test anxiety scale was content valid in measuring psychometric properties (worry, emotions, and concentration) and reliable in measuring test anxiety in middle school grades (grades 6-8). The study involved 550 students in grades 6-8 who were given the Test Anxiety scale. The findings showed a reliability of .87. Permission to use the Test Anxiety scale was granted by the Lawrence Erlbaum Associates of Mahwah, New Jersey (see Appendix A).

#### *Testing Behaviors Questionnaire*

The testing behavior questionnaire consists of three domains (time on-task, preparation, and problems). The first two domains require the participants to provide short answers to questions asked about how much time is spent preparing for testing and how they prepare. The third domain asks the respondents to check off problems experienced with the Mathematics 8 and English 8 components of the Virginia Standards of Learning (SOLs).

A group consisting of 14 teachers, a guidance counselor, and an administrator developed the first draft of the questionnaire. During hours of discussion, the group brainstormed concerns they experienced with the SOLs and students' preparation for testing. The concerns were written down and grouped under domains of similarities. Three domains were developed from the analysis and grouping of concerns: time-on-task, preparation, and problems. I developed the first draft of the questionnaire by creating one question for each domain. The question for the domain of time-on-task was stated as: How much time do you spend preparing for a test (a number)? The question for the domain of preparation was stated as: How do you prepare for a test? The domain of problems with the SOLs (Mathematics 8 and English 8) was stated as: What problems did you have with the SOL tests: a) English 8 and b) Mathematics 8?

The first draft of the testing behavior questionnaire was piloted with a class of 12 students of mixed gender and race attending summer remediation. Students were given the questionnaire at the commencement of the summer program. The guidance counselor and I analyzed the responses to each question for validity—measuring what was being asked. It was determined that questions 1 and 2 were valid in measuring how much time was spent studying prior to testing and the strategies used by students to prepare for success. Question 3, however, was deemed invalid in obtaining specific problems with either of the Mathematics 8 or English 8 SOL tests. Students were forced to circle a or b due to the format of the question. Responses to the question proved that the question was vague as stated. Question 3 was redesigned to ask the same question as before, but to have students check off possible problems (i.e., the readability of the test, the content, the length of test, and having mastery of the content) developed from students' and teachers' complaints of the SOLs. In addition, the other statement was added for students to write in their comments about problems that may have been overlooked. Question 3

was piloted again with the same group a week later. An Analysis of the responses proved the question valid in pinpointing problems specific to the SOLs as experienced by students.

The second draft of the testing-behavior questionnaire was piloted with the same group at the end of the summer program (6 weeks later). The results of the second full administration of the pilot test corresponded with responses to the first full administration of the pilot test and to the second administration of the revised question 3.

### *Reading Ability (Literacy Passport Test)*

In 1989, the State of Virginia implemented its first high-stakes test of educational achievement, the Literacy Passport Test (LPT). The LPT consisted of three tests that measured competency in reading comprehension, mathematics, and writing. Students had to demonstrate competency on all components of the LPT commencing in the sixth grade, and every grade thereafter until they successfully passed all components. Students who had not passed all three components before their ninth grade year was carried as unclassified students. Unclassified meant that the students could not participate in school or Virginia High School League sponsored activities that required grade membership above the eighth grade (i.e., class officers, varsity, or junior varsity sports). In addition, students had to pass all components of the LPT to receive a standard or advanced diploma.

For the purpose of this study, the reading scale score (ranging from 0 – 300, 250 needed to pass) of the LPT obtained in the Spring of 1996 was used as a factor to investigate the influence of reading ability on the performance of African American males on high stakes tests of educational achievement. The reading component of the LPT consisted of 11 comprehension passages with 7 questions each. A degree of reading power (DRP) score of 52 points was required to receive a passing scale score of 250. The test results (Spring, 1996) were used

because this was the period in which the subjects of the study were sixth graders taking the LPT for the first time.

### *Student Performance (Standards of Learning)*

In 1998, the legislation to phase out the Literacy Passport Test program was passed. Starting with the class of 2004, students will have to show proficiency on the four components of the new high-stakes Standards of Learning (SOLs). The four components of the SOLs are English 8, Mathematics 8, Science 8 and History 8. High stakes are attached with the implementation of the SOLs. Students must pass all four components of the SOLs by receiving a scaled score of 400 on each test to receive a diploma. Those students failing any parts of the SOLs must receive remedial services in the areas of weaknesses. In addition, a local school must score a 70% passing rate in all subject areas tested to maintain accreditation.

The results from the spring 2000 administration were used as variables to measure student performance on the high-stakes tests of educational achievement. The English 8 section assessed student performance in the content of word analysis, understanding printed and resource materials, and understanding elements of literature. The Mathematics 8 component, on the other hand, measured student performance in the content of number sense, computation and estimation, measurement and geometry, probability and statistics, and pattern, functions, and algebra. A scaled score of 400 was required for a student to demonstrate proficiency on any of the four subtests of the SOLs.

### Data Collection

Permission was obtained from the superintendent of the school division, parents, and students to administer the research instruments. In addition, the Office of Research Compliance at the Virginia Polytechnic Institute and State University granted permission to conduct the

study. English 8 and Mathematics 8 Standards of Learning (SOLs) scores were obtained from the testing coordinator of the school division. The testing coordinator provided reports from each school using the Tracker software. The software publisher of Tracker (Harcourt Brace) works with the Virginia Department of Education and school divisions to provide organized reporting of individual performance on the SOLs and other mandated state tests. The reports presented to me by the testing coordinator included the name and scaled score of each individual who failed the English 8 and/or Mathematics 8 SOL(s) by school during the Spring of 2000. Individual scaled scores from the Literacy Passport Test (LPT) were obtained from students' cumulative folders housed at each school. Permission was obtained from the principals to schedule visits to speak with students about the research, the scales, the questionnaire, and to decide a return date to collect data from those interested in participating. All information was handled with strict confidentiality.

