Theses and Dissertations   Graduate School

2008

The Effects of Family, School and Peer Support on the Achievement Outcomes of African American Adolescents

M. Annette Clayton
Virginia Commonwealth University

THE EFFECTS OF FAMILY, SCHOOL AND PEER SUPPORT ON THE

ACHIEVEMENT OUTCOMES OF AFRICAN AMERICAN ADOLESCENTS

A Dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Social Work at Virginia Commonwealth University.

by

M. ANNETTE CLAYTON
Master of Science in Social Work, University of Texas at Austin, 1981
Bachelor of Science in Psychology, Howard University, 1978

Director: Dr. Delores Dungee-Anderson
Associate Professor, Social Work

Virginia Commonwealth University
Richmond, Virginia
May, 2008

Acknowledgements

I want to thank my committee for all of their support, encouragement, guidance and flexibility. Without their collective wisdom and personal sacrifice, this milestone accomplishment would not have been possible.

I am dedicating my dissertation to my parents, Nellie B. and James A. Clayton, who instilled in me a thirst for knowledge, love for all mankind, a desire to achieve my goals, and hope for the future. I also want to express my heartfelt gratitude to the following special friends who are no longer with me but who have touched my life in so many varied and valued ways: Ropelle Richards, Tony Covas, King Stephens, Wesley Hunter, Wesley Williams, Terri Schmidt, Marie Ford and Margaret Bailey.

Last but not least, I want to thank God who gave me what I needed when I needed it, who carried me when I was too tired to walk, and who continues to bless and sustain all that is good in this world.

Table of Contents

List of Tables

List of Figures

Abstract

THE EFFECTS OF FAMILY, SCHOOL AND PEER SUPPORT ON THE

ACHIEVEMENT OUTCOMES OF AFRICAN AMERICAN ADOLESCENTS

By M. Annette Clayton, Ph.D.

This study used survey design to explore the relationship between protective influences (support from parents, teachers and peers, social capital assets, and social support use), contextual risks, and two achievement outcomes in a representative sample of male and female African American high school seniors (N=317). Responses to two questionnaires, weighted cumulative grade point averages, and eleventh grade Virginia English Reading Standards of Learning test scores were analyzed.

Multiple regression analysis revealed that some support variables were predictive of better achievement outcomes and others were associated with poorer outcomes. Three of the parent support predictors were associated with poorer achievement outcomes, suggesting that low-achieving African American students may have heightened needs for

xii

parent support during their senior year in high school, a point in time that determines the trajectory for years to follow.

Even though 44 percent of the sample acknowledged a high level of exposure to contextual risks, its effects were more predictive of poorer outcomes for males than for females. This finding suggests that males may be more vulnerable to the effects of contextual risks. Additionally, only two support variables, Friend Support and Family Togetherness, moderated the influence of contextual risks on male student achievement.

Qualitative findings revealed that important gender differences exist with regard to perceptions of support within the samples' home, school, and peer group environments. Females identified emotional support as a success factor more than males. In contrast, males acknowledged the importance of behavioral support as a school success factor. Both males and females endorsed tangible support as an important school success factor. Respondents also endorsed ambivalence about the role of peer support as a school success factor.

Taken in combination, the study findings increase our understanding of the relationship between the context-linked experiences of urban African American adolescents and their achievement outcomes. The findings also support the critical need to extend our understanding about the role of contextual influences as we facilitate stronger connections between homes, schools, and communities.

This document was created in Microsoft Word 2003 and Adobe Acrobat 7.0.

The appendices are available, and can be accessed, in the print version only.

Chapter 1: Introduction

Purpose of the Study

In this study, the researcher utilized an ecological model to investigate the relationship between perceptions of social support from parents, teachers and peers and achievement outcomes in a sample of male and female African American high school seniors. The researcher also explored the relationship between the following; social support use, social capital assets (support and encouragement that students receive from relationships with adults in their social environments), contextual risks and two achievement outcomes. In addition to the main effects of the social support variables, the researcher was also interested in examining the effects of social support as a possible moderator of exposure to contextual risks (peer substance use, neighborhood crime, death of a friend, etc.).

For African American adolescents, social support from adults such as parents and teachers are associated with higher grade point averages and other favorable educational outcomes (Fisher, 2000; Forsbach, Yanowitz, & Fiala, 2002; Maton, Hrabowski, & Grief, 1998; McClendon, Nettles, & Wigfield, 2000). The findings on the influence of peer support vary significantly (Cooper & Datnow, 2000; Fisher, 2000; Fordham & Ogbu, 1986; Gutman, Sameroff, & Eccles, 2002) and suggest a need for more research that investigates the relationship between peer support, contextual risks and achievement outcomes (Gonzales, Cauce, Friedman, & Mason, 1996; Gutman et al., 2002). Overall,

1

the paucity of published studies that have investigated the combined influence of parent, teacher and peer support and contextual risks on the achievement outcomes of African American adolescents suggest that insufficient attention has been given to furthering our understanding about the relationship between contextual influences and African American adolescents' educational outcomes.

Problem Statement

In the United States, there are distressing differences in the educational achievement of different racial/ethnic groups. African American students' performance scores in reading, mathematics, and science improved significantly relative to White students of all ages starting in the early 1970s and up to the mid to late 1980s; however, during the 1980s and 1990s the gap either remained the same or widened, depending on the grade and subject (The State of America's Children: A Report of the Children's Defense Fund [CDF], 2000). For example, in 1998 White students scored 33 points higher than African American students on fourth grade reading tests (CDF, 2000) and according to the U.S. Department of Education's National Center for Educational Statistics 2004 report, in 1999 the disparities in reading scores for 13 and 17 year old African American and White students was 29 and 31 points respectively (as cited in Lamb, Land, Meadows, & Traylor, 2005). Even though African American students' scores in reading and math have increased at certain grade levels within recent years, these gains have not been enough to close the racial/ethnic achievement gaps between African American and White students (Lee, Grigg, & Dion, 2007; Lee, Grigg, & Donohue, 2007).

The number of African American students taking the Scholastic Aptitude Test (SAT) is increasing, approximately 115,000 in 1998 compared to 98,000 in 1988 (Chenowith, 1998); however, African American students' scores on this college admissions examination continue to be significantly lower than White students. In 1999, for example, African American students' mean combined math and verbal score was 856 compared to White students' mean combined score of 1055 (College Board, 1999). Moreover, "only 4 % of African American students who took the exam in 1999 earned combined scores of 1200 or higher, compared to almost 25 % of White students" (Hrabowski, Maton, Greene, & Greif, 2002, p.7). According to the College Board (1999) report, *high-achieving* students typically come from educationally and economically advantaged families; however, there is compelling evidence that African American students from middle-income families are not achieving at the same levels as their White and Asian American counterparts and achievement problems exists at all socioeconomic levels within some minority groups (College Board, 1999).

The Relationship between Family Income, Race and Educational Outcomes

Even though there is compelling evidence that achievement problems exist at all socioeconomic levels within some racial/ethnic minority groups, the relationship between family income, race/ethnicity and educational outcomes is well documented in the research literature. Rumberger (1987) documented that students more susceptible to academic problems and poor psychosocial adjustment to school were those from racial or ethnic minority groups and lower socioeconomic levels (SES). In their evaluation of Bureau of Census data, Livingston and Miranda (1995) found that children living in

families with low SES were five times more likely to drop out of school than those in higher SES families. They also found that at each income level, the dropout rates for African American and Hispanic youth were higher than the dropout rates for White youth. Other researchers (Boocock, 1972; Hale, 2001) also have provided evidence that in schools with sizable impoverished student populations, student achievement scores were consistently lower than the national average. These studies provide convincing evidence that low SES has a detrimental impact on the educational experience of many youth in this nation. Furthermore, their findings also suggest that family income may place some African American youth at increased risk for poor educational outcomes because 36.7% of African American youth live in poverty compared to 15.1% of White youth (CDF, 2000).

There is considerable scholarly consensus (Linver, Fuligni, Hernandez, & Brooks-Gunn, 2004; McLoyd, 1997; McLoyd, 1998; Taylor, 1994; Taylor, 1997) that poverty, a contextual risk factor, influences adolescent development. In their review of the literature on the impact of poverty on child development, Linver et al. (2004) noted that a number of studies provide evidence, when controlling for other demographics, that poverty is a strong predictor of negative developmental outcomes. They also found consistent empirical evidence that poverty effects are strongest during the preschool and early school years and these effects are strongly associated with cognitive and economic disadvantage. Linver et al. emphasized that the prevailing research suggests that poverty does not affect all children equally. Gender, age and ethnicity all appear to influence how

a child or adolescent is affected by living in poverty; however, poverty effects are magnified during adolescence and into the young adulthood years (Linver et al., 2004). Taylor (1994) also argues that the economic hardships that many African American families endure affect their adolescent family member's capacity to master developmental tasks, including achievement in school. Taylor (1994; 1997) contends that because economically disadvantaged African American adolescents may be at increased risk for psychosocial difficulties such as depression and school adjustment problems, they may possess a limited capacity for engaging in behaviors that promote the development of skills and abilities necessary for a successful transition into adulthood.

Social Support and African American Students' Educational Outcomes

There is consensus in both the theoretical and empirical literature that for many students the academic and social problems that culminate in school failure surface early in their educational careers (Rumberger, 2004). There is also considerable empirical evidence that these problems are influenced or exacerbated by the absence of support and resources in families, schools, and communities (Rumberger, 2004).

It is difficult to determine what external factors have the greatest impact on African American students' educational outcomes, the absence or presence of support or the availability of resources that can limit or expand opportunities. However, an ecological framework offers an opportunity to consider not only the impact of variables like family income; but also simultaneously a broad range of variables including types of social support that operate at the family, school, individual and neighborhood levels that may, in fact, affect students' educational outcomes.

Early in the resilience discourse, Garmezy (1985) noted that the availability of social support or external support systems that encourage and reinforce children or adolescents' coping efforts and their use of those resources is one of three broad types of protective influences that promote resilience and healthy developmental outcomes. To understand how social support acts as a protective influence, it is imperative to consider that it may or may not be domain specific. Social support's influence may operate principally within specific domains (home, school, peer group etc.) or the presence or absence of social support in one or more domains may have a significant impact on a number of developmental outcomes, including achievement in school.

Arguably, the seminal work of Clark (1983) ushered in a new era in the study of the influence of social support on African American students' educational outcomes. In Clark's study of 10 African American students from poor homes, half of whom were successful and half of whom were not, he discovered that the parents of the achieving students had distinct styles of interacting with their children. Not only did the parents of achieving students provide an emotionally supportive home environment, but they also provided reassurance to their children when it was most needed. Essentially, Clark's findings suggested that consistent practices at home had a positive impact on student achievement. But more importantly, his study demonstrated that an understanding about the processes that occur within the ecological contexts that directly influence African American students' development are important in furthering our understanding about African American student achievement.

In the years since Clarke's (1983) study, there has been a growing interest in research that enables us to better understand how ecological contexts differentially influence African American adolescents' educational outcomes. Not only are researchers interested in understanding more about the influence of risk; but also how, in the presence of risk, protective influences promote educational resilience (Franklin, 2000). In pursuit of a better understanding about the relationship between risk, protection and educational resilience, several scholars emphasize the importance of investigating gender and socioeconomic status differences within African American adolescent study samples (McLoyd, 1998; Taylor, 1994; Taylor 1997; Wilson, Cooke, & Arrington, 1997). This need is based on the knowledge that far too often in earlier research on African American adolescent achievement, investigators did not adequately distinguish within-group variations in their samples, even though these variations existed (McLoyd, 1998). Frequently, African American youth from low SES backgrounds were compared to middle SES White youth or to samples of both low and middle SES White youth (McLoyd, 1998). Methodological oversights like this are problematic when discussing the generalizability of findings. Moreover, conceptual and methodological concerns like the aforementioned highlight the fact that many studies involving African American adolescents have not been sensitive to the complexities of race and class in our society.

<div align="center">Conceptualizing Variations in Educational Outcomes</div>

The problem of school failure can be conceptualized in many different ways and may include one or more of the following: poor academic performance, grade retention, and school dropout. Some conceptualizations of school failure also focus on the quality

of students' educational experiences, whether or not the education they receive prepares them for future education, employment or training. Richman and Bowen (1997) and Richman, Bowen and Woolley (2004) conceptualize the potential for school success or failure from an eco-interactional –developmental [EID] perspective that emphasizes the person-environment fit and considers individual variations in educational outcomes from the perspective of risk, protection, and resilience. Contextual variables and other predictors figure prominently in their conceptualization.

In the Richman and Bowen (1997) and Richman et al. (2004) conceptualization there are four categories of students. The first category of students includes those who are described as having both physically and psychologically withdrawn from school. The second category includes students who physically drop out of school but remain psychologically invested in their education. The third category of students includes those who are physically enrolled in school but have psychologically disengaged from school. Many of these students perform poorly in school. Lastly, they describe a fourth category of students who are both physically and psychologically invested in school. The fourth category of students extends the applicability of this model to students who experience success in school.

In this study, the EID perspective was used as the primary conceptual framework because it emphasizes the critical role of the person-environment fit and also considers individual variations in educational outcomes from the perspective of risk, protection, and resilience. The study sample included students from all achievement levels (*low-*

achieving to *high-achieving*) and the researcher anticipated that within the sample there would be varying levels of contextual influences (risk and protection).

Historical Perspective

It is commonly held that intellectual potential and achievement are inextricably linked. Therefore, any exploration of potential influences on the school achievement of African American adolescents must include a critical examination of historical perspectives that have and continue to influence societal beliefs about African American adolescents' intellectual potential.

Over the course of the last 300 years different ideological, political and economic forces have influenced the debate about the intellectual potential of African Americans. The controversial discourse can be traced back to colonial times when notions of racial difference helped to define the established social order. During the years before the Civil War, the prevailing attitudes about the intellectual potential and social status of African Americans were intricately tied to the struggle to establish and maintain slavery as an economic institution. Southerners, by and large, benefited the most from an ideology that purported that African Americans were intellectually inferior. However, Quakers and other abolitionists held views that were in sharp contrast to the prevailing ideology. They believed that African Americans possessed the same intellectual potential as members of other racial groups and argued that education was a means by which African Americans free or enslaved could realize their full potential.

In the 1800s, science significantly influenced prevailing ideological and political thinking, as the debate over the status of African Americans became a national concern.

As early as 1854, Arthur Gobineau of France theorized that the inequalities of races

explained all destinies (Watkins, 2001b). Gobineau argued that the White race was

superior, followed by the Yellow race and that the Black race formed the lowest group.

By advancing the notion that racial differences could be reduced to scientific law,

Gobineau's ideology helped to influence a generation of scientific speculation regarding

race, social order and intellectual potential.

Louis Agassiz, a respected natural biologist who moved to the United States from

Switzerland in the 1840s, further advanced Gobineau's ideology. In a paper written for

the *Christian Examiner* in 1850, Agassiz argued that while all men share commonalities,

the races were created as separate species and racial differences were manifested in

culture, habit, intelligence, and ability. Samuel George Morton, a highly respected

scientist and physician, further advanced this ideology through his research. He is best

known for the study of differences in the size of crania during the 1840s to support the

assertion that the White race was intellectually superior to other races and justify the

social positions assigned to racial groups. Morton's work was highly acclaimed for its

quantification of data, especially its attention to detail, even though there was evidence

that he omitted data that did not support his thesis (Watkins, 2001b). Together, Agassiz

and Morton represented an important thrust in the development of "scientific" racism.

They Americanized the discourse and provided a powerful rationale for slavery and the

separate and unequal policies that arose after the end of Reconstruction. Science soon

became the centerpiece of the new social sciences, that presented human difference as the

rationale for inequality as notions of anatomical, physiological, intellectual and psychological difference framed medical and biological inquiry.

In the years following the Civil War, the ideological and programmatic challenge of educating African Americans was conceived and nurtured by a northerner General Samuel Chapman Armstrong (1839-1893) and a former slave Booker T. Washington (1856-1915). General Armstrong and Booker T. Washington believed that African Americans possessed limited potential and that educational opportunities for African Americans should be limited and designed to support social stratification (the prevailing social order).