Dates were arranged with each principal to meet with students. The purpose of the study was presented to them. Students were told that their participation was voluntary. Permission forms were given to those interested in participating. After forms were return to the office on the date specified, students were contacted by the office secretaries and given a date and location to meet with the examiner. During the data collection, students were given a package containing: a) the self-esteem scale; b) the locus of control scale; c) the test anxiety scale, and d) the testing behavior questionnaire. Instructions for completing the self-esteem scale was given, first, by having students turn to that particular page and completing that section, only. The steps were repeated for each instrument. Completed forms were returned and each marked by the practitioner with the initials (wm- white male, bm- black male, wf- white female, bf- black

female) in upper the right hand corner for categorization purposes. The procedures were repeated at each of the three schools.

### Analysis

This study involved a mixed-analysis approach with the data gathered. Scaled score results for English 8 were recorded in column 1, column 2 for math, and column 3 for the LPT. A code of 1 was assigned to the African American males group and a code of 2 assigned to the *test-failers* group. Total raw scores results from the self-esteem scale were recorded in column 4, column 5 for test anxiety scale, and column 6 for the locus of control for each participant. Individual *t*-tests were run for each variable (reading ability, locus of control, test anxiety, self-esteem, and English 8 and Mathematics 8 results) to determine if there exists significant difference in the mean scores of African American males and the *test-failers* groups in reference to the specific variables.

The qualitative data collected on testing behaviors was placed into a content matrix for analysis of emerging themes.

### Reflection

The original vision of this study was to involve 50-100 students. However, I obtained only 39 volunteers. One explanation for the small population could have been the connection of the study with the Standards of Learning. The students composing the population have experienced prior failure with the Standards of Learning. Perhaps, many chose not to participate thinking that they would have to perform the task over again, envisioned repeated failure, or feared of being belittled by their peers. The title of the study may also have given students the impression that the research was only meant for the participation of African American males. The requirement of parental permission may have been another factor limiting the participation



of some students. Some students expressed interest in participating, but failed to return the necessary permission form. My role as a public school administrator in my community was a significant factor in obtaining the 39 participants. I had the opportunity to speak with a parent who stated that she wanted her daughter to participate in the study because she knew me and knew that I truly cared about the well being of the students. In addition, anonymity was another concern with the study. Because of the multitude of students identified to participate in the study and to prevent interfering with the instructional day, the initial meeting with students took place in a large group setting. Perhaps, students were deterred from participating after being seen by their peers or embarrassed to be associated with failure. The pressures of previous failure, student assumptions, peer pressure, personal relationships, and anonymity were variables impacting the participation of middle school students in the study. In summary, I have learned from this experience that a large initial population must be identified in order to obtain a proper sample size, that a concerted effort to obtain parental permission for students to participate must be made, that personal contacts in the community are helpful, but not sufficient alone to produce a workable sample, and that the best efforts must be made to protect anonymity.

## CHAPTER THREE

### FINDINGS

This study was conducted with 39 students who voluntarily gave their time to participate, and who failed either the Mathematics 8 and/or the English 8 Virginia Standards of Learning examination administered in the spring of 2000.

The potential sample size could have been 245 female and 292 male students of various race and ethnicities who failed either the Mathematics 8 or the English 8 Standards of Learning tests. However, only 22 females and 17 males volunteered to participate. Table 1 provides a break down of the number of students who failed either the Mathematics 8 or English 8 examination and the percentage of those students by ethnicity participating in the study. Dividing the total number of participants by the total number of failures derived the total percent of females (9%) and males (6%) participants of the study. Although the sample size was small (39), the practitioner decided to proceed with this investigation as an exploratory study because of its potential value to the educational profession.

The participants were divided into two groups. The African American males group consisted of 10 participants. The *test failers* group was composed of 29 students of various ethnicity and genders (16 white females, 6 black females, and 7 white males). Student's *t*-tests were run for the variables self-esteem, locus of control, test anxiety, and reading ability to examine the difference in the means scores of the African American males and *test failers* groups. In addition, a qualitative piece (testing behaviors) was included to examine information given by students about possible barriers to their performance on high-stakes tests. The section on student performance portrays the achievement of African American males and other *test*

Table 1

Total Number of Failures by Gender and Ethnicity/Total and Percent Participating in Study

Ethnicity	Female		Male	
	Failures	Participants	Failures	Participants
American Indian	2	0	1	0
Asian	0	0	0	0
African American	32	6	51	10
Hispanic	5	0	4	0
Caucasian	206	16	236	7
Total	245	22	292	17
		9%		6%

*failers* on the spring 2000 administration of the Virginia Standards of Learning for the school division represented in this study.

### Student Performance

In an exploratory study, and where inference to a target population is of limited intent, *t*-tests are not usually indicated. However, they were believed to be important to this study with the awareness of their limitations and violations of assumptions of inferential statistics to determine if there existed a significant difference between the means of the samples studied. The practitioner decided to proceed with this investigation as an exploratory study because of its potential value to the educational profession.

The results of the *t*-tests and student performance on the English 8 and Mathematics 8 tests disclosed that the African American males group ( $n=10$ ) had a mean score of 318 with a standard deviation of 56.3. The *test failers* group ( $n=30$ ) had a mean score of 364 with a standard deviation of 35.4, after extracting the African American males sample.

Table 2 provides a comparison of the English 8 and Mathematics 8 mean scores for both groups and indicates that the average English mean score for African American males was significantly lower ( $t(28) = -2.78, p = .010$ ) than the mean score for the *test failers* group. For Mathematics 8, however, the *t*-test results suggested that the African American males group ( $n=10$ ) had a mean score of 357 with a standard deviation of 26.7. The *test failers* group ( $n=21$ ) had a mean score of 371 with a standard deviation of 17.7, after extracting the African American males group. An inspection of the *t*-test results showed that, although the mean score of the African American males group was 14 points lower than the mean score of the *test failers* group,

the difference in means, however, was not significant ( $t(29) = -1.70, p = .100$ ) at a  $p < .05$  significance level.