An opposing ideology was advanced by the American Negro Academy, which was founded in 1897 in Washington D.C. The Academy members included respected African American social scientists and educators who "devoted significant attention to matters of African American education, its delivery, its ideological posture, and the prospects for its refinement and expansion" (Watkins, 1996, p. 7). The goals of the Academy were to publish information on the conditions of African American life, build an African American intellectual community, encourage the intellectual development of African American youth, and provide a "truer" account of African American life. W.E.B. Du Bois (1868-1963), a founding member, best summarized the Academy's philosophy when he argued that African Americans were entitled to full recognition within American society, with rights and privileges equal to Whites (Morgan, 1995). Consistent with this view, Du Bois wrote extensively about the impact of slavery upon the achievement, intellect, and spirit of African Americans. Given the Academy's established philosophy,

its mission was to (re) construct established views. As a group, the Academy favored expanding educational opportunities for African Americans and insisted that educated African Americans take a leadership role in shaping the economic, social and political development of the African American population.

To further understand contextual influences on African American student achievement during that era in American history, it is important to consider the impact of the Landmark *Plessy vs. Ferguson* Supreme Court decision in 1897. The case of *Plessy vs. Ferguson* 1897 was actually a culmination of rulings passed by the U.S. and state Supreme Courts after Reconstruction. As a landmark decision this ruling decisively gave southern states the permission to establish "separate but equal" facilities, so they could prevent the commingling of races. The Supreme Court's ruling supported the ideology that there were inherent differences in the human condition and potential of African Americans and White Americans. It also effectively erased the policies put in place during Reconstruction. In the years that followed, a system of separate and "unequal" schooling would be established and maintained throughout the south. Meanwhile, the controversy about the intellectual potential of African Americans and their role within American society would continue to be debated. In fact, the strife between the competing ideologies of Washington and Du Bois, one that sought to use education for the purpose of social control and the other that viewed education as a means for liberation, did not subside until the late 1920s. The contrasting ideologies were institutionalized in public education with the expansion of high schools for the masses and in colleges and universities where African American teachers were trained.

The 1954 Supreme Court ruling that segregated schools denied African American youth access and opportunity and the advent of desegregation eventually changed how and where African American youth were educated. However, vestiges of the unabated ideology of White supremacy and African American intellectual inferiority remained and were firmly entrenched in the American psyche even after the Civil Rights era (Perry, 2003a). The opposing ideology, that affirmed African American intellectual potential, humanity and achievement also survived in spite of the constraints of institutionalized oppression and racism (Perry, 2003a; Watkins, 1996; Watkins, 2001a).

The beliefs that African Americans were intellectually inferior and genetically different were eventually articulated in theories to explain and predict the academic performance of African American youth. Early on, it was theorized that "genetic deficits" formed the basis for differences in school performance and rates of achievement among ethnic groups. During and after the Civil Rights Era, notions about genetic deficits proved to be controversial and eventually, a number of successful theoretical, methodological, statistical, and ethical challenges to the assumption of these theories were waged (Murray & Fairchild, 1989). However, as recent as the 1990s notions about genetic differences once again entered the discourse with Hernstein's and Murray's (1994) Bell Curve thesis that inherent racial/ethnic group differences in intelligence were a better predictor of success in life than a number of other variables. Their thesis, like many others before it, was widely criticized conceptually and methodologically (Kuppermintz, 1996; Matthews, 1998).

As early as the 1960s, scholars and educators began to consider the possibility of other factors as explanations for why African American youth were not achieving at the same rate as White youth and certain other minority groups. Initially, theories were formulated that focused on cultural deprivation or "environmental handicaps" that confronted African American youth and their families as explanations for group differences in school achievement (Murray & Fairchild, 1989). One of the primary assumptions of the *cultural deprivation theories* was that oppression and economic conditions contributed to poor developmental outcomes such as lower achievement among African American youth. Unlike genetic deficit theories, cultural deprivation theories acknowledged that broad systemic issues could help to explain differences in achievement and failure rates. Cultural deprivation theorists argued that "pathological families" and "the culture of poverty" explained and predicted the academic performance of African American youth and, in doing so, they also inevitably perpetuated beliefs that there was something intrinsically wrong with African American families and the youth that were products of them. In the end, both genetic deficit and cultural deprivation theorists essentially "blamed the victim" for the disproportionate rate of school failure and lower achievement among African American youth. Just like the genetic deficit theories, cultural deprivation theories also reinforced racial stereotypes and reinforced lower teacher expectations and in a broader sense supported social stratification (Murray & Fairchild, 1989).

An examination of factors that influence African American adolescents' educational outcomes would be incomplete without considering the role of social and

cultural contexts (Bempechat, 1998; McLoyd, 1998; Perry, 2003b). Given the understanding that these contexts are important, African American student achievement is located in the nexus of child, family, school, neighborhood, larger community, culture and historical time. Bempechat (1998) argues that if genuine progress is to be made in our understanding of an issue as complex as African American student achievement, researchers must critically consider the influence of culture on development. First, it is imperative that we acknowledge that children grow and develop within social and cultural contexts. Not only is it important to understand that a child's social development is shaped by these contexts, but it is equally important for researchers to consider how these contexts bear on a child's academic development. Secondly, it is important to recognize that parents, teachers and often peers are the agents of culture. In this role, they transmit cultural beliefs and practices to children within various ecological contexts that directly and indirectly influence their development. Third, to best understand an issue as complex as the motivation to succeed in school, we must consider what many scholars refer to as "meaning making in context" or how children and adolescents view their schooling experiences within their own cultural and social contexts and the beliefs that develop because of these experiences (Bempechat, 1998, p.7).

Ecological models, that emphasize the person-environment fit, can provide a framework for understanding how social and cultural contexts influence African American adolescent achievement. These models offer an opportunity to examine developmental mastery within the context of student/environment interactions (Franklin, 2000; Masten, 1994; Taylor, 1994). Ecological models also assume that in most

student/environment interactions there is likely to be a continuum of risk and protective factors that directly influence individual student's educational outcomes (Franklin, 2000).

General Definitions

The following definitions clarify key terms used in this study. Each of the constructs introduced in this section is defined, as it was conceptualized in this study. Most of the definitions are a compilation of operational descriptions found in the social work, developmental psychology, and general resilience literature.

Adaptation – in resilience research is defined in terms of the attainment of psychosocial milestones called developmental tasks (Masten & Braswell, 1991).

Competence – refers to the effectiveness of individual adaptation to environmental constraints at a given point in child development and within a particular cultural context (Garmezy & Masten, 1991). Fraser, Kirby, & Smokowski, (2004) further clarify that competence "implies good adaptation within a particular ecological context during a particular developmental stage" (p. 24).

Contextual Risks – "include situations and conditions in the social environment of children that decrease their chances of positive life experiences and increase their chances for adverse developmental outcomes" (Bowen & Richman, 2002, p.2).

Developmental Tasks – are broadly defined expectations or standards of human behavior over the course of development (Masten, 1994; Taylor, 1994). As the markers of good psychosocial adjustment, developmental tasks can change as a function of age and can vary across culture. In the United States, for example, academic achievement and identity

formation are two of a number of varied developmental tasks associated with adolescence (Masten, 1994).

Educational Resilience – is defined "as the heightened likelihood of success in school and in other life accomplishments, despite environmental adversities, brought about by early traits, conditions and experiences" (Wang, Haertel, & Walberg, 1994, p. 46). This term has often been used to describe students who manage to be engaged in school and perform well despite facing the same risk conditions that raise the likelihood of school failure for their peers (Wang & Gordon, 1994).

High-Achieving Students – in this study was defined as those students who had a 3.0 or higher cumulative grade point average on a 4.0 weighted scale.

Low-Achieving Students – was defined as those who had cumulative grade point averages of 1.99 and below on a 4.0 weighted scale.

Middle-Achieving Students – was defined as those students whose cumulative grade point averages ranged from 2.0 to 2.99 on a 4.0 weighted scale.

Poverty – is based on an absolute threshold of the income of an individual or family that falls short of what is needed for food, shelter, and other necessities as estimated by the U.S. Government (Duncan, 1984).

Promotive Factor – "any influence, independent of risk, which increases the likelihood of positive developmental outcomes" (Fraser et al., 2004, p. 30).

Protective Factors – are internal and external forces, in the presence of risk, that lower the chances of poor developmental outcomes.

Resilience – is generally defined as "a dynamic process that involves positive adaptation

within the context of significant adversity" (Luthar, Cicchetti, & Becker, 2000, p. 543).

In this study, resilience was conceptualized as a dependent outcome.

Resilient Children – "reflects two co-existing conditions of resilience, the presence of threat to a given child's well-being and evidence of positive adaptation in the child, despite the adversity encountered" (Luthar et al., 2000, p. 546).

Risk Factors – are any influences that increase the probability of onset, digression to a more serious state, or the maintenance of a problem condition (Coie et al., 1993).

School Success – has been typically measured by academic achievement and is usually operationalized as students' grades or grade point averages. Given the increased emphasis in educational reform on standardized test performance, school success is also being operationalized as student's performance on state and federally mandated standardized tests.

Social Capital – a resource available to a person that exists in the structure of his or her relationships with others, and that facilitates certain activities or actions (Coleman, 1988).

Social Support – "information that leads an individual to believe that he or she is cared for, loved, esteemed, and valued, as such it is considered to be an important positive factor for children, adolescents, and adults" (Gutman et al., 2002, p. 372). In this study, types of social support were operationally defined as protective factors.

Socioeconomic Status – is typically used to signify an individual or families access to or control over a number of valued commodities including cash, power and social status (McLoyd, 1997).

Contributions to the Literature

A number of scholars from the fields of education, anthropology and psychology have contributed to the discourse on the relationship between social support and school engagement and achievement; however, only a few social work scholars are represented in the literature that examines the relationship between sources and types of social support and school engagement and adolescent achievement. Some social work scholars (Bowen & Bowen, 1998; Bowen & Bowen ,1999; Fraser, Kirby, & Smokowski, 2004; Woolley & Bowen, 2007) have increased our understanding of the relationship between contextual influences, school engagement and adolescent achievement outcomes and others (Greif, Hrabowski, & Maton, 2000; Hrabowski, Maton, Greene, & Greif, 2002; Maton, Hrabowski, & Greif, 1998; Saunders, Davis, Williams, & Williams, 2004; Shearin, 2002) have focused more specifically on understanding the relationship between contextual influences and the school engagement and achievement of African American adolescents.

Significance of this Study

It is hoped that the findings from this study will add to the growing body of knowledge about the influence of social support and contextual risks on the academic achievement of African American adolescents. The processes that occur within the three social contexts (home, school, and peer group) that were examined in this study significantly influence adolescent development; therefore, it is expected that this study will extend our understanding of these context-linked experiences on the normative development of African American adolescents. Because this study involves a

racial/ethnic-homogeneous sample, there is an additional expectation that the findings

will increase our knowledge about the variations that exist within a particular sample of

African American adolescents.

As noted by Germain (2002), social work practitioners have a dual and

simultaneous function: (1) to help strengthen individuals' coping patterns and their

growth potential and, also (2) to help improve the quality of impinging environments.

Given this dual emphasis in practice, there is a critical need within the school social work

profession to understand progressive forces and situational assets that promote school

success in populations of students at risk. Consistent with this emphasis, it is hoped that

the study findings will inform school social work practice initiatives that involve the

microsystems (home, school and peer group) that directly and indirectly influence

achievement outcomes for African American students. The researcher expects that the

findings can be used to inform school social work practice models that focus on

strengthening parents' and teachers' efforts to support African American students'

academic success. It is also anticipated that the findings can be useful to school social

work practitioners and educators in their efforts to improve school climate and strengthen

the home-school connection.

Within the current context of educational reform there is a critical need for

educators, policy-makers, and school social work practitioners to understand how

protective influences foster educational resilience among this population of youth. Given

the increased emphasis on accountability and the reliance on empirical evidence to

inform institutional models to close achievement gaps, the findings of this study are

expected to reinforce the notion that school success involves a partnership between parents/caregivers, educators, and communities. It is also anticipated that the study findings will support a systemic conceptualization of academic achievement in which it is believed that support systems and ecological factors influence African American adolescent achievement (Epstein, 1995; Sanders, 1998; Sanders & Herting, 2000).

Chapter 2: Review of the Literature

In this study, the researcher investigated the relationship between perceptions of social support from parents, teachers, and peers and achievement outcomes in a sample of male and female African American high school seniors. The researcher also explored the relationship between social support use, social capital assets, contextual risks and achievement outcomes in the sample. In addition to the main effects of the social support variables, the researcher was also interested in examining the effects of social support as a possible moderator of exposure to contextual risks.

The first three sections of this literature review will cover three relevant and related bodies of literature that form the empirical and theoretical basis for the proposed investigation. The first section will examine the literature on risk, protection, and resilience as it informs the eco-interactional-developmental perspective, the conceptual framework used in this study. The second section is a review of the literature on the relationship between parent, teacher, and peer support and African American adolescent achievement outcomes. In the third section, the theoretical constructs of the eco-interactional-developmental perspective will be discussed. The two measures of achievement, conceptualized as achievement outcomes, will be discussed in the fourth section. The final section of this chapter synthesizes the literature and provides the rationale for this study.

Risk, Protection, and Resilience Perspective

During the past two decades there has been a concerted effort within the social

and behavioral science community to understand the interplay between risk, protection,

and resilience. The pursuit of research in this area has significant implications for social

work and other disciplines that are concerned with the development of the individual. The

research on risk, protection, and resilience is also relevant to our understanding of a

social problem like school failure because it offers an opportunity to better understand

how some students are academically successful in the context of adversity.

Risk

Risk factors, also known as vulnerability factors, are any influences that increase

the probability of onset, digression to a more serious state, or the maintenance of a

problem condition (Coie et al., 1993). As such, risk factors may include genetic,

physiological, behavioral, social, cultural, demographic conditions, characteristics, or

attributes that, when present, increase the probability of negative outcome. Some risk

factors can be directly linked to negative outcomes, whereas others simply represent

correlates -- sometimes called markers-- of potential outcomes (Kirby & Fraser, 1997).

Because child behavior is influenced by a number of different factors at each stage of

development it is often difficult to disaggregate causes from correlates in developmental

risk models (Kirby & Fraser).

In pursuit of a better understanding of risk, researchers have delineated several

key concepts. Pelligrini (1990) defined *risk traits* as an individual predisposition toward

developing a specific problem condition. Genetic markers are often considered risk traits,

but as research in this area has progressed, there is considerable evidence that genetic

markers are not invariant traits; rather, they often have both direct and environmental

components (Fraser, Kirby, & Smokowski, 2004).

In the risk literature, there are often references to *stressful or critical life events* in

the study of vulnerability that result from the impact of a single significant life event such

as failing a grade in school or the death of a parent. There is also some recognition of the

impact of small events or chronic stresses that occur within the context of everyday living

such as those that may be associated with poverty, repeated academic failure, or having

limited resources. Considerable evidence suggests that the accumulation of stress has a

major effect on the developing child (Coie et al., 1993; Garmezy, 1993; Seifer, Sameroff,

Baldwin, & Baldwin, 1992) and as the number of risk factors increases, the cumulative

effect exerts an increasingly strong influence on children (Rutter, 1979; Sterling, Cowen,

Weissberg, Lotyczewske, & Boike, 1985). This process is not always simply additive, but

appears to be attributed to a more complicated interactional process (Rutter, 1979; 1987).

One approach to examine risk in this context is to consider what Rutter (1987) delineates

as *risk processes* or the mechanisms whereby a risk factor contributes to heightened

vulnerability over time. For example, poverty (a risk factor) combined with poor

parenting and inconsistent school support may increase the likelihood that a child will be

unsuccessful in school. In this example, no single event (risk) produces a negative

outcome instead the interaction of risk factors over time exponentially increases the

likelihood of poor educational outcomes.

The concept of risk chains or causal chains has been used by researchers and practitioners to establish a logical foundation on which to base prevention and intervention efforts. However, because relationships among risk factors, child development, and social problems are complex, it is often difficult to identify unconfounded causal chains (Kirby & Fraser, 1997). Nonetheless, the causal modeling concept has been widely used to identify sequential risk chains that are essentially linkages of conceptually distinct risk factors or processes that when linked together can logically explain probable outcomes (Kirby & Fraser, 1997).