Table 2

Mean English and Math Scores for Grade 8 Students

English							
Group	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Variance</i>	<i>t</i>	<i>df</i>	<i>p</i>
Test Failers	20	364	35.4	1254	-2.78	28	.010*
African American Males	10	318	56.3	3164			
Math							
Group	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Variance</i>	<i>t</i>	<i>df</i>	<i>p</i>
Test Failers	21	371	17.7	284	-1.70	29	.100
African American Males	10	357	26.7	713			

\* $p < .05$ , 2-tailed, significant difference

Given the sample size of my study, the assumptions of normality and homogeneity of variance of the data were concerns. The Shapiro-Wilk test of normality and the Levene's test of homogeneity of variance were used to address the assumptions of the *t*-tests statistics, where significance of departure was obtained at  $p < .05$ . The Shapiro-Wilk test indicated significant normality of the data for the African American males group ( $p = .573$ ) in the area of English 8, but a significant departure from normality for the data collected on the *test failers* group ( $p = .010$ ). For Mathematics 8, no significant departure from normality was shown for the data gathered on the African American male group ( $p = .442$ ), nor for the *test-failers* group ( $p = .569$ ). The run of the *Levene's* test of homogeneity of variance, on the other hand, suggested no significant departure from homogeneity of variance for the English 8 data ( $p = .183$ ), but significant departure from homogeneity for Mathematics 8 data ( $p = .040$ ). The findings,

therefore, should be taken with caution. The remainder of this section will focus on the variables of self-esteem, locus of control, test anxiety, reading ability, and testing behaviors, and their findings.

### Self-esteem

Self-esteem is defined as how one feels about the self. The *t*-test results revealed that the African American males group ( $n=10$ ) had a mean score of 8.40 with a standard deviation of 1.35. The *test failers* group ( $n=29$ ) had a mean score of 7.66 with a standard deviation of 2.41, after extracting the African American males sample (see Table 3). There was no significant difference in the mean scores of the African American males sample and the *test failers* group ( $t(37)=.924, p=.362$ ), even though the self-esteem mean score for African American males was .74 higher. The mean average for both groups was around 8 on a 10-point scale, indicating positive self-esteem. There was no significant departure from normality of the data for self-esteem and African American males ( $p=.269$ ), but there existed significant departure from normality for the data on self-esteem and the *test failers* group ( $p=.010$ ). The Levene's test showed no significant departure from homogeneity of variance between groups ( $p=.255$ ). The findings, therefore, should be taken with caution.

The findings about self-esteem and student performance on high-stakes tests of educational achievement are consistent with my personal observation as an educational administrator, but contrary to Rosenberg's (1965) and Hansford and Hattie's (1982) findings. According to Rosenberg, self-esteem declined with failure, and; as a result, subjects developed feelings of loneliness and depression. In agreement, Hansford and Hattie found that negative self-esteem lead to negative outcomes. Contrarily, my observations of students suggest that students are emotionally unaffected by unsuccessful outcomes on tests. They appear to develop

lethargic attitudes about doing well on tests, but maintain positive attitudes about themselves. They remained energetic and outgoing in spite of failure. These characteristics are visible in students of all academic ability and capability, not just with those students who are categorized as at-risk of academic failure. Similar to Osborn's (1997) findings, students are not taking the experience of failure personally. They come to disidentify at an early age with failure on high-stakes tests of educational achievement as less important than other variables in their lives, whatever they might be.

Table 3  
Mean Attribution Scores for Self-esteem

Group	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Variance</i>	<i>t</i>	<i>df</i>	<i>p</i>
Test Failers	29	7.66	2.41	7.31	.924	37	.362
African American Males	10	8.40	1.35	1.82			

\* $p < .05$ , 2-tailed, significant difference

#### Locus of Control

How an individual internalizes or externalizes life events is referred to as the locus of control. The results of the *t*-tests (see Table 4) showed that the African American males group ( $n=10$ ) had a mean score of 8.50 with a standard deviation of 2.46. The *test failers* group ( $n=29$ ), on the other hand, had a higher mean score of 8.93 with a standard deviation of 2.87, after extracting the African American males sample. The information suggested that there was no significant difference in the mean scores of the African American males and the *test failers* groups ( $t(37) = -.424, p = .674$ ). Both groups averaged in the low range (0-10) on the Rotter's scale, meaning both groups internalized life events. In reference to normality, the Shapiro-Wilk test indicated no significant departure from normality for the African American males group ( $p =$

.362), and significant normality for the test failers group ( $p=.521$ ). The Levene's test for homogeneity of variance suggested significant homogeneity of variance ( $p= .583$ ).

The findings indicated that students in this study internalized life events. Similar to Ickes and Layden's (1976) finding, the internalization of negative events had no immediate effects on students' self-esteems. The study of Belgrave, Johnson, and Carey (1992) and Metalsky, Abramson, Seligman, Semmel, and Peterson (1982), however, showed that subjects who internalized negative events developed poor self-esteems over time, became depressed, or, as noted by Finn (1989), become passive and withdrawn. Although the impact of the Standards of Learning on the students in this study is not immediately foreseen, I can only ponder the worst outcomes from my review of student data over the years and the development of students' lethargic attitudes at a young age toward taking high-stakes tests of educational achievement.

Table 4  
Mean Attribution Scores for Locus of Control

Group	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Variance</i>	<i>t</i>	<i>df</i>	<i>p</i>
Test Failers	29	8.93	2.87	9.31	-.424	37	.674
African American Males	10	8.50	2.46	6.10			

\* $p<.05$ , 2-tailed, significant difference

Test Anxiety

Table 5 shows the results of the *t*-test run compared to the scores collected from the Test Anxiety scale. An inspection of the results reveals that the mean score for the African American males group ( $n=10$ ) was 21.7 with a standard deviation of 5.95. The *test failers* ( $n=29$ ), on the other hand, had a higher mean of 24.8 with a standard deviation of 5.16, extracting the African American males sample.



The data indicated no significant difference in the mean scores of the African American males sample and the *test failers* ( $t(37)=-1.57, p=.124$ ). The mean scores, however, of 21.7 and 24.8 on a scale of 37, suggested that both groups experienced discomfort with taking tests (A score of 15 or greater indicating considerable discomfort) as measured by the Test Anxiety scale. Results of the Shapiro-Wilk test provided no significant departure from normality for data obtained on both groups (African American males group,  $p=.167$ , *test failers* group,  $p=.487$ ). The Levene's test of homogeneity of variance, likewise, indicated no significant departure from homogeneity of variance for samples' data ( $p=.310$ ).

Table 5  
Mean Attribution Scores for Test Anxiety

Group	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Variance</i>	<i>t</i>	<i>df</i>	<i>p</i>
Test Failers	29	24.8	5.16	25.3	-1.57	37	.124
African American Males	10	21.7	5.95	35.3			

\* $p<.05$ , 2-tailed, significant difference

Both groups experienced test anxiety when administered the Test Anxiety scale. The findings were consistent with the findings of Sarason et al. (1960) who found that when the level of anxiety increased, the achievement of elementary students decreased. Likewise, Steele and Aronson (1995) found that *stereotype-threats* in the form of words (i.e., yuppie, ability, or intelligence) created anxiety and impacted achievement. I experienced this effect with the Scholastic Aptitude Test (SAT). Hearing the letters SAT brought to mind such threats as ability, failure, intelligence, I.Q, and underachiever. These threats initiated anxiety in me before every administration. Perhaps, many students experienced anxiety with the Standards of Learning (SOLs) by the mere mentioning of the letters, which, in turn, lead to unsuccessful outcomes.

## Reading Ability

Students' scores achieved on the Literacy Passport Test (LPT), a state mandated test in Virginia, were used to investigate the influence of reading ability on the achievement of African American males and other test failers. Table 6 contains the results of the *t*-test run on the LPT scores. The mean score for the African American males group ( $n=10$ ) was 251 with a standard deviation of 18.5. The *test failers* group ( $n=28$ ), on the other hand, received a higher mean score of 256 with a standard deviation of 15, after extracting the African American males sample. The *t*-test results in Table 5 reveal no significant difference in the mean scores for the African American males sample and the *test failers* group ( $t(36) = -.866, p = .392$ ). The mean scores of 251 and 256 indicate that both groups were successful with the LPT (a score 250 needed to pass). The Shapiro-Wilk test of normality indicated a significant departure from normality for the sample data obtained for the African American males group ( $p = .010$ ), but no significant departure from normality for the *test failers* group ( $p = .271$ ). The Levene's test of homogeneity of variance indicated significant normality of variance for the data between groups ( $p = .921$ ). The findings should be taken with caution.

Table 6

### Mean Attribution Scores for Reading Ability

Group	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Variance</i>	<i>t</i>	<i>df</i>	<i>p</i>
Test Failers	28	256	15	265	-.866	36	.392
African American Males	10	251	18.5	340			

\* $p < .05$ , 2-tailed, significant difference

For more than four decades, researchers such as Rosa (1994), Hood (1992), Mangieri and Olsen (1977), Boykin (1955), and Lee (1951) have explored the relationships between reading ability and student achievement. The findings suggested the relevance of mastery with basic and

critical reading skills, and successful academic outcome. In reference to African Americans, Lee found that there existed discrepancies in the ability of high school students to grasp word meaning, to infer cause, to propose hypothesis, to make generalizations, and to comprehend meaning from written text. Boykin and Hood found similar findings with college freshmen, as did Rosa with elementary students. African Americans were weaker than other ethnicities in those basic and critical reading skills necessary for academic success. According to Mangieri and Olsen, the more proficient the subject was in reading, mastery with basic and critical skills, the higher was his self-concept of academic achievement. And, vice versa, the less proficient the subject was with basic and critical reading skills, the lower was his self-concept of academic achievement. Although this study excluded the examination of the sub-tests composing the Literacy Passport Test (LPT), the latter scenario was more supportive of the findings of data reviewed from the spring 2000 administration of the high-stakes Standards of Learning (SOLs). Students who failed were weak with basic and critical reading skills (word knowledge, inferences, interpretation, and comprehension). Similar to Finn's (1989) findings, The extrapolation of students' test data and my observations of classroom instructions exposed discrepancies in what was taught in the classroom (educational practice) and what was tested.

#### Testing Behaviors

In investigating testing behaviors of students, three domains were explored: time on task, preparation, and problems that students experienced with the Standards of Learning tests. An inspection of Table 7 reports that African American males ( $n=10$ ) spent an average of 1.5 hours studying for the Standards of Learning tests. The *test failers* group ( $n=29$ ), on the other hand, consumed less time preparing (an average of 1.4 hours, after excluding the African American males sample).

The data for test preparation revealed three common themes from the data collected. Students gave three strategies utilized in preparing for testing. Fifty-percent of African American males ( $n=10$ ) utilized class study guides the most to prepare for testing, compared to 69% of the *test failers* group ( $n=29$ ), excluding the African American males sample. In addition, 10% of African American males prepared for testing with the use of class notes or flashcards, compared to 14% of the *test failers* group. Ten percent of African American males claimed that they don't study for tests, compared to 3% of the *test failers*. Both groups identified study guides as the most common strategy for preparing for tests.

Table 7

Attributes of Testing Behaviors

Themes	African American Males	Test Failers
Time on Task	1.5 hrs.	1.4 hrs.
Preparation		
Study Guides	50%	69%
Notes/Flashcards	10%	14%
Don't Study	10%	03%
Problems		
Readability	10%	31%
Content	60%	59%
Length of Test	30%	55%
Being Prepared	50%	79%

Having comprehension and mastery of the content were identified as the most problematic areas for both the African American males sample ( $n=10$ ) (50% comprehension/60% mastery) and the *test failers* group ( $n=29$ ) (79% comprehension/ 59% mastery). Fifty-five percent of students from the *test failers* group claimed that the length of the tests was problematic, compared to 30% of African American males. Readability was the least

problematic area for both groups (10% African American males, 31% *test failers*). Although not significant enough to classify as a major theme, it was worth noting that 6 % of students from the *test failers* group commented that they saw no importance in taking the Standards of Learning tests.

### Summary

The intent of this study was to explore the variables of self-esteem, locus of control, test anxiety, reading ability, testing behaviors, and African American males' performance on high stakes testing of educational achievement. The findings, however, should be interpreted with caution because of the small sample sizes.