In the literature on risk, there are often references to contextual effects or environmental conditions or situations that have both direct and indirect effects on overall vulnerability. When these conditions operate as risk factors, they do so because the social and environmental contexts in which children or adolescents interact expose them to damaging experiences. A number of *contextual risk* factors are associated with poorer developmental outcomes. Some of the most frequently cited are poverty or low socioeconomic status (SES), few opportunities for education and employment, interparental conflict and racial discrimination and injustice (Fraser, Kirby, & Smokowski, 2004). The significance of poverty or low SES as a contextual risk factor during childhood and adolescence is related to its association with multiple stressors and inadequate resources (Bradley et al., 1994; McLoyd, 1990; McLoyd, 1997; Taylor, 1994; Taylor, 1997). Not only do many youth from poor families lack basic necessities such as food, clothing and adequate shelter, but they often reside in neighborhoods that have high

crime rates, chronic unemployment or underemployment and restricted access to resources like affordable healthcare.

Contextual risks "often appear to be mediated by variables at the family and individual levels and appear to be like other risk factors in that they may exert a strong influence in some settings and at some times, and weak effects in other settings and times" (Kirby & Fraser, 1997, p.11). Because contextual risks can vary across settings, it is often challenging for practitioners and researchers to identify and assess levels and types of contextual risk.

There is considerable evidence that contextual risks directly and indirectly influence different educational outcomes (Bowen & Bowen, 1999; Gonzales, Cauce, Friedman, & Mason, 1996; Gutman, Sameroff, & Eccles, 2002; Nash & Bowen, 2002; Pollard, Hawkins, & Arthur, 1999). For example, Bowen and Bowen (1999) found that students' reports of neighborhood danger were associated with lower grades and trouble avoidance at school. Bowen and Bowen also found that students who reported the highest level of school and neighborhood danger were students of color who were economically disadvantaged and who resided in urban areas. Even though contextual risks are often highly confounded, the recent emphasis on research that explores the relationship between contextual risk factors and educational outcomes represents an important advancement in our understanding of broader situational concerns that influence academic achievement (Richman, Bowen, & Woolley, 2004).

Bowen and Richman (2002) offer a conceptualization of contextual risk that includes "situations and conditions in the social environment of children and adolescents

that decrease their chances of positive life experiences and increase their chances for

adverse developmental outcomes" (p. 2). Their conceptualization is informed by James

Garbarino's (1995) concept of toxicity and Richard Lerner's (1995) model of

developmental contextualism. Based on Garbarino's and Lerner's conceptualizations,

Bowen and Richman identified twenty contextual risks that youth may encounter in their

neighborhood, school, peer group and family (see Figure 1) that directly relate to

Maslow's (1954) hierarchy of safety/security needs and social/affiliative needs. From the

twenty contextual risks identified, Bowen and Richman developed the *Contextual Risk*
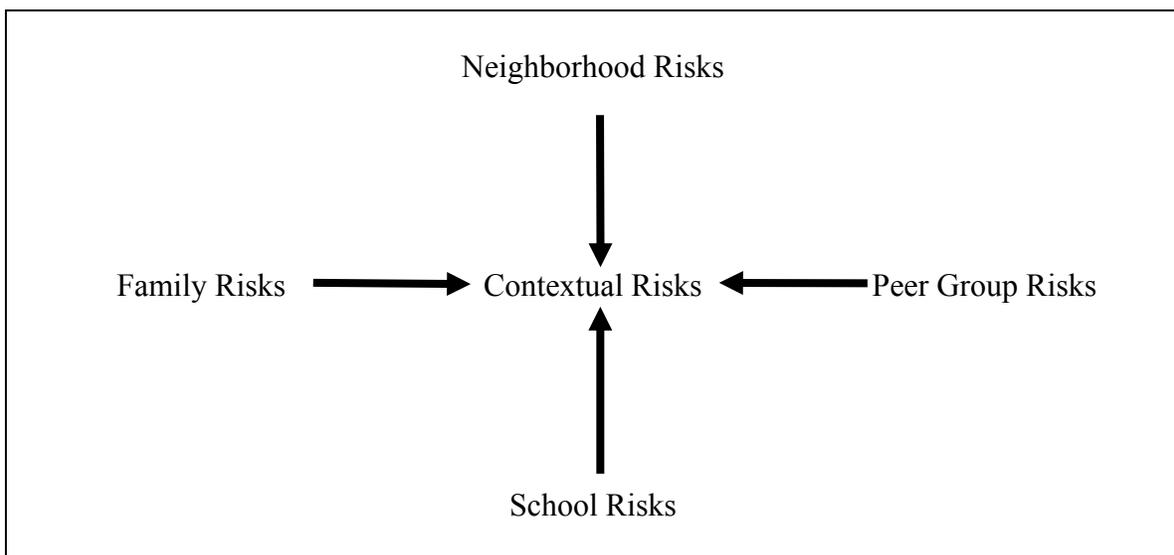
Index.

Figure 1. Contextual Risks

The *Contextual Risk Index* is included in the School Success Profile (SSP), one of the

instruments that used in this study. Bowen and Richman (2002) report that research to

date with SSP samples suggests that the school performance of adolescents decreases as their contextual risks increase.

Protective Factors

     Protective Factors can be defined as the internal and external forces that help children resist or ameliorate risk. Protective factors may buffer risk factors, may interrupt the risk chain through which the risk factors operate or they may operate to prevent the initial occurrence of a risk factor. Garmezy (1985) concluded that three broad sets of variables operate as protective influences: (1) personality features or dispositional attributes such as self-esteem, neuropsychological and temperamental factors, coping skills and cognitive abilities; (2) family milieu or family cohesion, an absence of discord and supervision; and (3) the availability of external support systems that encourage and reinforce a child's coping efforts and the individual's use of those resources.

     Rutter (1987) argued that, like risk, the concept of protection is more useful when the focus is on "processes" or "mechanisms." He preferred the terms "process" and "mechanism" to "variable" or "factor" because he argued that any one variable may act as a risk factor in one situation but may act as a vulnerability factor in another. Therefore, it is the process or mechanism, not the variable that determines the function. To that end, he offered definitions for vulnerability, protective mechanisms and resilience. Rutter advanced the notion that *resilience* is concerned with individual variations in response to risk; it is not a fixed attribute, but is always time and context bound. Moreover, he argued that the concepts of vulnerability and protective mechanisms are more specific and more narrowly defined than resilience. Both vulnerability and protection involve some

modification of the person's response to the risk situation. Either there is some form of intensification *(vulnerability)* or amelioration *(protection)* of the reaction to a factor that in ordinary circumstances leads to a maladaptive outcome. What is key from this view is that the effect, in terms of both, is indirect and dependent on some type of interaction.

Rutter (1987) considered vulnerability and protection as the negative and positive poles of the same concept and that essentially vulnerability or protective effect is evident only in combination with the risk variable. He argued that "the critical difference between vulnerability or *protection processes* and risk mechanisms is that risk mechanisms lead directly to disorder (either strongly or weakly), whereas vulnerability or protective processes operate indirectly with their effects apparent only by virtue of their interactions with the risk variable" (p. 319).

There is evidence that like risk, protective factors probably have cumulative effects. For example, in the Bradley et al. (1994) study of premature, low-birth weight children living in poverty the researchers found that the presence of three or more protective factors differentiated resilient children from nonresilient children. In the Bradley study, those protective factors included parental warmth, acceptance, infant stimulation and organized care. Bradley's findings and that of others (Werner, 1993; Werner & Smith, 1982) suggest that the presence of protection may have at least cumulative, additive effects across protective conditions.

Four protective processes have been consistently cited in the risk and resilience literature (Fraser et al., 2004; Rutter, 1987). The first protective process or mechanism operates to *reduce the impact of risk*. This can happen in two different ways. Somehow

the mechanism either alters the potential of risk or alters the exposure to risk. An example of the latter would be a parent who lives in a high-crime area and enrolls her adolescent in pro-social peer activities. Consequently, in the context of exposure to high environmental risk, a protective factor moderates the relationship between risk and outcome. The second mechanism operates by *reducing the negative chain reactions*. For example, support from a teacher at a critical time period may protect a child from vulnerability that results from a chain of stressors related to the lack of parental support. In this case, the protective factor disrupts the linkage between a stressor and an outcome. The third mechanism that operates as a mediator or moderator is the *establishment and maintenance of self-esteem and self-efficacy*. Self-esteem (confidence in your own merit as an individual) and self-efficacy (the belief that you can influence your own thoughts and behaviors) are significantly influenced by relationships with significant others. Secure relationships with parents or caregivers are critical to the development of self-esteem and self-advocacy. Self-esteem and self-advocacy may also be enhanced through task accomplishments, such as earning honor roll grades in school or earning high scores on standardized test. In this example, in the context of higher risk, an activity that promotes self-confidence and competence may protect children and youth by promoting adaptive behavior in the face of adversity. The last mechanism is *opening up of opportunities*. This process often involves turning points in people's lives, in the context of structural reforms at the societal level. The protective process occurs because the reforms increase access and opportunities for individuals. For example, the implementation of a school program that provides tutorial support may serve to expand

opportunities for students who are failing in school and therefore alter a trajectory toward school failure.

Rutter's (1987) perspective of protective processes advances the notion that researchers examining psychosocial resilience should focus on understanding the processes that protect individuals against risk. Rutter argued, "the search is not for broadly defined protective factors but instead for the developmental and situational mechanisms involved in the protective processes" (p. 317). Assuming this framework for analysis, a researcher who is interested in examining how some students are successful in school in spite of significant adversity would ask the following types of questions. Why is it that some students manage to maintain high self-esteem and self-efficacy in spite of considerable vulnerabilities that lead others to give up? What has happened to allow these students access to social supports that they can use effectively at moments of crisis? Or they might be interested understanding what circumstances or situations (familial or institutional), if any, have served to bring about more favorable educational outcomes.

Resilience

Resilience refers to "a dynamic process encompassing positive adaptation within the context of significant adversity" (Luthar et al., 2000 p. 543). Implicit within this notion are two critical conditions: (1) exposure to significant threat or severe adversity; and (2) the achievement of positive adaptation despite major assaults on the developmental process (Garmezy, 1990; Luthar & Zigler, 1991; Masten, Best, & Garmezy, 1990; Rutter, 1987; Werner & Smith, 1982). Resilience always involves individual adaptation; however, Fraser, Randolph, and Bennett (2000) argue that even

though individual attributes often serve protective functions, the potential for individual adaptation is usually nested within environmental conditions. Therefore, in most cases resilience arises from the transaction of individual factors and environmental possibilities and, as such, it is a person-in environment phenomenon.

Research on resilience emerged in the search for a better understanding of the role of risk factors. Over the course of the last quarter century several researchers (Garmezy, 1985; Rutter, 1987; Werner & Smith, 1977, 1982, 1992) found that some children who had experienced adversity did well in life in spite of the challenges they encountered. For example, Wolin and Wolin (1995) in their study of youth growing up in substance abusing families found that about one-third of a population of "at risk" children survived risk experiences with negative outcomes and two-thirds appeared to survive risk experiences without major developmental disruptions. Other scholars like Fraser et al. (2000) contend that resilience is rare and that it is more likely the exception to the rule. Their contention is based on research findings like those of Pollard et al. (1999) who found that as few as 5% of the children exposed to high risk have high levels of protection. Notably, in the Pollard study researchers also found that adolescents exposed to higher levels of risk had poorer educational outcomes. What the resilience research to date suggests is that children exposed to high levels of risk or repeated maltreatment do not typically enjoy high levels of protection. Conversely, there is also strong empirical evidence that children exposed to lower levels of risk are more likely to function adaptively or demonstrate resilience (Fraser et al., 2004; Pollard et al., 1999).

Three types of resilience are often cited in the resilience literature (Masten, Best, & Garmezy, 1990). The first type of resilience is commonly referred to as *overcoming the odds.* Characteristically, it is defined by the attainment of positive outcomes in spite of high-risk status. For example, the presence of a severe learning disability is considered high-risk by virtue of the correlation between learning disabilities and negative school outcomes. If a child who is learning disabled does not experience negative school outcomes, then she would be described as overcoming the odds. The second type of resilience is associated with the literature on stress and coping. This concept of resilience is commonly referred to as *sustained competence under stress*. For example, a child who grows up very poor but is successful in school is resilient because she has been able to cope with the chronic environmental and interpersonal stress associated with poverty. The third type of resilience is commonly referred to as *recovery from trauma*. This type of resilience is evident in children who function well after a traumatic experience such as the death of a parent, divorce or debilitating illness.

In their critical review of the empirical literature on the construct of *resilience*, Luthar et al. (2000) noted that within the last two decades the focus of empirical work has shifted from identifying protective factors to understanding the underlying protective processes. This shift represents a need to understand how such factors contribute to positive outcomes. As research has evolved, it has become clear that positive adaptation despite adversity involves a developmental progression, such that new vulnerabilities and/or strengths often emerge with changing life situations (Masten & Garmezy, 1985; Werner, 1993; Werner & Smith, 1982; Werner & Smith, 1992); however, because

"resilience involves both adaptation and normative development, it is imperative that researchers recognize that what may be viewed as adaptive within one culture may not be adaptive within another cultural context" (Kirby & Fraser, 1997, p. 15). Given the broader understanding that resilience is always time and context bound, some scholars (Cichetti, 1993; Cichetti & Toth, 1992) argue that research-based understanding of resilience allows practitioners to capitalize on periods of developmental change as unique opportunities for promoting positive adaptation.

Over the course of the last twenty or more years the construct of resilience has been the subject of intense debate. In response to the controversy, Luthar et al. (2000) attempted to identify and address some of the problems apparent in the literature that have directly and indirectly contributed to the debate. First, they found that early research reflected little consensus about definitions and there were substantial variations in the operationalization and measurement of key constructs. They also found that there was considerable ambiguity related to the conceptualization of resilience. In some instances, researchers considered resilience to be a personal trait and in other studies it was viewed as a dynamic process. Researchers often used the conceptualizations interchangeably. In response to these concerns, Luthar et al. offered the following clarifications:

> *Resilience* represents a dynamic process, *resilient* is a characteristic or trait, and
> *resilient children* can be used to reflect two coexisting conditions of resilience—
> the presence of threat to a given child's well-being and evidence of positive
> adaptation in this child, despite the adversity encountered. (p. 546)

Luthar et al. (2000) also noted that there has been little consensus on central terms used within models of resilience and cited examples of the usage of terms like "protective" or "vulnerability" or "protective factors" in varied and inconsistent ways. In response to the inconsistencies that existed, Luthar et al. argued that careful consideration must be given to the selection and justification of strategies used to operationalize pivotal constructs. Researchers, in their opinion, should also clearly explicate the approaches they select to define terms such as adversity, adaptation, and competence and provide convincing justifications for their choices based on both conceptual and empirical evidence.

Interactions between Risk and Protection

There is a consensus in the scientific community that resilience results in some way from the interplay between risk and protective factors. The nature of the interactions between risk and protection are poorly understood and often inconsistently described in the literature (Kirby & Fraser, 1997); however, two basic models of interaction are consistently described in the empirical literature, additive and interactive models.

In additive models, protective factors are said to exhibit main effects, direct effects, or compensatory effects. In these models, the presence of a risk factor directly increases the likelihood of a particular negative outcome and the presence of a protective factor directly increases the likelihood of a positive outcome (Luthar, 1991; Masten, 1987; Pelligrini, 1990). Risk and protection are conceptualized as polar opposites along a continuum, and it can be assumed that competence declines as stress increases. For example, a student with above average grades in school and a positive attitude toward

school (a protective factor) would be expected to perform better in school than a student who has a history of failing grades and a poor attitude toward school (a risk factor). Using this same example, students with failing grades would be at increased risk for school-related problems relative to students with above average grades and a positive attitude toward school.

Masten (1987) and Rutter (1979, 1987) offer another conceptualization that emphasizes the interactive relationship between risk and protection. In interactive models, protective factors have effect only in combination with risk factors. Therefore, protective factors are most important when stress is high and they exert less effect when stress is low. In interactive models, protective factors have been conceptualized in three basic ways (Kirby & Fraser, 1997). Protective factors may buffer risk (moderate), serving as a cushion against the harmful effects of risk factors. Protective factors may interrupt the risk chain through which the risk factors operate or they may operate to prevent (mediate) the initial occurrence of a risk factor.