The *t*-tests results from the data collected on student achievement found a significant mean difference between the African American males and the *test failers* groups in the area of English, but no significant mean difference for math. In reference to the variables of self-esteem, locus of control, test anxiety, reading ability, and testing behaviors, there existed no significant difference in the mean scores of the African American males and the *test failers* group for these variables. However, the scores achieved from the various scales and questionnaire administered provided information useful in aiding educators' understanding of those variables that influenced student performance on high-stakes tests of educational achievement. With this knowledge, practitioners may be able to plan, develop, and implement instructional and learning strategies to improve student achievement. The findings were:

- 1) that there was no significant difference in the mean scores between African American males and the *test failers* groups for the variable of self-esteem, but the mean scores suggested that both groups possessed strong, positive self-esteem

despite failure, and that the mean score for African American males was slightly higher;

- 2) that there was no significant difference in the mean scores between the two groups for the variable of locus of control, but the means indicated that both groups internalize outcomes. Inferring that negative events, such as failure, result primarily from their own actions;
- 3) that there was no significant difference between the mean scores of African American males and the *test failers* groups for the variable of test anxiety, but the mean scale scores showed that both groups experienced discomfort, or anxiety, with taking tests, and that African American males experienced less discomfort;
- 4) that there was no significant mean difference for the variable of reading ability on the Literacy Passport Test, but African American males scored 5 points lower, and
- 5) that both groups spent approximately an hour preparing for tests, utilized traditional methods (class study guides and flashcards) for preparing, and expressed a lack of content knowledge, mastery of the skills, and trouble with the format of the subtests, especially the length of the tests, as barriers to their success on the Standards of Learning.

## CHAPTER FOUR

### CONCLUSIONS AND RECOMMENDATIONS

Chapter one of this study reviewed evidence that the achievement gap between African American students and other ethnicities is continuous. Simultaneously, many states, including Virginia, have implemented reform measures that utilize high-stakes tests as means of accountability. Student performance on these tests is a criterion for graduation. Virginia mandates that students pass six Standards of Learning exams, earning six verified credits towards a regular high school diploma, for graduation. Ironically, this mandate occurred at a time when disparity in student achievement was noticeable from the results of the spring 2001 administration of the Standards of Learning. For example, African Americans scored 30 points lower than Caucasians and 13 points lower than Hispanics on the Mathematics 8 exam. On the English 8 exam, African Americans dropped from a 62% passing rate in 2000 to a 59% passing rate in 2001. The passing rate of Caucasians remained at 82%. The scores of Hispanics dropped 2 points to 67%. Caucasians and Hispanics scored 23 and 8 points higher than African Americans, respectively (Virginia Department of Education, 2002). In this study, there was significant difference in the mean English 8 scores between the African American males and *test failers* groups, but no significant difference between the mean Mathematics 8 scores. It is evident that the implementation of the Standards of Learning has not diminished the achievement gap between African American students and other ethnicities in Virginia, nor have they served as the quick fix to raise academic standards (Cross, 1999). They have, however, posed more concerns when considered with other influential student related variables.

Chapter one further discussed various theories associated with student performance on high-stakes tests of educational achievement. Self-esteem was defined as how an individual felt

about himself or herself (Rosenberg, 1965). Self-esteem had a direct effect on self-concept— an individual’s attitude associated with an event-- which, in turn, impacted performance (Osborne, 1997 and Hansford & Hattie, 1982). The theory of test anxiety was the second variable explored in this study. Test anxiety was defined as an unpleasant experience associated with taking a test (Sarason et al., 1995). Steele and Aronson (1995) studied how unpleasant experiences, termed *negative stereotype threats*, worked as barriers to the achievement of African American males, causing them to *disidentify* with an event as irrelevant to their successes in life. Third, the theory of locus of control, the internalization/externalization of life events, was examined in reference to student performance on high-stakes tests of educational achievement. Weiner (1983,1986), Lochel (1983), Ickes and Layden (1976), Belgrave et al. (1992), and Metalsky et al. (1982) explored this theory and concluded that whether a student internalized or externalized positive or negative events determined future success with the same task. Finn (1989) explored the influence of educational practices as possible attributes influencing student academic performance. According to Finn, an individual’s lack of identification with his educational environment lead to a lack of motivation, poor self-esteem, poor participation, poor academic performance, and, eventually, a withdrawal from school. Reading ability was the fourth theory in review. Lee (1951), Boykin (1955), Mangieri and Olsen (1977), Hood (1992), and Rosa (1994) studied factors associated with African Americans’ performance on high stakes tests of educational achievement and reading ability. The ability of a student to acquire and demonstrate basic and higher-level reading skills such as comprehension, critical thinking, vocabulary, fluency, and speed correlated with achievement. The final variable explored in this study was testing behaviors. Students were administered a qualitative instrument (questionnaire) composed of questions from three domains: time-on-task, preparation, and problems. The testing behaviors



questionnaire was used to measure the influence of testing behaviors on student achievement. The theories of self-esteem, locus of control, test anxiety, reading ability, and testing behaviors were explored as student-related variables influencing the performance of African American males on high-stakes tests of educational achievement.

### Conclusions

Chapter three reported the findings of the study. It is important to remind readers that the purpose was to explore the variables of self-esteem, locus of control, test anxiety, reading ability, testing behaviors, and student performance on high-stakes tests of educational achievement. It was concluded that 1) both groups of students in the study achieved positive self-esteem scores, regardless of their experience with failure. This could be attributed to them disidentifying with tests as having nothing to do with their successes in life; 2) both groups of students scored below 10 points on the locus of control scales indicating that they internalized life experiences. If the experiences were of a negative nature, such as failing a test, then this could contribute to students developing a lethargic attitude toward the specific event. Unfortunately, this lethargic attitude expands to effect the student's educational performance in general as I have observed in students who have experienced frequent failures with life events; 3) both groups achieved test anxiety scores in the discomfort range, which could have resulted from their prior experiences with test failure, the pressures imposed on them by the demands of the high-stakes tests of educational achievement, the expectations passed down to them from educators mandated to meet the rigorous time requirements of curriculum and pacing guides, or the student's belief that the Standards of Learning are irrelevant to his/her life successes; 4) both groups were identified as being successful readers, but unsuccessful with the English 8 exam. This could be attributed to their lack of mastery in the area of critical thinking skills. The passages of the English 8 exam

are quite lengthy. It is not enough for students to be able to read the passages. They must be able to comprehend the information, depict key vocabulary, synthesize the information, make inferences, and apply key concepts to generated questions; and 5) limited time to prepare for testing, the use of traditional testing strategies, the length of the tests, the lack of content knowledge and mastery of skills attributed to students' performance on the Standards of Learning.

### Implications

The findings of this study portrayed many implications for the education profession and student performance on high-stakes tests of educational achievement. The findings suggested that the issue of the achievement gap has been revived by the Standards of Learning implemented by the State of Virginia. The gap between African Americans and other ethnic groups has widened in the areas of Mathematics 8 and English 8. African American males scored significantly lower than other students who also failed the English 8 exam, and worse than the same group of students on the Mathematics 8 exam. Disparity in achievement between ethnicities on the Standards of Learning is an issue of concern about the newly implemented high-stakes tests of educational achievement.

The findings on self-esteem and student performance suggested that both the African American males and test failers groups maintained positive self-esteem in spite of failure with the Standards of Learning. This may be the result of the development of a new attitude about the relevancy of high-stakes tests as accountability measures to students' success in life. Characteristics such as passive behavior, lack of motivation, lack of interest, avoidance, or withdrawal become mechanisms of protection from embarrassment. Students see "no compelling incentives to expend effort" (Osborne, 1997, p. 728) on something with which they have

experienced failure. Unless this new attitude is addressed with positive incentives, rather than punitive ones, this lethargic sentiment towards the value of the Standards of Learning will only worsen over time because the negative experience of failure is internalized by students, creating anxiety, and making conscious the phobia of failure whenever the student is confronted with the task of taking a test. There are many psychological discomforts brought on by test anxiety. Headaches, nervousness, stomachaches, rapid heartbeats, or frequent restroom visits are behaviors exhibited by a student experiencing test anxiety. The African American males and test failers groups of this study received high scores on the Test Anxiety scale, meaning that they experienced discomfort with taking tests. Educators, therefore, must implement strategies to relieve the anxiety experienced by students during testing if students are to experience success with high-stakes tests of educational achievement. Possible strategies for implementation by educators are discussed in the reflection section of this study.

The ability to master basic and critical reading skills equals academic success. However, my review of student data from the administration of the Standards of Learning revealed that the African American males and *test failers* groups were weak with critical reading skills such as analyzing, comparing, synthesizing, and drawing conclusions. They might have been good readers, but critical readers they were not. In order for students to be successful with the English 8 exam, educators will have to abandon the philosophy that being a good reader is good enough. Students must be acclimated to those high-field processing skills (Rosa, 1994). The focus of teaching and learning strategies must educate students to ask the right questions, to make generalizations, to draw conclusions from complex text, to compare and contrast information, to maintain the focus of lengthy passages, and to depict relevant information necessary to extrapolate main ideas. Having appropriate resources to teach such skills are necessities.

Educators, however, must understand that having the resources and strategies are pointless unless the teaching and learning techniques are of the nature of assisting students to handle the anxieties caused by testing, to experience comfort and success with testing, and to view testing as a measure of academic strengths and weakness rather than a challenge of their competence to be successful in life.

The voices of students were relevant in understanding the influence of testing behaviors on student achievement. An analysis of the information given by students in reference to the domains of time-on-task, preparation, and problems with the Standards of Learning indicated that all students spent few hours planning to achieve, relied on traditional methods of preparation, and experienced many problems with the examinations. The limited amount of time specified by students for studying might have signified a lack of interest, or value, placed on the importance of the Standards of Learning, and that cramming years of information into a few hours before testing was not beneficial. The traditional means of preparation (i.e., the use of study guides and flashcards) proved to be unsuccessful strategies for both groups. In addition, students expressed concerns with not having mastered the content of the subject matter, and with the formats of the sub-tests-- especially the length. Practitioners need to explore contemporary instructional and learning strategies to challenge students to become stakeholders in their own education, and attend in-services and workshops offered by the Governor's Best Practice Centers to learn techniques for teaching the Standards of Learning. Possible strategies for implementation are discussed in the reflection section of this study. School divisions can also assist educators by planning division-wide staff development opportunities in the areas of data disaggregation, curriculum and pacing guide development, lesson planning, differentiation of instruction, and resource selection for assessing and monitoring student performance. The State

of Virginia can assist school divisions by allocating appropriate funds to support personnel and program decisions necessary for the successful implementation of the Standards of Learning and the success of all students.

#### Reflection, Limitations and Recommendations for Further Study

I currently serve in the role of a public school administrator and have done so for the past ten years. During this time period, one duty of many included the disaggregation of student achievement data on high-stakes tests. Each year we have seen the widening of the achievement gap between African Americans and other ethnic groups. Without a clear understanding behind the performance of African Americans on high-stakes tests and the influential variables, more research is needed. This study, therefore, was an exploratory one conducted to examine the achievement gap from the perspectives of groups of failers and the variables of self-esteem, locus of control, reading ability, test anxiety, and testing behaviors during the stage of life (eighth grade adolescents) when students are developmentally mature and become responsible for their learning. Another focus of the study was the documentation of challenges experienced by the practitioner conducting such a study in his community.

The findings of the study implied that students in the study demonstrated positive self-esteem in spite of failure, internalized life experiences, experienced discomfort with testing, and possessed basic reading skills. These variables impact student achievement on high-stakes tests of educational achievement. Further study is recommended that addresses these concerns and “ensure[s] that the quality of schooling [is] not being linked to the quality of students’ test scores,” (Popham, 2001, p. 8) but to the assessed needs of students. Instructional recommendations for improving student success with high-stakes measures include the need:

- 1) for educators to explore strategies to provide positive incentives for students who have experienced failure on the Standards of Learning. At my own elementary school, our school improvement plan incorporates an awards assembly to recognize student achievement. Students are exposed to testing and test taking skills as early as kindergarten. Ice cream is awarded weekly for students who correctly answer the question of the day read during morning announcement relating to history. These are incentives to build students' self-esteem and to promote positive attitudes about learning;
- 2) to implement ways to relieve anxiety experienced by students during testing. Have students spend time relaxing and meditating on positive thoughts. Insure that the classroom environment is a relaxing one during testing with no distractions. Accentuate positive thinking by having students practice affirmative reinforcements such as "I can do it," "I am in control," and "I am not afraid." Frequently remind students to relax, take a break, and even perform relaxing exercises during lengthy tasks (Rubenzer, 1988). Monitor and assist students to implement these techniques during informal assessments so that they become habitual during formal testing;
- 3) to provide student with high-field processing skills in reading to give them a greater chance of success on high-stakes measures. Integrate new media activities into units of studies such as editorials, magazines, and radio to motivate critical listening and reading skills with a questioning attitude (Carr, 1990). Implement strategies to assist the teaching and learning of critical thinking skills to include identifying the author's main idea and conclusion, having students rewrite the ending of a piece of literature from the student's perspective and comprehension, depicting cause and effect

relationships, making inferences from reading and role playing, and having students explain how they arrived at a given answer to a problem or situation (Shermis, 1999); and,

- 4) to explore contemporary ways to assist students in reviewing information learned throughout the year. One strategy implemented at my school this year is on-going review and periodic assessment. Morning work is used to review concepts learned the previous day before moving on to new concepts. Strand assessments (short tests) are given to determine mastery of skills after all skills of a particular standard strand are taught. Students are formally assessed three times a year to measure on-going performance in the core areas, and to guide instruction. Unfortunately, the impact of these strategies is inconclusive until end-of-year assessments are conducted.

Possible future studies to assist in understanding African American males' success with high-stakes tests of educational achievement might include: 1) conducting a longitudinal study involving self-esteem, test anxiety, and African American males achievement; 2) exploring the variables of this study and those African American males who were unsuccessful verses those who were successful with high-stakes test of educational achievement; 3) investigating the specific skill components of the English 8 Standard of Learning and African American males' success with high-stakes tests of educational achievement; 4) studying one or two specific testing behavior variables and the impact of such on student performance on high-stakes tests of educational achievement; 5) examining a larger population and the variables of this study to determine if there exist significant differences in the mean scores; and 6) collecting and maintaining data at the individual level in order to match individuals with scores. In summary, these possible recommendations for further studies could provide information to help educators

to better understand and assist African American males' with having success with high-stakes tests of educational achievement.

The Virginia Department of Education (VDOE) has developed the Best Practice Center, whose purpose is to bring together teaching and learning strategies from around the state that have been proven to raise student achievement. In addition, the VDOE has compiled resources guides for the core subject areas (English, History, Science, and Mathematics) to assist educators in aligning their school/division curriculum and instruction with the Standards of Learning. Our school division has formed a task force composed of school and community leaders to brainstorm possible action plans to address the achievement gap issue. Likewise, in my own elementary school, our school improvement plan addresses early identification of students at-risk of academic failure by using formal and informal assessments. In addition, on-going assessment and exposure to testing strategies are implemented as opportunities to make students more confident with high-stakes tests, to pinpoint weak skills in the areas of reading and math, and to guide instructional and curriculum decisions to meet the needs of students. Our goal is to implant an attitude in our students that success is not solely measured by their performance on a high-stakes test of achievement, but by their lifelong desire to obtain and to use those fundamental skills achieved through education to be productive citizens. I hope to see the day when the achievement gap issue is no more, and the competence of our youths is based on a multiplicity of performance indicators, rather than the outcome of a single testing measure.



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APPENDIX A

SELF-ESTEEM SCALE

**Directions.** Read the statement on the left, then choose one answer by placing a check in the box under the statement that applies.

	Strongly Agree	Agree	Disagree	Strongly Disagree
I feel that I'm a person of worth, at least on an equal plane with others.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel that I have a number of good qualities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
All in all, I am inclined to feel that I am a failure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am able to do things as well as most other people.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel I do not have much to be proud of.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I take a positive attitude toward myself.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
On the whole, I am satisfied with myself.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I wish I could have more respect for myself.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I certainly feel useless at times.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
At times I think I am no good at all.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Rosenberg (1965)

## LOCUS OF CONTROL SCALE

Directions: Read the statement and circle either A or B.

1. Children get into trouble because their parents:
  - a. push them to much.
  - b. are to easy on them.
2. Many of the unhappy things in people's lives are partly due to:
  - a. bad luck.\*
  - b. mistakes they make.
3. One of the major reasons for war is because:
  - a. of the lack of interest in politics.
  - b. wars will always happen.\*
4. In the long run:
  - a. people get the respect they deserve.
  - b. individual worth passes unrecognized.\*
5. The idea that teachers are unfair to students is:
  - a. nonsense.
  - b. not realized by students.\*
6. One cannot be an effective leader because:
  - a. he/she does not get the right breaks.\*
  - b. he/she has not taken advantage of opportunities.
7. No matter how hard you try:
  - a. some people just don't like you.\*
  - b. people don't understand how to get along with you.
8. One's personality is determined by:
  - a. heredity.
  - b. one's experience in life.
9. I have found that:
  - a. what will happen will happen.\*
  - b. fate has never turned out as well as making a decision.
10. In the case of a well prepared student:
  - a. there is no such thing as an unfair test.
  - b. exam questions are unrelated to course work, so studying is useless.\*
11. Success is depended on:
  - a. hard work, not luck.
  - b. being in the right place at the right time.\*
12. The average citizen:
  - a. can influence government.
  - b. has no influence.\*
13. When I make plans they:
  - a. work.
  - b. turn out to be a matter of good or bad fortune.\*
14. There are certain people:
  - a. who are just no good.
  - b. who are good.
15. What I want:
  - a. has nothing to do with luck.
  - b. can be determined by a flip of a coin.\*
16. Who get to be the boss:
  - a. depends on luck.\*
  - b. depends upon ability.