Rutter's (1987) conceptualization of the distinctions in the interactive process that involve both vulnerability and protection provides a framework for considering key turning points in people's lives. Rather than focusing on long-standing attributes or experiences, Rutter suggests that key turning points may be more significant. These turning points arise because what happens at a pivotal point in time determines the direction of trajectory for years to follow. Therefore, *protective mechanisms* operate when what was previously a risk trajectory is changed to one with a greater likelihood of an adaptive outcome. For example, in the school-based studies (Maughan, & Rutter,

1986; Rutter et al., 1979) the decision to stay in school enabled African-American

teenagers with a history of poor academic performance to attain improved scholastic

qualifications that widened occupational opportunities. Rutter concluded the following:

> [T]he point of emphasizing the turning points that change a developmental
>
> trajectory is to focus attention on the process involved. It is not enough, for
>
> example, to say that academic success or self-efficacy are protective (although
>
> they are), we must go on to ask how those qualities developed and how they
>
> changed the life course. (p. 319)

Lastly, Rutter (1987) argued that recognizing and categorizing risk and protective factors

have very limited value as a means of finding new approaches to prevention or

intervention unless there is an emphasis on protective processes or mechanisms. He also

proposed that the possible meanings of interaction effects are most useful in illustrating

different possibilities rather than drawing general conclusions.

Even though research on the interactive pathways has been inconclusive, it is

quite apparent that risk and protective factors are present in multiple systems of

influence. Because risk and protective factors exist at many different levels in the social

ecology of children, understanding the interactions between them can pose considerable

challenges for the researcher or practitioner. Individual risk factors can sometimes be

nested within family or other contextual risk factors. For example, a child with fragile

health (a risk factor) may be a member of a family system wherein there is a great deal of

environmental stress (a contextual effect). Likewise, individual protective factors can also

be nested within family or broader contexts that increase or decrease vulnerability.

Because the nature of interactions between risk and protection is complex, it is important for researchers and practitioners to identify and try to understand the contextual dependence and reciprocal causation that is associated with interactions between individuals and their environments over time (Kirby & Fraser, 1997).

Promotive Factors

Even though considerable progress has been made in operationalizing terms in resilience research, there still exists some controversy on how to define a protective factor (Fraser et al., 2004; Gutman et al., 2002). Fraser et al. (2004) argue that because the term protective factor is inconsistently defined in the research literature there is perhaps a better term for the positive pole of the risk dimension – *promotive factors*. They posit that promotive factors are unlike protective factors in that they exist independent of risk. Given this perspective, a promotive factor can be conceived as any influence that promotes positive developmental outcomes and protective factors can be "reserved to describe attributes and conditions that lower the chances of poor developmental outcomes in the presence of risk" (Fraser et al., 2004, p. 30). Using this distinction, it is possible to recognize the potential impact of positive influences on developmental outcomes for individuals who have not been exposed to risk; however, Fraser et al. caution that because the term promotive factor is not yet widely used and accepted, there may be a number of conceptual and methodological issues that are yet to be resolved.

Social Support: Protective and Promotive Influences

Gutman et al. (2002) define social support "as information leading an individual to believe that he or she is cared for, loved, esteemed, and valued" (p.372). Sarason, Levine, Basham, and Sarason (1983) also note that social support implies the availability of people on whom an individual can rely, and who affirms that they are cared for and valued.

The importance of social support was clearly articulated by Garmezy (1985) when he concluded that the availability of external support systems was one of three broad sets of variables that operate as protective influences. He further posited that external support systems encourage and reinforce the developing child's coping efforts and their use of resources. Given this framework for analysis, not only can support systems serve to ameliorate risk or act as a buffer against risk, but the availability of social support can also be conceptualized as a promotive influence because it increases the likelihood of positive developmental outcomes, independent of risk.

In the resilience literature, three broad types of social support are often cited, informational support or advice, tangible or material support, and emotional support (Cobb, 1976; House, 1981). Each of these three types of social support derives from the interpretation of a "support provider's" behavior or transactions with a recipient. When a recipient perceives that she has received social support, she attaches a personal meaning to the transaction that somehow the "support provider's behavior" has enhanced her well-being (Rosenfield & Richman, 2003).

This study focused on supports that exist within three social contexts that have been found to significantly influence adolescent school achievement. First, this study explored the perceptions students have about social support they have received from their parents or guardians within the social context of the family. As caretakers, parents/guardians are role models, they provide emotional and tangible support, and they provide information and learning opportunities. Because they are primary caretakers, parents are also expected to facilitate the critical connections to other resources that support school success. Secondly, because schools are the social context within which educational experiences occur, this study examined the influence of teacher support. Schools, just like the family, provide an environment that is critical to the psychosocial development of adolescents and "what a student experiences at school can either support or undermine normative developmental processes" (Swanson & Spencer, 1997, p. 186). Finally, this study examined the influence of peer support within the social context of the peer group. The focus on peer support is based on the knowledge that during adolescence peers become increasingly more important because they affirm a sense of belonging, being cared for, and valued (Wang, Haertel, & Walberg, 1998). According to Wang et al. (1998), peers can facilitate the development of individual resilience by protecting against stress and providing a stable, supportive source of concern. Because peers exert significant influence on the daily behavior of adolescents, they can also contribute to less favorable developmental outcomes.

Parent Support and African American Adolescents' Academic Achievement

The importance of social support from parents on adolescents' experiences at school is well documented (Gilbert, Barr, Clark, Blue, & Sunter, 1993; Hrabowski, Maton, Greene, & Greif, 2002; Miller-Cribbs, Cronen, Davis, & Johnson, 2002; Nurmi, 1987). High levels of parent support have been associated with higher grade point averages (Gutman et al., 2002; Richman, Rosenfield, & Bowen, 1998; Sanders & Herting, 2000) and academic self-concept (Fisher, 2000; Ryan, Stiller, & Lynch, 1994). There is also considerable empirical evidence (Baker, 1985; Bowen & Bowen, 1998; Clarke, 1983; Gilbert, Barr, Clark, Blue, & Sunter, 1993; Gutman & McLoyd, 2000) suggesting that a lack of parent support contributes to difficulties in school. Even though economic disadvantage has been linked to early school leaving, there is also evidence that parent support is more predictive of school involvement than economic level (Connell, Spencer, & Aber, 1994; Lagana, 2004). Within the general social support literature there are a number of studies involving African American adolescents (Cooper & Datnow, 2000; Floyd, 1996; Hrabowski et al., 2002; Morris, 1992; Richman et al., 1998; Sanders & Herting, 2000; Shearin, 2002) that provide evidence that support from parents is one of the most important protective factors that influence African American adolescents' educational outcomes.

Several scholars have explored the relationship between parent support and academic achievement in populations of African American adolescents. Many of their studies have focused on the relative importance of parent support along with other types of support. In some studies (Fisher, 2000; Forsbach et al., 2002; Sanders & Herting,

2000) the researchers also explored the influence of personal attributes on academic achievement. Some researchers (Cooper & Datnow, 2000; Fisher, 2000; Forsbach et al., 2002; Sanders & Herting, 2000) did not examine the influence of environmental risk; however, in most of these studies the researchers did examine the relationship between social economic status and the variables of interest or they reported the percentage of students in their sample who were economically disadvantaged. Also represented in the literature are studies (Floyd, 1996; Gonzales et al., 1996; Gutman et al., 2002; Hrabowski et al., 2002; Maton et al., 1998) in which the researcher investigated the influence of parent support, other types of support, and environmental risk on achievement.

In one study, Fisher (2000) investigated the influence of parent support and other predictors on achievement in a population of 17 year old African American students (*n*=368) who attended three different predominantly minority high schools in an urban setting. Using primarily quantitative data, Fisher explored the relationship between parent support and academic achievement (cumulative grade point average) and also investigated the relationship between individual attributes and other types of support and academic achievement. In the quantitative analysis, Fisher did not find that students with higher grade point averages (GPAs) had more positive perceptions of parent support, the correlations between the two types of variables, social support and GPA, were low and insignificant. However, Fisher reported that although the significance of parent support was not conclusively supported in the quantitative analyses, interviews with students (*n*=30) confirmed the importance of parent support on their achievement outcomes. Those students who were more successful in school reported that they received

significant support from their parents. Unexpectedly, the researcher found that participants from low-income families had higher grade point averages than their peers who were from higher income families. One plausible explanation for this finding was that all of the students participated in a college preparatory curriculum and that this exposure may have been a factor that influenced lower income students' academic achievement. This unanticipated finding suggest that there may be other contextual influences beyond family income, such as experiences at school, that can potentially influence African American adolescents' achievement outcomes.

In a similar study, Sanders and Herting (2000) examined the relationship between gender and the effects of family, school, and church support on academic achievement in a representative sample of eighth grade African American students (n=828) enrolled in middle school in an urban school district in the southeast. In this mixed method study, the survey instrument included six scales including one that measured parent support(students' perception of parents' encouragement of academic endeavors). Data from individual interviews (n=40) were used to supplement and enrich the researcher's interpretation of the survey data. In spite of the limitation of only one criterion measure (self-report of grades), the researchers did find that there were statistically significant differences in males and females on each of the seven study variables. The effect of poverty was not significant for either group. Females reported greater parent support as well as other factors and attributes that were conducive to academic achievement. The researchers also found that parent support was positively and significantly related to school behavior and that it significantly predicted achievement ideology (students'

perceptions of the importance of schooling and academic achievement for future success) for both genders.

Socioeconomic status (SES) and family income are commonly examined in studies involving African American adolescents, yet only a few studies in the extant literature have looked beyond SES and family income to investigate the combined effects of parent support and contextual risks on achievement-related outcomes in this population. In one such study, Gonzales et al., (1996) utilized a 1-year prospective design to study the combined influences of parents, peers, and neighborhood contexts on the academic achievement of 7th and 8th grade (n=120) African American students. Among their findings was that maternal support contributed to better grades over time for African American adolescents irrespective of the types of neighborhoods in which they live. Maternal support in their study was explained as a main effect, as it was not moderated by perceived neighborhood risk. The findings of others (Gutman et al., 2002; Hrabowski et al., 2002; Maton et al., 1998) suggest that neighborhood context may be moderated by parent support and that parents of achieving students may respond to neighborhood risk in socially relevant ways. For example, in the Gutman et al., (2002) survey of seventh grade African American students (n=837), the researchers found that in the context of multiple risk (a composite score), consistent discipline and parental school involvement (conceptualized as a parent support measure) had both a protective and promotive influence on students' grades. Notably, the correlation between the multiple risk score and performance on a second achievement measure (a math achievement test) was weaker than the correlation that existed between the multiple risk score and grades. One

of the obvious strengths of this study was the use of multiple perspectives and more than one outcome measure. In addition to student data, data was obtained from student participants and their mothers both of whom participated in brief interviews and completed questionnaires.

The interest in understanding the effects of parent support and multiple risks on achievement-related outcomes has extended to studies involving older African American adolescents (Floyd, 1996; Hrabowski et al., 2002; Maton et al., 1998). In the studies by Hrabowski et al. (2002) and Maton et al. (1998) consistent parental involvement was identified by adolescents and their parents as a factor that enabled some students to become academically successful in the context of environmental risks. In one of the qualitative studies, Floyd (1996) interviewed 20 African American 12th graders (10 females, 10 males) to explore the phenomenon of educational resilience- conceptualized as the acquisition of academic competence despite the presence of stressful life events or circumstances. In Floyd's study, academic success was defined as having taken at least one college preparatory class and having qualified for college admission. All of the study participants attended school in an urban setting in California and qualified for free or reduced priced lunches based on the school system's criteria. Floyd found that support from the participants' parents was one of three protective factors that were operant in the participants' lives. Floyd also reported that although the protective factors identified appeared to moderate the effects of stress for these adolescents, the protective factors did not eliminate the effects of stress. Floyd concluded that the protective factors provided a means for these students to be successful in school, despite the study participants'

acknowledgement of numerous challenges and barriers to their success. Even though Floyd described the procedures used for data collection, there was no discussion of the methods and safeguards used in data analysis; consequently, the credibility and trustworthiness of this study is not fully substantiated.

In another qualitative study, Maton et al. (1998) explored the role of the family in the academic success of *high-achieving* African American male students (*n*=60) who entered the Meyerhoff Scholars Program at the University of Maryland Baltimore County. The researchers' reported that the participants' mean high school grade point average was 3.5 and their Scholastic Aptitude Test (SAT) scores placed them in the top 3%-4% nationwide among African American students. This study was part of a larger study and the reported findings were based on data collected between 1989 and 1995. In their analysis of data from in-depth interviews with the students and their parents the researchers found that even though these college students' backgrounds differed in terms of family income, SES, and neighborhoods of origin; parent support had the greatest influence on their son's high level of academic achievement. The researchers concluded that "the combined importance of parental-determined academic engagement, strict discipline, nurturance, and community connectedness appeared to counteract potentially negative influences of neighborhood, peers, schools, and society" (p. 639). Even though this study was retrospective in nature, several steps were taken to enhance its credibility and trustworthiness. Multiple perspectives were gathered and a systematic method of coding and thematic analysis was used. Quantitative data was also used as a means of triangulation.

The studies that investigated the effects of parent support and contextual risks on achievement-related outcomes provide support for the notion that parenting practices that are associated with positive educational outcomes for African American adolescents depends, in large part, on the values, demands and challenges that these youth and their families face within the larger social context within which they participate. Their findings also highlight the need for more research that is ecologically based to increase our understanding of African American adolescents' schooling experiences within the larger sociocultural and historical milieu.

Teacher Support and African American Adolescents' Academic Achievement

Within the empirical literature on teacher support there is considerable evidence suggesting that the relationship between teachers and students can affect student achievement and other educational outcomes. Notably, Clark (1995) found that students' experiences within schools are related to their level of psychological investment (motivation), their emotional well-being and their academic achievement. Several research studies (Forsbach et al., 2002; McClendon, Nettles, & Wigfield, 2000; Sanders, 1998; Sanders & Herting, 2000; Sanders & Jordan, 2000) also provide evidence that there is a relationship between teacher support and African American adolescent school achievement. Their findings generally support the notion that positive teacher-student relationships increase the likelihood of higher student achievement among this population of youth. The significance of teacher support is also demonstrated in the findings of other researchers who found evidence that low teacher expectations and impersonal or negative

teacher-student relations can lead to low student engagement and poor achievement in school (Bowen & Bowen, 1998; Irvine, 1990).

Even though teacher support was not the primary focus of the qualitative studies found in this review of the support literature, in the qualitative studies cited the researchers were interested in identifying from the students' perspectives the external factors that had the most influence on African American adolescents' academic achievement. For example, in Floyd's (1996) study of low income *high-achieving* African American high school seniors (*n*=20) who were successful in school the researcher was interested in identifying those adults who exerted the most influence on the participants' sustained effort and achievement. Even though the students reported that parent support was more influential, a number of the participants noted that certain teachers provided specific types of support that had a significant influence on their school performance. In the final analysis, Floyd concluded that the support provided by the teachers confirmed students' ability to achieve (academic self-concept) and also challenged the students to meet and exceed expectations. Floyd's findings, in this regard, are consistent with that of others (Croninger & Lee, 2001; Furstenberg & Hughes, 1995; Stanton- Salazar, 1997; Wang & Gordon, 1994) that suggest that teacher support can be a critical factor in the lives of students whose socioeconomic status places them at increased risk for poor school performance. In another study, Forsbach et al. (2002) interviewed six African American high school seniors who were described as successful students. In this study, the researchers were interested in identifying what factors promoted or inhibited the participants' academic achievement. The participants identified

teacher support as secondary only to parent support as having a significant influence on their achievement in school. Several of the participants noted that teacher's attitudes toward students and their willingness to help and take time with students who needed it, could have a significant influence on African American adolescents' performance in school and perhaps change a trajectory of school failure to one in which school success was possible.

In a number of quantitative studies with sizable African American participants, within group similarities and differences such as family income or SES status were not investigated. One example is Rosenfield, Richman, and Bowen's (2000) national survey of middle (*n*=827) and high (*n*=988) school students. The researchers noted that "the sample design ensured adequate representation of students by race/ethnicity, region of the country, size of locality and gender" (p. 208). The sample included 13.1% African American middle school students and 15.6% African American high school students. In this study, the researchers used the School Success Profile to compare the school outcomes for students who differ in the extent to which they perceive their teachers, parents and friends; each alone and in combination as important sources of support. Teacher support was measured by nine true/false summative statements (i.e., "My teachers really care about me"). One of the seven outcome variables was an achievement measure (student's self-report of their typical grades on the most recent report card). The relationship between each outcome variable and eight support configurations (low support, support from teachers only, support from parents only, support from friends only, support from parents and friends, support from parents and teachers, support from

friends and teachers, and high support) were analyzed separately for middle and high school students to avoid possible confounds. A notable findings was that students who perceived the combined support from teachers, parents and friends as opposed to none, one or two sources of support earned better grades in school and were more satisfied with and engaged in school. They also found that students who reported receiving low support from teachers, parents and friends had the poorest school outcomes. The consequences of support were greater for the three school affect variables (school satisfaction, engagement, and self-efficacy). The researchers also noted that "although perceived high teacher support appears to be a necessary condition for positive school behavior, affect, and outcomes, it is not a sufficient condition" (p. 219). Even though this study increases our understanding about the role of teacher support during adolescence, it did not provide new knowledge about the differences (family income, gender and SES status) that existed within the African American sub-sample.

Richman et al.'s (1998) survey of adolescents at-risk of school failure ($n= 525$) that examined the effects of particular types of support on school performance outcomes is an example of a study with a sizable African American sub-sample (49.3% middle school and 56.2% high school) where the researchers also did not examine within-race effects. The researchers used the School Success Profile to investigate whether or not the participants received eight types of social support, who the support providers were, and the school outcomes associated with these types of support. Participants' self report of their most recent report card grades was one of eight school outcomes measured. Data collected from the middle and high school student sample was analyzed separately. A

significant finding was that middle and high school participants perceived their parents

and teachers, respectively, as their primary sources of support. However, peer support for

the middle school students and parent/guardian support for the high school students were

more positively correlated with grades. Presumably, a separate analysis of within-race

effects could have provided important data about the relationship between the three types

of support and achievement outcomes in this sample of at risk African American

adolescents. The literature suggests that this type of data analysis could increase our

understanding about what external factors influence achievement outcomes for at risk

African American adolescents.

In a second study, Bowen and Bowen (1998) used the School Success Profile

(SSP) to examine the relationship between home risk, school protection, and educational

outcomes. Their sample of middle (61.3%) and high school (38.7%) at risk adolescent

participants in the Communities in Schools programs in North Carolina and Florida

included a large percentage of African American students (51.1%, total *n*=582). One of

the outcome variables was a composite grade score that was calculated based on three

questions included in the SSP. The predictor variables were two measures of home

environment risk and a single school protective measure (perceived teacher support). The

first risk variable was conceptualized in this study as the home status risk composite

score, that was created by counting six indicators that are supported in the risk literature

(free or reduced lunch status, parental education less than high school, race/ethnicity, one

adult in the home, one of more siblings in the home and one or more siblings that

dropped out of school). The second risk variable was the home academic culture risk

(whether or not the adolescent had recently discussed with an adult in the home information about their school experiences within the last 30 days). Teacher support was measured by nine items from the SSP. Bowen and Bowen found that teacher support decreased as home status risk and home academic culture risk increased. Students in the highest risk category had a lower mean teacher support score. The researchers concluded that they found no support for the "immunity" hypothesis that teacher support would buffer the effects of home risk factors on grades; however, they did find that grades improved as teacher support increased. In this study, the researchers examined main effects and two way interactions for several variables (gender, grade level, home status risk, home academic culture risk and teacher support); however, the main effects of race/ethnicity were not explored even though there was a large sample size that presumably offered an opportunity for this type of analysis. Within-race effects could have provided information about how teacher support differentially influenced school outcomes among African American adolescents in the sample.

Not commonly found in the teacher support literature are studies with a large or representative population of African American adolescents in which the investigators explored within-race differences. One exception is McClendon, Nettles and Wigfield's (2000) mixed method study. In their investigation they explored within-race effects and when they compared high school student athletes (*n*=900) who participated in a program developed by the American Sports Institute with students matched on the criterion variables who did not participate in the program. The two groups were matched on grade point averages (GPA), race/ethnicity, gender and involvement in extracurricular

activities. This study included a large percentage of male participants (68%) and a high percentage of African American students (54%). The students who participated in the (PASS) program were enrolled in an elective class designed to assist learners in transferring to the academic arena skills learned through playing sports. An implicit goal of the program was to engage students, teachers, coaches, families and communities in building protective environments for youth. The researchers tested three hypotheses one of which was that African American students (n=489) who participated in the program would have higher grade point averages than those in the comparison group. Another hypothesis was that observations of the PASS classrooms would render more examples of social support for student engagement and achievement. Classroom observations using the *Madison* framework for authentic instruction was used to assess six dimensions of classroom life. The researchers found that PASS students had higher posttest grades than the comparison group, but the group differences were not statistically significant. However, within-race effects were measured and the researchers found that there was a significant group effect for African American PASS students. They achieved significantly higher post grade point averages than did comparison students even though their grades were lower than other racial/ethnic groups represented in the sample. The researchers also found that PASS classroom teachers provided social support to the students in the program over and above what was provided in the comparison classrooms. In this investigation, the analyses of within-race effects allowed the researchers to discuss how teacher support differentially influenced African American adolescent academic achievement.

In many of the recent studies that have investigated within-group differences among African American adolescents, findings about the influence of teacher support on achievement outcomes have been inconsistent. In their cross-sectional survey of African American seventh grade students, Gutman et al. (2002) unexpectedly found that teacher support was negatively related to one of the two achievement measures, the math achievement test score. They also found that adolescents who had lower multiple risk scores (a score based on their mother's reports about their level of education, emotional health, marital status, # of children, and history of family stresses during the previous year) were less likely to report teacher support. In a cross sectional survey of African American high school students, Fisher (2000) also did not find that teacher support was an important predictor of grades, but instead that a number of personal attributes and parent support were better predictors. Fisher found that females reported more teacher support than males. In a similar study of African American eighth grade students, Sanders and Herting (2000) also found that females reported greater teacher support than males; however, the effects of teacher support had a significant influence on male students' behavior in school. Sanders and Herting also found that teacher support significantly predicted achievement ideology (students' perceptions of the importance of schooling and academic achievement for future success) for both males and female students. There were no gender differences in the magnitude of these effects.

Even though a number of scholars have investigated the influence of teacher support on the academic achievement of African American adolescents, only a few studies (Bowen & Bowen, 1998; Floyd, 1996; Gutman et al., 2002) were found that

explored the relationship between teacher support, contextual risks and achievement outcomes. This supports the assertion that more research is needed to address the gap in the literature on the relationship between teacher support, contextual risk, and African American adolescents' educational outcomes.

Peer Support and African American Adolescents' Academic Achievement

During adolescence, the influence of peers becomes increasingly more important in determining a number of developmental outcomes because it is during this stage of development that adolescents attempt to individuate from the family. Parents have the most influence on students' long-term educational outcomes; however, during adolescence peer relationships often exert more influence than parents on the daily behavior of adolescents in the school setting (Steinberg, Dornbusch, & Brown, 1992).

Within the general literature on social support, close relationships with peers during childhood and adolescence are thought to promote competence in a number of domains, including psycho-social well-being, academic motivation and achievement in school (Connell & Wellborn, 1991; Cotterell, 1992; Ryan, Stiller, & Lynch, 1994). Several researchers (Cooper & Datnow, 2000; Gonzales et al., 1996; Fordham & Ogbu, 1986; Forsbach et al., 2002; Maton et al., 1998; O'Brien, 1990; Ogbu, 1987) provide evidence that peer relationships' influence African American students' achievement during adolescence; however, there is considerable disagreement among scholars about how much, and in what ways, African American peers exert influence on each other's academic achievement (Gonzales et al., 1996; Wilson et al., 1997).

Contrary to what is generally assumed about peer support, within the discourse on African American achievement it is often assumed that African American peers exert a negative influence on each others' educational outcomes (Hill, 1999). This perception has been bolstered by the ethnographic research of Fordham and Ogbu (1986) and Ogbu(1987) who found that African American students who decided to become academically successful were ostracized by other African American students within their school settings. Fordham and Ogbu (1986) posit that peer influence is one of a number of important social factors that contribute to the problem of underachievement among African American adolescents. Although Fordham and Ogbu's thesis has garnered a great deal of public attention, it has not found conclusive support in the empirical literature (Gonzales et al., 1996; Hill, 1999; Steinberg, Dornbusch, & Brown, 1992; Perry, 2003b; Wilson et al., 1997). In fact, the limited evidence that exist about peer support has been contradictory. Some early studies (Cauce, Felner, & Primavera, 1982) reported a negative relationship between peer support and African American adolescent achievement; however, others (Cauce, 1986) found a positive correlation between peer support and academic achievement. Still others, (Seidman, Allen, Aber, Mitchell, & Feinman, 1994) found no relationship between peer support and African American adolescent achievement. What makes the issue of peer support even more complex is that there is considerable data suggesting that African American peers are just as supportive of their peers' academic achievement as students from other racial/ethnic groups (Hill, 1999).

In recent studies that have explored within group variations among African American adolescents, there is evidence (Cooper & Datnow, 2000; Forsbach et al., 2002;

Laguna, 2004; Maton et al., 1998) that peer support is correlated with better educational

outcomes. For example, Lagana (2004) used group membership as a proxy in her study of

low-income African American high school students (*n*=194) who were at varying levels

of risk for school dropout. Students in the low-risk group were enrolled in the mainstream

academic program. Students in the medium-risk group participated in a program for at

risk students and students in the high-risk group were enrolled in an evening program for

students who had already dropped out of school. To measure peer support, Lagana used a

20- item subscale of the Perceived Social Support Scale. On this measure, peer support is

viewed positively ("There is a friend who is good at helping me solve problems").

Lagana found that students in the low-risk group identified higher levels of peer support

than those in the medium and high-risk groups. Lagana also found that those in the high-

risk group could be distinguished from those in the low-risk group by scores on both the

peer support and adult support measures, with the low-risk group having higher levels of

support in both areas.

A few scholars (Cooper & Datnow, 2000; Forsbach et al, 2002; Maton et al.,

1998) provide evidence that peer support is especially beneficial to *high-achieving*

African American high school students. For example, in their study of African American

high school students (*n*= 31) who attended 15 independent schools in Baltimore, Cooper

and Datnow (2000) found that opportunities to develop and maintain peer relationships

with other African American students appeared to influence their educational resiliency.

Seventy-two percent of the students surveyed reported that peer relationships at school

were an important factor in their school success. The researchers also found that African

American peer networks at school functioned to both foster these students' academic success and provide a context in which their racial identities were reaffirmed. Because the study participants were a racial minority in their independent school settings, their findings lend support to the notion that the influence of peer support may also vary depending upon school contexts. In the Maton et al., (1998) qualitative study of *high-achieving* adolescent males admitted to the Meyerhoff Scholars' Program, many of the students interviewed emphasized the importance of positive peer influences during their high school years. The researchers found that a number of the students formed close peer bonds with other *high-achieving* students, some who were African American and some who belonged to other racial/ethnic groups. This finding is particularly salient because many of the adolescents resided in troubled neighborhoods and acknowledged other contextual challenges such as a lack of support from African American peers and having to overcome negative images and expectations held by society about African American males.

The findings that peer support is correlated with more positive achievement outcomes was not confirmed in Fisher's (2000) study of 17 year old urban high school students who participated in a college preparatory program at three different high schools. Fisher found that the correlations between peer support and academic achievement was low and insignificant; however, the correlations between the support scales (parent, teacher and peer) used in this study were strong.

Even though there were only a few studies found in the literature that focused on the relationship between peer support and African American adolescents' achievement

outcomes, one comparative study by Steinberg, Dornbusch, and Brown's (1992) of ethnic differences in adolescent achievement is frequently cited. In this study, the researchers were interested in the contextual variations that influenced academic achievement in a sample of African American, Hispanic American, Asian American and White American high school students. They found across all ethnic groups that students whose peers and parents both support achievement performed better in school than those who receive support from only one source but not the other or neither source. They also found that the congruence for parent and peer support was greater for White and Asian American students than it was for African American and Hispanic American students. This finding led Steinberg et al. to conclude that for many African American high school students the absence of peer support for achievement undermined the positive influence of authoritative parenting (a high score on a measure of parental acceptance, behavioral control, and psychological autonomy granting or democracy). Two other findings from their study were noteworthy. African American high school students were just as likely as others to value education and those who were *high-achieving* often sought peer support from peers outside of their own racial/ethnic group. Their findings and those of others (Cooper & Datnow, 2000; Gonzales et al., 1996; Gutman et al., 2002; Maton et al., 1998) highlight the complex interplay between students and their environmental contexts and provide further support for applying ecological models to increase our understanding about how peer support influences African American adolescents' achievement outcomes.

Within the last ten years there has been an interest in applying ecological models to our understanding of how peer support influences African American adolescents' academic achievement. Some researchers (Gonzales et al., 1996; Gutman et al., 2002) have found that African American adolescents that are exposed to higher levels of contextual risk are particularly affected by the absence or presence of peer support. For example, Gonzales et al. (1996) used a one year prospective design to examine the influence of peer support, family status variables, parenting variables and neighborhood risk on the school performance of 120 African American junior high school students. In this study, the peer support measure focused on perceptions of trust and communication among peers. To assess exposure to neighborhood risk, the researchers developed a 17–item neighborhood risk measure that asked the students about their exposure to problematic behaviors in the neighborhood (i.e. vandalism, crime, and gang activity). When the researchers looked solely at main effects, they found evidence that peer and neighborhood contexts may be more powerful than family influences as determinants of school performance; however, in the second set of analyses the researchers found that peer support was positively related to grades for those students who resided in low-risk neighborhoods, but peer support was not predictive of grades within high-risk neighborhoods. This led them to conclude that in their study population, neighborhood influences undermined the positive influence of peer support. The researchers offered several plausible explanations for this finding including that high-risk neighborhoods may not provide the context for the formation of supportive peer groups and prosocial activities that are associated with more positive achievement outcomes. Their findings

also support the contention that the paucity of studies that have investigated the relationship between peer support, neighborhood contexts, and African American adolescent achievement outcomes may contribute to a lack of consistent findings in the literature.

In their cross sectional survey of seventh grade African American students (*n*=837), Gutman et al. (2002) found that in the context of multiple risks, peer support appeared to have a protective effect for those who faced multiple risks on one of the three achievement measures (the math achievement test). When examining the relationship between peer support, multiple risks, and math achievement scores the researchers found that participants with a high multiple risk score reported higher levels of peer support. The same effect was not found for those who had lower risk scores. Notably, the math achievement test is a "single event" measure; therefore, it is not generally assumed to be as stable a measure as grade point average. Nonetheless, this finding and their finding that parent support was correlated with higher grades suggest that the influence of peer and parent support on African American adolescent achievement may vary depending on the needs of the adolescent.

A number of scholars (Gonzales et al., 1996; Gutman et al., 2002; Maton et al., 1998; Steinberg et al., 1992) argue that there is more knowledge to be gained about the relationship between peer support and African American adolescent academic achievement. Not only is there a lack of information about the peers who provide the support, such as their racial/ethnic orientations, little is known about the variations that exist with regard to the types of peer support that African American adolescents receive.

There is also some recognition of the need for more research that will enable us to better understand how peer support effects may vary over the course of adolescence, given the changes in vulnerability that are associated with different stages of adolescence (Gonzales et al., 1996). Underrepresented in the existing literature are studies that have investigated the combined influence of peer support and environmental risks on the achievement outcomes of older African American adolescents at the important developmental period when they are completing high school and preparing to transition into adult roles.

<div align="center">Conceptual Framework</div>

Two competing theoretical orientations have been prominent in the discourse about the academic performance of African American youth during the last quarter century, the cultural difference theories (Cazden, John, & Hymes, 1972; Perry & Delpit, 1998) and social mobility explanations (Fordham & Ogbu, 1986; Ogbu, 1981; Ogbu, 1986). Notably, both have primarily been used to explain or predict school failure, rather than school success. Acknowledging this, some like (Franklin, 2000; Perry, 2003c) argue that, on balance, there has been far too little attention afforded to theoretical formulations that can be used to explain or predict academic success among this population of youth. They also contend that an over-emphasis in the discourse on underachievement and the achievement gap, rather than achievement, further stigmatizes and distracts from the reality that there are many African American students who are academically successful. Additionally, Perry (2003c) noted that the discourse often fails to focus on environmental influences that promote high achievement among this population of youth, even though it

advances the notion that contextual factors have an impact on student outcomes. Needless to say, this failure or oversight in the empirical literature beckons a need for more research that examines the role of environmental influences on the development of African American students. Given what is known about an African American philosophy of education that places a high value on achievement, there is a critical need for more research that is based on theoretical formulations that can be used to both explain and predict academic failure and success among this population of youth.