LOCUS OF CONTROL SCALE (CONTINUED)

17. World affairs is:  
a. something we are victims of and cannot control.\*  
b. something we can control as active participants.
18. Most people don't realize:  
a. that extent their lives are controlled by accidental happenings.\*  
b. that there is not such things as luck.
19. One should:  
a. always be willing to admit mistakes.  
b. cover up one's mistakes.
20. It is hard to know:  
a. whether people really like you.\*  
b. whether the number of friends you have depends on how nice you are.
21. Bad things are:  
a. balanced by good ones.\*  
b. are the result of lack of ability, ignorance, laziness, or all three.
22. Political corruption:  
a. can be wiped out by enough effort.  
b. is difficult for people to control.\*
23. In reference to grades:  
a. it is hard to determine how teachers arrive at the grades they give.\*  
b. the grade I receive is connected to how hard I study.
24. A good leader:  
a. expects people to decide for themselves what they can do.  
b. makes it clear to everybody what their jobs are.
25. Many times I feel that:  
a. I have little influence over the things that happen to me.\*  
b. it is hard to believe in chance or luck.
26. People are lonely because:  
a. they don't try hard to make friends.  
b. they believe that if people like you, they like you. If they don't, they don't.\*
27. Athletics are:  
a. over emphasized in high school.  
b. are an excellent way to build character.
28. Sometimes I feel:  
a. that what happens to me is my own doing.  
b. that I don't have control over the direction of my life.\*
29. In reference to government:  
a. I don't understand why politicians behave the way they do.\*  
b. people are responsible for bad government, national as well as locally.

Rotter (1966)

## TEST ANXIETY SCALE

Read, then answer the following questions with "True" or "False" by circling the letter of your choice following each question.

- |  |     |
|--|-----|
| 1. While taking an important exam, I find myself thinking of how much brighter the other students are than I am. | T F |
| 2. If I were to take an intelligence test, I would worry a great deal before taking it.                          | T F |
| 3. If I knew I was going to take an intelligence test, I would feel confident and relaxed.                       | T F |
| 4. While taking an important exam, I perspire a great deal.  | T F |
| 5. During class examinations, I find myself thinking of things unrelated to the actual course material.          | T F |
| 6. I get to feeling very panicky when I have to take a surprise exam.  | T F |
| 7. During a test, I find myself thinking of the consequences of failing.   | T F |
| 8. After important tests, I am frequently so tense my stomach gets upset.  | T F |
| 9. I freeze up on things like intelligence tests and final exams.  | T F |
| 10. Getting good grades on one test doesn't seem to increase my confidence on the second.                        | T F |
| 11. I sometimes feel my heart beating very fast during important exams.  | T F |
|  |     |
| 12. After taking a test, I always feel I could have done better than I actually did.                             | T F |
| 13. I usually get depressed after taking a test.   | T F |
| 14. I have an uneasy, upset feeling before taking a final examination.   | T F |
| 15. When taking a test, my emotional feelings do not interfere with my performance.                              | T F |
| 16. During a course examination, I frequently get so nervous that I forget facts I really know.                  | T F |
| 17. I seem to defeat myself while working on important tests.  | T F |
| 18. The harder I work at taking a test or studying for one, the more confused I get.                             | T F |
| 19. As soon as an exam is over, I try to stop worrying about it, but I just can't.                               | T F |
| 20. During exams, I sometimes wonder if I'll ever get through school.  | T F |
| 21. I would rather write a paper than take an examination for my grade in a course.                              | T F |
| 22. I wish examinations did not bother me so much.   | T F |
| 23. I think I could do much better on tests if I could take them alone and not feel pressured by time limits.    | T F |
| 24. Thinking about the grade I may get in a course interferes with my studying and performance on tests.         | T F |



TEXT ANXIETY SCALE (CONTINUED)

25. If examinations could be done away with, I think I would actually learn more. **T F**
26. On exams I take the attitude, "If I don't know it now, there's no point in worrying about it." **T F**
27. I really don't see why some people get so upset about tests. **T F**
28. Thoughts of doing poorly interfere with my performance on tests. **T F**
29. I don't study any harder for final exams than for the rest of my coursework. **T F**
30. Even when I'm well prepared for a test, I feel very anxious about it. **T F**
31. I don't enjoy eating before an important test. **T F**
32. Before an important examination, I find my hands or arms trembling. **T F**
33. I seldom feel the need for "cramming" before an exam. **T F**
34. The [school] should recognize that some students are more nervous than others about tests and that this affects their performance. **T F**
35. It seems to me that examination periods should not be made such intense situations. **T F**
36. I started feeling very uneasy just before getting a test paper back. **T F**
37. I dread courses where the instructor has the habit of giving "pop" quizzes. **T F**

## STUDENT TESTING BEHAVIOR QUESTIONNAIRE

Directions: Read the following and write in your answer.

### **I. Time on Task**

1. How many hours do you spend preparing for a major test? (a number)

### **II. Preparation**

2. What strategies do you use to prepare for a major test?

### **III. Problems experienced.**

3. What problems did you have with the SOL tests (place a check in the blank next to those that apply).

1. \_\_\_\_\_ readability (reading the test).

2. \_\_\_\_\_ content (information covered on the test).

3. \_\_\_\_\_ length of the test (number of questions on the test).

4. \_\_\_\_\_ being prepared for the test (having mastery of the content).

5. \_\_\_\_\_ others (use the space below to write your comments).

Comments:

APPENDIX B

PARENTAL CONSENT FORM

I \_\_\_\_\_ have read and understand the informed consent and conditions of this project. I have had all questions answered. I hereby acknowledge the above and give my voluntary consent for my child, \_\_\_\_\_, to participate:

\_\_\_\_\_ Date \_\_\_\_\_  
Parent signature

Should I have any questions about this research or its conduct, I may contact:

\_\_\_\_\_ Telephone \_\_\_\_\_  
Investigator

\_\_\_\_\_ Telephone \_\_\_\_\_  
Faculty Advisor

\_\_\_\_\_ Telephone \_\_\_\_\_  
Chair, IRB  
Office of Research Compliance  
Research & Graduate Studies

APPENDIX C

STUDENT CONSENT FORM

I \_\_\_\_\_ have read and had explained to me the informed consent and conditions of this project. I have had all questions answered. I understand that I may withdraw at any time during the research without any questions asked. I hereby acknowledge the above and give my voluntary consent:

\_\_\_\_\_ Date \_\_\_\_\_  
Student signature

Should I have any questions about this research or its conduct, I may contact:

\_\_\_\_\_  
Investigator                  Work                  Home