<center>The Eco-Interactional-Developmental Perspective</center>

Richman and Bowen (1997) and Richman et al. (2004) offer the eco-interactional developmental perspective [EID] as a theoretical formulation for considering school failure and academic success. When considering the problem of school failure and the potential for school success, this perspective emphasizes the critical role of the person-environment fit and considers individual variations in educational outcomes from the perspective of risk, protection, and resilience. Because the EID perspective is an ecological formulation it is informed by two rich traditions in the behavioral and social sciences, the focus on individual attributes (needs, beliefs, abilities etc.) and a regard for "situational factors" or those social, cultural, economic, and historical forces that influence individual development. The EID perspective also embraces the notion that human beings are evolutionary and adaptive in response to their environments. Central to this perspective, is the assumption that mutual adaptation and accommodation takes place between individuals and their environments over time; therefore, opportunities for growth and positive adaptation are always present.

Richman and Bowen (1997) and Richman et al. (2004) conceptualize school failure to include school dropout, poor school attendance, low achievement, and grade retention. In their application of the EID perspective to this problem, they describe four categories of students. The first category of students are those who have both physically and psychologically withdrawn from school. The second category of students are those who have physically withdrawn from school, but remain psychologically invested in their education. The third category of students includes students who are physically enrolled in school but have psychologically withdrawn from school. Lastly, they delineate a fourth category of students; those who are defined as school success-students and are both physically and psychologically invested in school. The inclusion of the fourth type of students shifts the perspective from a pathological model of school failure to a model that can also be applied to students who experience school success.

An Ecological Perspective

The EID perspective advanced by Richman and Bowen (1997) and Richman et al. (2004) incorporates the Bronfenbrenner (1979) conceptualization of the environment as a set of four regions that are defined in terms of their proximity to the individual. Each of these regions is embedded within the next region; therefore, what occurs in each of the regions directly or indirectly has an influence on the developing child. Risk and protective influences are present within each of the four regions.

According to Bronfenbrenner (1979), the first region that influences a child's development is the *microsystem* or an environment in which the developing child or adolescent directly participates such as home, school, church, peer group or

neighborhood. He posits that because children and adolescents actively participate and interact with others in the microsystems, their experiences within them most directly influence their views of the world. As such, these experiences are incorporated into children's beliefs about themselves and therefore play a decisive role in fostering resilience (Richman & Bowen, 1997).

The second region that influences a child or adolescent's development is the *mesosystem*. The mesosystem is conceptualized as the connections or relationships between two or more settings (microsystems) in which children and adolescents actively participate or interact. In this conceptualization, the emphasis is on the quality of relationships among each of the settings. When the connections between the microsystems are strong and positive, they provide a supportive context for the developing child. Conversely, when the connections between the microsystems are weak or there are value conflicts between them, it places the developing child at a disadvantage for acquiring attitudes, beliefs, and behaviors that are associated with positive developmental outcomes (Richman & Bowen, 1997; Richman et al., 2004).

The third region conceptualized by Bronfenbrenner (1979) is the *exosystem*. It is described as "one or more settings that do not involve the developing person as an active participant, but in which events occur that affect, or are affected by, what happens in the setting containing the developing person" (Bronfenbrenner, 1979, p.25). For example, a parent's experience at work may influence how he handles his own child's academic challenges or a teacher's prior experience with students' at risk may similarly be a factor in terms of how she approaches the learning environment.

The fourth region that influences a child or adolescent's development is the *macrosystem*. This environment is most distal from the developing child but, within it broad ideological and institutional patterns are formulated. These ideological and institutional patterns can be political, economic and social and what occurs in the macrosystem may limit or increase opportunities for positive developmental outcomes. For example, educational policy that limits resources for populations of students at risk may place them at developmental risk and provide a poor context for the development of educational resiliency.

An Interactional Perspective

Within the EID framework there is an emphasis on the interactions or the "goodness of fit" between the characteristics of an individual and the characteristics of her environment. This perspective assumes that the better the goodness of fit between an individual and her environment, the more likely she will attain developmental mastery and experience enhanced social functioning. In their discussion about the person-environment fit, Germain and Gitterman (1995) further describe goodness of fit as a variable that can range from favorable to unfavorable. They emphasize that one benefit of operationalizing the variable in this manner is that it allows the researcher or practitioner an opportunity to evaluate goodness of fit in the context of an individual's development and within broader sociocultural and historical milieu.

The EID perspective advances the notion that at least two levels of fit can be specified, needs-supplies and demands-competencies (Caplan, 1983, 1987; Richman & Bowen, 1997; Richman et al., 2004). Needs are related to physical and psychological

survival. According to Maslow's (1954) hierarchy, these basic needs include safety, security, and self-actualization. Maslow argued that these needs are physiological, social, and affiliative and when these needs are not met, individuals will lack the motivation to strive for and attain higher needs. In the first type of fit (needs-supplies) a child or adolescent's needs are considered in the context of whether or not she has opportunities, resources, and supplies available in her environments to meet them (Richman & Bowen, 1997; Richman et al., 2004). Given this framework for analysis, it is likely, for example, that an adolescent who has been reared in a predictable, secure and nurturing home environment possesses the prerequisite supplies for the development of resilience because her basic needs have been and continue to be met.

The second level of fit (demands-competencies) considers the demands placed on the developing child or adolescent from her environment and the competencies or capabilities that she has to meet them. Given this framework for analysis, if an adolescent encounters environmental demands at school that are overwhelming she is likely to feel frustrated or inadequate and experience self-doubt, which may increase the likelihood of poor educational outcomes. It is also possible that if an adolescent is placed in an educational environment that fails to challenge her, because the environment does not affirm or engage her skills and abilities, she may be at risk for poor educational outcomes. Conversely, if she possesses the skills and competencies required from her educational environment and there is congruence between the two it is more likely that she will experience better educational outcomes.

Richman and Bowen (1997) and Richman et al. (2004) argue that there are some important considerations that need to be emphasized when examining goodness of fit. First and foremost, they note that the EID perspective assumes that resilience is a by-product of favorable goodness of fit over time; therefore, the person-environment fit must be conceived as dynamic, because both individuals and their environments change over time. As active participants, children and adolescents are constantly seeking the best level of fit between themselves and their environments in the context of developmental tasks (Germain & Gitterman, 1995). Secondly, because a child or an adolescent's perceptions form the basis of her view of the world, the person-environment fit is also a by-product of a subjective reality. An adolescent's subjective reality may, in fact, differ from objective reality but because she responds to her subjective reality, it is the subjective reality upon which the basis of resiliency is formulated (Richman et al., 2004).

A Developmental Perspective

As noted by Bronfenbrenner (1979, 1986), each child or adolescent's development is strongly influenced by the family, school, peer, neighborhood and community context in which they are active participants. The dynamic interplay between the developing child in each of these environments form the basis for healthy development and the same continuous interactions over the course of a child's physical, cognitive, emotional and social development also provide the context and experiences for the development of resiliency (Richman et al., 2004). Similarly, exposure to individual or situational risks within these same environmental contexts without the benefit of protective influences increases the likelihood of poor developmental outcomes.

Richman et al. (2004) contend that each child or adolescent has a "developmental past" or a history that informs and constrains their present situation. Both children and adolescents are orientated to the future and their expectations about future opportunities or constraints have an impact on their assessment of their present situations. Therefore, it is critically important in both research and practice to consider developmental mastery and the acquisition of competence with the understanding that present and future orientations are influenced by both positive and negative past experiences.

To understand how types of social support or the presence of contextual risks influence educational outcomes, it is important to recognize that vulnerability can shift relative to developmental or maturational changes. For example, a student's ability to understand and cope with academic challenges may depend in part on her developmental maturity. In applying this perspective to our understanding of school achievement, it is also imperative to consider that situations such as life transitions and normative challenges may also influence educational outcomes. For example, a student's ability to understand and cope with academic challenges might also depend on whether or not she is provided social support at home or school at a point in time when this support can make a critical difference.

<div align="center">Measures of Student Achievement</div>

Achievement in school is one of a number of varied and important developmental tasks associated with adolescence (Swanson & Spencer, 1997; Wilson, Cooke & Arrington, 1997). There is a consensus that academic competence, often measured by achievement outcomes, is necessary to ensure healthy identity during this critical stage of

development. Arguably, achievement in school is particularly important for African American adolescents because their experiences in school form the foundation for establishing a more productive and fulfilled future in a society that offers them limited support (Swanson & Spencer, 1997).

In this study, two different measures of school achievement, grade point averages and standardized test scores, were conceptualized as educational outcomes. The decision to use two different achievement measures was based in part on the desire to examine more than one dimension of school achievement.

In research on adolescents, grade point averages are commonly used as markers of developmental mastery or adolescent adjustment. The use of grade point averages in developmental research as an educational outcome is a widely accepted practice. As such, grade point averages are also considered to be valid measures of school performance (Keith & Benson, 1992). Not only do grade point averages provide some measure of student performance, but they can also be used to assess a student's performance relative to a referent group. In this study, official weighted cumulative grade point averages were used as an educational outcome. This measure represents the weighted average of students' grades since they began taking high school courses.

The 11th grade Virginia English/Reading Standards of Learning test score was used as a second achievement measure. This test was chosen as an educational outcome for two reasons. It is one of six tests that high school students must pass (in addition to required courses) in order to obtain a standard high school diploma. The decision to use this test scores was also based on the knowledge that it is a measure of reading

achievement. Competency in reading is considered to be an essential skill for entry into a wide array of opportunities in school and beyond.

Until recently, standardized tests were only used for a limited set of purposes (Haladyna, Nolen, & Haas, 1991); however, their use has increased within the context of federal and state educational reform. In every state in the United States, achievement testing is now mandated in most grades and subjects. In the state of Virginia, Standards of Learning (SOL) tests are used to measure student achievement and also as an accountability indicator at the student, classroom, school and school district level. There is considerable controversy related to the use of standardized tests as infinite measures of student achievement (Cronbach, Linn, Brennan, & Haertel, 1997). Some of the criticism is related to the validity of what is now commonly referred to as *high-stakes* testing (Haertel, 1999). Others have expressed concern about the use of standardized tests as accountability indicators (Smith & Fey, 2000). Not withstanding these concerns, in the state of Virginia, SOL tests remain as an important indicator of individual student achievement.

Summary

Even though the contextual challenges facing African American adolescents are well documented (Lamb et al., 2005; McLoyd, 1998; Taylor, 1994, 1997) there has been little attention to understanding the relationships between the three types of social support that will be examined in this study, contextual risks and African American adolescents' achievement outcomes. Few studies have looked beyond a single variable to examine how multiple risk factors influence African American adolescent academic achievement

(Gutman et al., 2002) and even fewer have considered the influence of multiple risks in combination with other factors. Yet, several researchers have identified a need for more research that will help us increase our understanding about the relationship between contextual risks and African American adolescents' achievement outcomes. Whereas some findings (Gonzales et al., 1996; Gutman et al., 2002) provide evidence that exposure to contextual risk differentially influences achievement outcomes, others findings (Maton et al., 1998) suggest that exposure to contextual risk in the context of other social challenges may be particularly difficult for African American adolescent males.

There is considerable evidence that parent, teacher, and peer support differentially influence achievement outcomes; however, the inconsistent findings about how peer support influences African American adolescents' academic achievement warrants further investigation. Similarly, the findings that teacher support alone is not strongly correlated with better achievement outcomes (Bowen & Bowen, 1998; Richman et al., 1998) in populations of at-risk adolescents also suggest that there is more knowledge to be gained in our understanding of whether or not teacher support potentially moderates contextual risk in populations of African American adolescents.

The gender differences that exist are well documented in the literature on African American adolescent achievement. Not only in achievement outcomes by group, but also in African American adolescents' perceptions about the types of support they receive during this critical stage in development (Fisher, 2000; Sanders & Herting, 2000). The findings that males report less parent and teacher support than females is particularly

alarming in light of evidence that achievement ideology (perceptions of the importance of schooling and academic achievement for future success) and academic self-concept (perceptions about their ability to achieve) are often associated with better achievement outcomes (Fischer, 2000; Floyd, 1996; Sanders & Herting, 2000). Presumably, both of these personal attributes can be influenced by relationships with significant others. For this reason and others, there is a need for more research that investigates the relationship between gender, perceptions of support, and the academic achievement of African American adolescents.

The availability of social support and encouragement from relationships with adults in students' social environments, also referred to as *social capital*, influences academic achievement (Coleman, 1988). As a resource, social capital can be accumulated and mobilized in the context of healthy relationships with significant others and it can be used to meet both internal needs and external demands (Richman & Bowen, 1997; Stanton- Salazar, Vasquez, & Mehan, 2000; Wang, Haertel, & Walberg, 1999; Werner, 1990). Social capital is not limited to the parent/child relationship, but also comes from resources within and outside of the home environment as well as from the linkages that exist between microsystems in which students directly participate (Coleman, 1988; Croninger & Lee, 2001; Rosenfield et al., 2000). The benefits of social capital to socially and economically disadvantaged youth have been explored (Croninger & Lee, 2001; Furstenberg & Hughes, 1995; Stanton-Salazar, 1997); however, the differential benefits of social capital for African American adolescents are not well understood (Stanton-Salazar et al., 2000).

In this study, social capital was not one of the primary variables of interest. However, because it is a measure of the receipt of social support the researcher investigated the relationship between social capital assets and achievement outcomes. The researcher was able to do so because one of the instruments used in the study, the School Success Profile, included a Social Capital Assets Index conceptualized as a measure of the receipt of social support students receive from adults in four social environments. Bowen and Richman's (2002) conceptualization of social capital assets considers the important role of parents/guardians as well as the influence of adults in other social environments (see Figure 2).
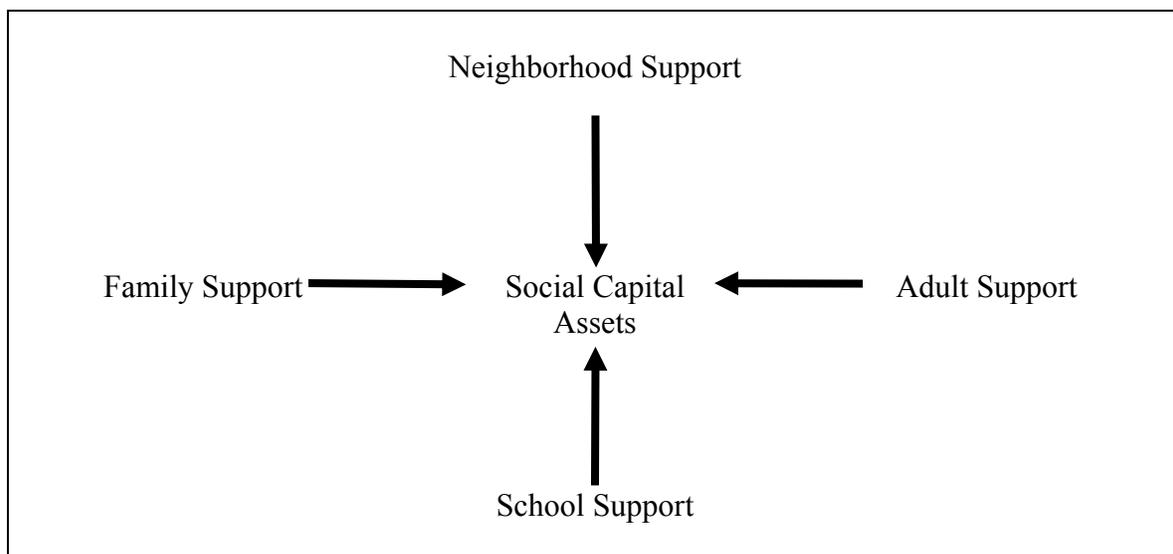
Figure 2. Social Capital Assets

In addition to social capital assets, the researcher also explored the relationship between *social support use* (students' self report that there are people to whom they can turn to at least weekly for various types of support) and the two achievement outcomes. In this

study, social support use is conceptualized as a measure of individual adaptation (health and well-being). By examining the influence of social capital assets and social support use, the researcher hoped to learn more about the characteristics of the sample under study as well as the relationship between these two variables and the achievement outcomes that are the focus of this study.

Given that there is still much to be learned about African American adolescents' schooling experiences, this researcher hoped to add to the growing body of knowledge about the relationships between social support, contextual risk, and African American adolescent achievement outcomes. Therefore, the following study hypotheses were examined in this investigation:

1. Male and female students will differ in their perceptions of social support, social capital assets and social support use. Females will have higher scores than males on the teacher support, peer support and parent support measures. Females will also have higher scores than males on the social capital assets and social support use summary scales.

2. Male and female students will differ in their perceptions of contextual risks; males will report higher levels of contextual risks.

3. African American adolescents who report higher levels of social support from teachers, peers, and parents will have better achievement outcomes.

4. African American adolescents who report higher levels of contextual risk will have poorer achievement outcomes.

5. Social support variables will moderate the effects of contextual risks on

   achievement.

Chapter 3: Methodology

The primary objective of this study was to examine the relationship between protective influences (types of social support, social capital assets and social support use) and two achievement outcomes in a sample of African American high school seniors. The researcher was also interested in investigating the relationship between level of contextual risks and the two achievement outcomes in the sample and whether or not the social support variables moderated contextual risks. The methods that were used in the study are described in the following sections: research design, instrumentation, data collection, and data analyses.

Research Design

Cross-sectional survey methods were used to investigate the relationship between protective influences (gender, types of social support, level of social capital assets, and social support use) and two achievement outcomes (weighted cumulative grade point averages and scores on the English/Reading 11th grade Virginia Standard of Learning Test). These methods also were used to examine the relationships between level of contextual risk and the two achievement outcomes and whether or not the social support variables moderated contextual risk on the criterion variables. To address the research questions, existing data (weighted cumulative grade point averages and English/Reading

SOL scores) and participants' responses on two questionnaires (the School Success

Profile and the School Support Questionnaire) were collected and analyzed.

Descriptive, bivariate and multivariate statistical procedures were used to analyze

the relationship between predictor variables (gender, types of social support, level of

contextual risks, level of social capital assets, social support use) measured by the School

Success Profile and the two criterion measures (weighted cumulative grade point

averages and English/Reading SOL test scores). Multiple regression, a multivariate

technique, was used to determine the contribution of each predictor variable to each of

the criterion measures. In choosing to use linear multiple regression, the researcher did

not assume that the associations sought, in and of themselves, would provide conclusive

evidence that exposure to contextual risks or self-report of protective influences (types of

social support) produced or inhibited the selected achievement outcomes (criterion

measures). However, the researcher did expect to find associations between protective

influences, contextual risks and the two achievement outcomes.

Multiple methodologies are often used in social and behavioral science research

to corroborate other findings and to illuminate a theme or theory (Rudestam & Newton,

2001). In this investigation, qualitative data were collected and analyzed to further

explore the relationship between participants' perceptions of social support from

teachers, peers and parents and their achievement in school. The researcher expected that

the qualitative findings from the School Support Questionnaire would supplement and

corroborate the quantitative findings.

Sample Description

A systematic (stratified) random sampling procedure was used to select African American high school seniors who were subsequently recruited to participate in this study. High school seniors were selected because they had completed at least twelve years of schooling (kindergarten through the eleventh grade) and were at a point in their educational career where planning for post high school (training, employment and future education) is critically important.

The study sample was taken from the total population of African American high school students enrolled at the five high schools located in an urban school district in southeastern Virginia. All of the five high schools represented in the sample had met or exceeded the standards for full accreditation by the state of Virginia in 2006 and each offered a comprehensive academic program designed to prepare students for work or further study at a technical school, college or university. In addition to the five high schools, the school district from which the sample was derived also has nine middle schools, twenty-six elementary schools, and five early childhood centers. The total student population as of October 2, 2006 was 32,593. Of that number, 9,301 (9th-12th) students were enrolled in high school. Of the total student population, 57.7% reported their race/ethnicity to be African American compared to 31.8% White, 5.9% Hispanic, 2.6% Asian/Pacific Islander, .6% Native American, and 1.5% who did not specify their race/ethnicity. In this school district, (48.4%) of the students are economically disadvantaged as determined by their eligibility for free or reduced lunch based on USDA guidelines.

According to the school district's *Research and Authorization Committee* designee, on October 2, 2006 there were 1,127 African American students who were high school seniors during the 2006-07 school year. Because the researcher attempted to control for possible confounding variables such as supports provided by school personnel for students who receive special education, English as a Second Language, or 504 services, students receiving these support services were excluded from the sampling frame. According to a report provided by the school district's *Research and Authorization Committee* designee dated January 19, 2007 approximately 942 students, from the 1,127 population of African American students, remained and constituted the population from which the stratified sample was selected.

Human Subjects' Protection

Prior approval to conduct the study was needed from two different institutions. The school district from which the sample population was derived required that the researcher secure written approval from its *Research and Authorization Committee* before conducting research projects involving students, parents or staff. This approval was granted on June 30, 2006. For all doctoral studies involving human subjects, approval was also required from the Office of Research Subjects' Protection, the *Institutional Review Board* (IRB), at Virginia Commonwealth University. The required application for approval was forwarded to the IRB office at Virginia Commonwealth University after the researcher successfully defended the study proposal. Approval for this study was given by the IRB on October 4, 2006 (see Appendix A approval letter dated October 10, 2006).

After receiving written approval from the IRB at Virginia Commonwealth University, parent/guardian consent documents (see Appendix B) along with the principal's letter (see Appendix F) were mailed to all of the parents/guardians of those students who were randomly selected to participate who were under the age of 18 years as of October 31, 2006. In this study, both parent/guardian consent and youth assent (see Appendix B and Appendix C) were required for these students to participate. Once parent/guardian consent was secured, the researcher solicited youth assent from the students who were under the age of eighteen years. For those students who were 18 years of age or older, with birthdays on or before October 31, 2006, the investigator solicited informed student consent (see Appendix E). At least two weeks prior to the researcher seeking and obtaining informed student consent (see Appendix E) a letter of notification (see Appendix D) was mailed to the parents/guardians of the students who were 18 years old or older.

The following safeguards were implemented to protect the identity of the participants, their personal information, and the information they provided for the purpose of this study. Only the researcher had access to student contact information (students' names, their school identification numbers, their parent/guardians' names, mailing addresses and home phone numbers). This personal information was placed in a locked file and stored in the researcher's home office. Only the researcher had access to the student data collected (weighted cumulative grade point averages, SOL test scores and responses to the questionnaires). During data collection, participants' data were coded using student identification numbers as identification. Once all data was collected,

these numbers were converted to another number to ensure anonymity. All of the data collected was placed in a locked file and stored in a secure location in the researcher's home office.

Sampling Procedure

In this study, stratified random sampling was used because it allowed the researcher an opportunity to obtain a greater degree of representativeness than simple random sampling (Rubin & Babbie, 2001). The researcher hypothesized that the perceptions of support students' reported would vary according to their achievement outcomes. To accurately measure the relationship between the predictor variables and the criterion measures, the researcher needed to obtain reliable data about each student's achievement. She also needed to identify and define groups of students for within group, between group and whole group analyses. To accomplish the second goal, the researcher stratified the study sample into three separate groups based on their weighted cumulative grade point averages. Notably, weighted cumulative grade point averages differ from cumulative grade point averages. Unlike cumulative grade point averages, in calculating weighted cumulative grade point averages the rigor of each individual course taken by a student is considered. Courses that are considered more rigorous are assigned a greater numerical value than those that are less rigorous.

For the purpose of this investigation, the first group of students was defined as *high-achieving*, with weighted cumulative grade point averages of 3.0 or higher on a 4.0 point scale. The second group was defined as *middle-achieving*, with weighted cumulative grade point averages that ranged from 2.0 to 2.99. The last group was defined as *low-*

achieving, with weighted cumulative grade point averages below 1.99. The decision to use the aforementioned grade point averages as cutoffs was based on the assumption that students with at least a B average (3.0 on a 4.0 scale) have more options in terms of future education and training than students with lower grade point averages. It is also generally assumed that students in the *middle-achieving* group may have fewer options than *high- achieving* students and students in the *low- achieving* group have the fewest options in terms of future education and training as they transition into adulthood.

The preliminary analysis (see Table 1) revealed that within the *high-achieving* group, there were fewer students and the male/female ratio was very different from the other groups. In the total study population of African American high school seniors, only 50 (5%) males were *high-achieving* males. Fourteen percent (*n*=128) of the females were *high-achieving*. Within the other two groups there were significantly more males and the male/female distribution was more even.

Table 1

Enrollment and Required Stratified Random Sample

	GPA Subset					
	.33 - 1.99		2.0 - 2.99		3.0 - 4.37	
	M	F	M	F	M	F
# enrolled	168	160	191	245	50	128
% of total group	18%	17%	20%	26%	5%	14%
Required sample size	49	46	55	71	14	38
Total (N=273)						
Note: Total study population N =972.						

To address possible problems associated with a small number of cases within a group, the researcher disproportionately sampled from the *high-achieving* and *low-achieving* groups in an attempt to give male and female subjects from these two groups a better chance of being selected than others in the sampling frame (Rubin & Babbie, 2001). In the *high-achieving* group, the researcher initially selected all of the males and every 2nd female starting with the first subject. In the *middle- achieving* group, the researcher selected every 3rd subject starting with the first subject. In the *low-achieving* group, the researcher selected every 2nd male and female starting with the first subject. The researcher over-sampled the *low-achieving* group because she anticipated difficulty securing parental consent from this population of students, who were not performing well in school. Because the researcher planned to conduct within groups, between groups and whole group analyses it was important to have a sufficient sample size of male and female participants within each group to conduct multivariate analysis. Using this sampling method, a sample size of 424 would reflect 100% participation. However, with a total study population of 942 potential participants, it was determined that a sample size of 273 subjects was sufficient to satisfy the requirements for representativeness (see Table 1). All students selected through the stratified random sampling process were recruited to participate in the study.

At the end of a two month time period, the researcher had not obtained the required number of study participants from the initial stratified random sample, so a second stratified random sampling was conducted from the population of students who were not selected during the first sampling procedure. The students selected with this

procedure were subsequently recruited to participate in the study which provided a group of study participants that exceeded the required sample size for representativeness. The stratified random sampling procedure yielded a total of 317 students who agreed to participate in the study. The procedures employed ensured that the number of study participants was sufficient for multivariate statistical analyses.

<div align="center">Instrumentation</div>

Two separate instruments were used in this study. Each is discussed in the following section.

School Success Profile

The School Success Profile was used to operationalize the predictor variables (gender, types of social support, level of contextual risk, level of social capital assets, and social support usage). The SSP (see Appendix G) is a self-report questionnaire based on an ecological theoretical perspective that measures the perceptions students have about social support and individual adaptation within four contexts (neighborhood, school, peer group, and family). The SSP was developed as a tool to inform program planning and intervention with middle and high school students. It has also been used by researchers interested in understanding how social support differentially influences educational outcomes (Bowen, Rose, & Bowen, 2004). The SSP provides information about twenty-two summary scales (See Appendix H). Fourteen scales that measure supports that exist within students' social environment and eight scales that measure individual adaptation. All twenty-two summary scales are comprised of multiple items that have been found to positively correlate with students' ability to succeed in school (Bowen et al., 2004).

Since the prototype was initially developed in 1993, the pencil and paper form of the SSP has undergone two revisions, in 1997 and 2001. The 2001 form of the SSP requires a fourth grade reading level and is available in both English and Spanish. This version of the SSP includes 220 multiple choice items and is divided into six modules: *About You* (9 items), *Neighborhood* (35 items), *School* (55 items), *Friends* (26 items), *Family* (47 items), and *Health and Well-being* (48 items). The summary scales used in this study are included in the six modules. Other SSP summary scales were not used in this investigation. However, the SSP was administered in its entirety because the researcher was interested in using two composite measures, the *Contextual Risk Index* and the *Social Capital Assets Index*, which are comprised of items taken from a number of different SSP summary scales.

The SSP has had extensive field testing to ensure content validity and concurrent validity (Rosenfield, Richman & Bowen, 2000; Rouk, 1999). To further investigate the psychometric properties of the SSP, Bowen et al. (2004) analyzed data from a national non-probability sample of 16,037 SSP respondents who were administered the SSP between 2001 and 2003. Their analysis included reliability and validity testing on each summary scale and its component items. First, they performed a descriptive analysis on each summary scale and its components. Next, they studied the internal consistency of the items in each summary scale. Finally, they used a four-step method to examine the construct validity of each SSP summary scale.

To examine the internal consistency of each of the SSP items, Bowen et al. (2004) used Cronbach's alpha for trichotomous-item scales and Kuder-Richardson 20 formula

(KR-20) for dichotomous-item scales. Reliability coefficients above .70 are considered to indicate that measures are consistent or stable (repeated measures of the same thing provide similar or identical results). Reliability coefficients can range from 0 to 1.0, the higher the coefficient the more reliable the measure.

[See Table 2 on next page]

Bowen et al. found that the reliability coefficients for the social environment summary scales ranged from a high of .92 (*Parent Support*) scale to a low of .75 (*Parent Education Support*) scale. Eight of the fourteen social environment scales yielded reliability coefficients above .85 (see Table 2). In this study, the following social environment summary scales were examined in data analysis; *Teacher Support* (.86), *Friend Support* (.86), *Peer Group Acceptance* (.80), *Friend Behavior* (.90), *Family Togetherness* (.91), *Parent Support* (.92), *Home Academic Environment* (.76), *Parent Education Support* (.75) and *School Behavior Expectations* (.86).

In their investigation, Bowen et al. (2004) found that the reliability coefficients for the individual adaptation scales ranged from a low of .65 (*Personal Adjustment*) to a high of .84 (*Self-esteem*). Only two of the eight individual adaptation scales yielded reliability coefficients above .80. In this study, only one of the individual adaptation measure, the *Social Support* scale, was used in data analysis. Its reliability coefficient was found to be .81. The *Social Support* scale was used in this investigation because it was developed to measure students' self report that there are people to whom they can turn to at least weekly for various types of support. Given the focus of this study, the researcher

was compelled to explore the relationship between this individual adaptation measure and

the two achievement outcomes.

Table 2

Social Environment Summary Scales Reliability Assessment

Dimension	Cronbach's Alpha or KR-20	Range		Std. dev.	SEM	Error
		Min.	Max.			
Neighborhood support	0.81	0	12	3.15	1.38	11%
Neighborhood youth behavior	0.87	0	8	2.57	0.93	12%
Neighborhood safety	0.81	0	12	2.29	0.99	8%
School satisfaction	0.76	0	7	2.09	1.03	15%
Teacher support	0.86	0	11	3.09	1.14	10%
School safety	0.86	9	27	4.64	1.74	10%
Friend support	0.86	5	15	2.68	1.00	10%
Peer group acceptance	0.80	8	24	3.23	1.45	9%
Friend behavior	0.90	9	27	4.67	1.45	8%
Family togetherness	0.91	7	21	3.82	1.13	8%
Parent support	0.92	6	18	3.48	1.00	8%
Home academic environment	0.76	0	6	1.94	0.96	16%
Parent education support	0.75	0	8	2.21	1.10	14%
School behavior expectations	0.86	8	24	3.61	1.36	8%

Note. The data in Table 2 are from *The Reliability and Validity of the School Success Profile* (p. 25), by G. L. Bowen, R. A. Rose and N. K. Bowen, 2004, The University of Chapel Hill, NC: Jordan Institute for Families. Adapted with permission.

Table 3

Individual Adaptation Summary Scales Reliability Assessment

Dimension	Cronbach's Alpha or KR-20	Range		Std. dev.	SEM	Error
		Min.	Max.			
Social support	0.81	0	8	2.24	0.98	12%
Physical health	0.78	8	24	3.18	1.49	9%
Happiness	0.72	6	18	2.71	1.43	12%
Personal adjustment	0.65	0	3	1.07	0.64	21%
Self-esteem	0.84	4	12	1.96	0.78	10%
School engagement	0.79	3	9	1.86	0.84	14%
Trouble avoidance	0.78	8	24	2.62	1.23	8%
Academic performance	0.75	3	9	1.50	0.75	12%

Note. The data in Table 3 are from *The Reliability and Validity of the School Success Profile* (p. 34), by G. L. Bowen, R. A. Rose and N. K. Bowen, 2004, The University of Chapel Hill, NC: Jordan Institute for Families. Adapted with permission.

In their final analysis, Bowen et al. (2004) examined the construct validity of each of the SSP scales. Using data from the entire sample, they found that the construct validity of the social environment scales was upheld. The inter-item correlations were also supported by the factor analysis of each scale. Bowen, Rose and Bowen also found that the individual adaptation scales demonstrated good construct validity.

School Support Questionnaire

The researcher developed the School Support Questionnaire (see Appendix I). In developing this instrument, both the assumptions of the EID perspective and prior research that supports the importance of the three social contexts (parent, teacher and

peer group) on individual student achievement were considered. The School Support Questionnaire (SSQ) is a self-administered instrument which is comprised of seven questions (one close-ended and six open-ended).

The first question on the School Support Questionnaire is close-ended (dichotomous) and was developed to assess whether or not the participants viewed themselves as a successful or unsuccessful student. The respondents either answered yes or no to this question. The decision to use a close-ended question was based on the knowledge that in survey research it is appropriate to use close-ended questions when all possible theoretically relevant responses can be determined in advance and the number of responses is limited (Monette, Sullivan, & DeJong, 2002). All of the other six questions on the School Support Questionnaire are open-ended and designed to elicit participants' perspectives about the relationship between social support from parents, teachers and peers and their academic achievement. Open-ended questions are often used in qualitative inquiry in an effort to minimize the imposition of predetermined responses, unlike fixed response questions that limit or predetermine the possibilities (Patton, 2002). A well constructed open-ended question allows the respondent an opportunity to select from a full range of possible responses that they may perceive to be most salient.

In qualitative data analysis, open-ended questions can be handled in two different ways (Monette et al., 2002). The researcher can accept only the first responses or she can accept all of the responses as usable data. In this investigation, all individual responses were accepted as usable data in an effort to capture a broad range of thoughts and perceptions.

The inclusion of the School Support Questionnaire in the study enabled the researcher to elicit information from the participants' themselves about the relationship between the three types of support (parent, teacher and peer) and their achievement in school. The decision to include the SSQ was also based on the knowledge that gathering data from multiple sources to corroborate and illuminate a theme or theory is a well established and acceptable practice in the social and behavioral sciences (Rudestam & Newton, 2001). The researcher anticipated that the qualitative data generated from the SSQ would supplement, enrich, and support the data obtained from the School Success Profile.

<div align="center">Data Collection</div>

Data was collected during the 2006-07 academic school year. Prior to data collection, the researcher color-coded the School Support Questionnaires. Participants who were *high-achieving* received gray questionnaires, those who were *middle-achieving* completed pink questionnaires and those who were *low-achieving* completed gold questionnaires. Color coding the School Support Questionnaires enabled the researcher to easily sort the textual data by groups (*high-achieving males*, *high-achieving* females, *middle-achieving* males, *middle-achieving* females, *low-achieving* males, *and low-achieving* females).

The process of data collection involved two different procedures. The first process involved collecting survey data from the participants themselves. The second process involved the collection of existing data about the participants. Both processes will be discussed in this section.

Survey Data Collection

The collection of survey data began with seeking informed consent from study participants. Parent/guardian consent and youth assent were sought from students who were not yet 18 years of age. Informed consent was solicited from those students who were 18 years of age or older.

A letter introducing the research project and requesting parent/guardian consent (see Appendix B) for student participation and the principal's letter (see Appendix F) were mailed to all of the parents/guardians of the students in the sample who had not reached the age of 18 years before October 31, 2006. A copy of the parent/guardian consent letter was included in the consent packet for the parent/guardian to keep. As noted in the parent/guardian consent letter (see Appendix B), their son or daughter could not participate in the study unless the parent or guardian signed the parent/guardian consent letter. Parents/guardians were asked to return, by mail, the parent/guardian consent letter within two weeks. A self-addressed postage paid envelope was included in the parent/guardian consent packets. One month after the initial mailing, a second parent/guardian consent packet was mailed to the parents/guardians who had not returned the first parent/guardian consent form.

After the researcher received parent/guardian consent, arrangements were made to meet with the students who were not yet 18 years of age in small groups at their respective high schools. Before meeting with the students, the researcher contacted the guidance director or the designated administrator at each of the five high schools to schedule an appropriate time and location to meet with students to obtain informed youth

assent and administer the questionnaires. After these arrangements were finalized, the researcher scheduled visits to each of the high schools, within a two to four week time frame, to solicit informed youth assent and administer the questionnaires. The meetings were held in conference rooms designated by a school administrator, which allowed for minimal distractions and no interruptions. Once the students arrived at the conference room, the Youth Assent Form (see Appendix C) was read to all of the students. The Youth Assent Form advised the students that their participation in this study was voluntary and confidential. It also explained the purpose of study, the survey process, benefits and risks, confidentiality issues and how the data would be used and stored. Although covered in the Youth Assent Form, students were also verbally assured that their decision to participate or not to participate in the study would in no way impact their school performance (grades) or academic standing. Students who agreed to participate were asked to sign the Youth Assent Form and given a copy of this form for their own records. Students who declined participation received passes to return to class. No additional efforts were made to seek their participation. Students who agreed to participate were administered the questionnaires (the School Success Profile and the School Support Questionnaire). As anticipated most students required 40-45 minutes to complete the questionnaires and missed approximately 55 minutes from class. After completing the questionnaires, the students who participated were thanked for their willingness to participate and given passes to return to class.

For those students who were 18 years of age or older, with birthdays on or before October 31, 2006, the researcher secured their informed consent (see Appendix E).

Before seeking these students consent, a letter of notification (see Appendix D) was

mailed to their parents/guardians. The researcher waited at least two weeks after the

parent/guardian notification letters were mailed to seek informed consent from these

students. Informed consent was secured in meetings with these students in small groups

at their designated high schools in a conference room set aside by a school administrator.

This allowed for minimal distractions and no interruptions. Once the students arrived at

the conference room, the Student Consent Form (see Appendix E) was read to all of the

students. This form advised students that their participation in this study was voluntary

and confidential. It also explained the purpose of study, the survey process, benefits and

risks, confidentiality issues and how the data would used and stored. Although covered in

the Student Consent Form, students were verbally assured that their decision to

participate or not to participate in the study would in no way impact their school

performance (grades) or academic standing. Students who agreed to participate were

asked to sign the Student Consent Form (see Appendix E) and given a copy of this form

to keep. Students who declined participation received passes to immediately return to

class. No additional efforts were made to solicit their participation. Students who agreed

to participate were administered the questionnaires (the School Success Profile and the

School Support Questionnaire). After completing the questionnaires, each student was

thanked for their willingness to participate and given a pass to immediately return to

class.

Two months after the initial stratified sampling procedure was used to recruit

participants, the researcher found that the desired sample size had not been obtained. In

an effort to obtain the desired sample size, a second stratified random sampling procedure was done from the population of students who had not been previously recruited. The same procedures for obtaining parent/guardian consent, youth assent, and student consent were followed. However, in the second stratified sampling process, the birth date of February 28, 2007 was used to determine which students were 18 years of age and which students were younger than 18 years of age. Parent/guardian consent and youth assent were sought from students who were not yet 18 years of age. Informed consent was sought from those who were 18 years of age or older and whose birthdays were on or before February 28, 2007.

Existing Data Collection

In addition to the questionnaires, participants' weighted cumulative grade point averages and 11th grade English Reading Standards of Learning (SOL) test scores were collected. The school district's *Research and Authorization Committee* designee provided this information to the investigator. Weighted cumulative grade point averages were collected on the entire population of potential participants prior to sample selection. This data was initially used to define the categories of participants. SOL test scores were collected after the Spring 2006 scores were available (confirmed and released by the Virginia Department of Education). The SOL test scores were obtained from the school district's designee on January 19, 2007.

During the data collection process, all student data (weighted cumulative grade point averages, English Reading SOL tests scores and questionnaire responses) were coded using the student's identification (ID) number as identification. Once data

collection was complete, the ID number for each individual student was converted to another number to further ensure anonymity.

<div align="center">Data Analyses</div>

Variables and their Measures

The following variables were used in quantitative data analysis.

1. <u>Gender</u>- students' self-report of their gender (item # 1 on the SSP-dichotomous, female=1 or male=2).

2. <u>Age</u>- students' self-report of their current age (item # 3 on the SSP).

3. <u>Family Income</u>-free or reduced lunch status (see item # 9 on the SSP-dichotomous, yes or no).

4. <u>Family Structure</u>-students' self-report of their family situation (see item # 5 on the SSP).

5. <u>Parent Support</u>- as measured by items of the following summary scales of the SSP:

   a. *Parent Support* (page 5, items # 5 items a-f). Six 3-point items assess students' perceptions of ways in which adults in their home provide them with emotional support. All items are stated positively. Responses are summed, which increase in value for more positive responses, to create a scale ranging from 6-18, with higher numbers indicating more parent emotional support.

   b. *Family Togetherness* (page 5, items # 1 a-g). Seven 3-point items assess students' perceptions of emotional connections and bonding among family

and household members. Family is defined as "the people you live with." All items are stated positively. The responses are first reversed, such that *A lot like us* corresponds to a value of 3 and *Not like us* corresponds with a value of 1(with *A little like us* unchanged). These numbers are then summed to create a scale ranging from 7 to 21, with higher numbers indicating more family togetherness.

c. *Home Academic Environment* (page 5, items # 7 a-f). Six dichotomous items that assess whether students have discussed a variety of school-related topics, current events, and future plans with adults in the home. All items are stated positively. Count *Yes* responses to create a scale ranging from 0 to 6. Higher numbers represent a more academically oriented home environment.

d. *School Behavior Expectations* (page 6, items # 12 a-h). Eight 3-point items assess students' perceptions of parent/guardian expectations of their behavior and academic performance at school. All items are stated negatively. The responses are first reversed, such that *Very upset* corresponds to a value of 3 and *Not upset* corresponds to a value of 1(with *Somewhat upset* unchanged). Items are then summed to create a scale ranging from 8 to 24, with higher numbers indicating more positive parental school behavior and performance expectations.

e. *Parent Education Support* (page 6, items # 8 and a-h). Eight dichotomous items assess students' perceptions of parent-school contacts and the extent

to which parents provide structure at home to encourage school achievement. All items are stated positively. Count the *Yes* response to create a scale ranging from 0 to 8. Higher numbers represent greater parental educational support.

6. Teacher Support- as measured by the items including in the following summary scales of the SSP, *Teacher Support* (page 3, items # 11 a-k). Eleven dichotomous items assess students' perceptions about teachers' attitudes and behaviors toward the respondent, including encouragement, praise, and academic expectations. All items are stated positively. The *True* responses are counted to create a scale ranging from 0 to 11, with higher numbers representing higher levels of teacher support.

7. Peer Support- as measured by the items in the following summary scales of the SSP:

    a. *Friend Support* (page 4, items # 1 a-e). Five 3-point items assess students' perceptions of friend support and satisfaction with peer relationships. Friends are defined as "non-relatives from your school or community with whom you have a good relationship." All items are stated positively. The responses are first reversed, such that *A lot like me* corresponds to a value of 3 and *Not like me* takes on a value of 1 (with *A little like me* unchanged). Items are then summed to create a scale ranging from 5 to 15, with higher numbers representing greater friend support.

b. *Friend Behavior* (page 5, items # 7 a-i). Nine 3-point items that assess students' friends' illegal, aggressive, and acting-out behaviors. Friends are defined as "non-relatives from your school or community with whom you have a good relationship." All items indicate negative friend behavior. Sum the responses, which increase in value for more positive responses, to create a scale ranging from 9 to 27, with higher numbers indicating lower levels of negative friend behavior.

c. *Peer Group Acceptance* (page 4, items # 5 a-h). Eight 3-point items assess students' perceptions of their relative standing in their peer group, and their ability to be themselves and resist peer pressure. Friends are defined as "non-relatives from your school or community with whom you have a good relationship." All items are stated negatively. Sum the responses, which increase in value for more positive responses, to create a scale ranging from 8 to 24, with higher numbers indicating greater peer acceptance.

8. Social Support Use- an individual adaptation summary scale of the SSP, as measured by the items of the *Social Support* scale (page 8, items # 20 a-h). Eight dichotomous items assess students' perception that there are people to whom they can turn at least weekly for various types of social support. All items are stated positively. The *Yes* responses will be counted to create a scale ranging from 0 to 8, with higher numbers indicating greater social support.

9. <u>Level of Contextual Risks</u>- as measured by the *Contextual Risks Index* score- a composite of 20 items of the SSP related to environmental factors (e.g. # of household moves in the previous year, neighborhood crime, peer substance use) thought to increase the likelihood of problematic outcomes during adolescence (Nash & Bowen, 2002). Scores for each risk measure (single item) will be divided into low/high risk categories. A higher percentage is associated with a higher risk level.

10. <u>Level of Social Capital Assets</u>- as measured by the *Social Capital Assets Index* score. This index is a composite of 20 items of the SSP that are associated with support and encouragement that youth receive from adults in their social environment that facilitate their ability to manage life demands, achieve goals, and fulfill ambitions. Scores for each social capital measure (single item) will be divided into low/high risk categories. A higher percentage is associated with a higher asset level.

11. <u>Academic achievement</u>- was measured by two different criterion variables.

   a. *Weighted cumulative grade point average*-as measured by a number that represents the average of students' grades during their tenure at a particular institution. Most high schools and colleges in the United States use a four point system, where numerical values are applied to grades as follows: A=4.0, B=3.0, C=2.0, D=1.0 and F=0. In this school district, students can receive weighted credit value in some courses because the courses are more or less rigorous. In Advanced Placement (AP) and

International Baccalaureate (IB) courses, an A=5.0, a B=4.0, a C=3.0, a

D=2.0 and an F=0. In Honors and Pre-IB courses, an A=4.5, a B=3.5, a

C=2.5, a D=1.5 and an F=0. In Modified courses (select special

education), an A=3.5, a B=2.5, a C=1.5, a D=.5 and an F=0. To determine

the weighted cumulative grade point average, a student's total grade points

earned are divided by the total of course credits attempted. Courses in

which a student did not receive a grade, such as pass/fail and audited

classes, do not factor into the weighted GPA calculation.

b. *SOL Test Performance*- was measured by the score participants' received

on the required English Reading Standards of Learning test administered

at the end of their 11th grade school year. On this test, the required score

for passing is 400. Scores below 400 fall within the *Failed* range. Scores

that range from 400-499 fall within the *Passed* range. A score of 500 to

600 falls in the *Advanced/Proficient* range. If there was no score available

for the participant, it was coded as *No Score*.

Data Analyses Procedures

The Statistical Package for the Social Sciences (SPSS) version 15.0 was used as

the primary statistical tool in the analysis of quantitative data. In the first stage of data

analysis, selected univariate analysis was conducted on socio-demographic variables to

provide a summary of the sample population. In this analysis, the following categories

were summarized; gender, ages, weighted cumulative grade point averages, 11 the Grade

English Reading SOL test performance (*No Score*, *Failed*, *Passed* or

Advanced/Proficient), family structure (see item # 5 on the SSP), and free or reduced lunch status (see item # 9 on the SSP).

During the second stage of data analysis, several different types of bivariate analysis were used to examine the relationships between the study variables. Chi square tests, Independent Sample T tests, One Way ANOVA and Kruskall-Wallis tests were used depending on the sample size, level of measurement of each variable and the relationship between the variables of interest. Pearson correlation coefficients were also obtained on all of the independent variables to determine the linear relationship between each interval ratio independent variables and the two interval ratio level dependent variables. These results were also used to evaluate any problems with multicollinearity.

In the next stage of data analysis, linear multiple regression analysis was done, to examine the relationships that existed between each of the predictor variables (gender, teacher support, friend behavior, peer group acceptance, friend support, family togetherness, school behavior expectations, home academic environment, parent education support, parent support, level of contextual risks, level of social capital assets and social support use) and each criterion measure. Standard linear multiple regression techniques were utilized to analyze the contributions of each variable in a set of predictor variables. As a predictor variable was removed one at a time from each model, the relationship between the group predictor variables and the criterion measure was re-assessed. This process enabled the researcher to determine whether any changes increased the model's predictive value or indicated a need to explore the possibility of mediating influences.

In the final phase of data analysis, qualitative data from the participants' responses to the questions that comprise the School Support Questionnaire (SSQ) were analyzed. The SSQ includes one close-ended and six open-ended questions that were designed to elicit participants' perspectives about the relationship between teacher, peer, and parent support and their success as a student. The first question is close-ended and asks the respondent whether or not they consider themselves to be a successful student. If the respondent answered yes to the first question, then they were requested to complete the next three questions. If their response was no to the first question, they were instructed to answer the last three questions. In some instances, the respondents answered all of the seven questions. In those cases, all of the data provided was considered usable data for analysis.

Atlas-ti, a software program developed for qualitative analysis of large bodies of textual data, was used as a primary tool in qualitative data analysis. This computer-based program provides a framework for data management and it can also be used for both building and testing theory because it enables the researcher to use semantic networks that emerge from the data (Miles & Huberman, 1994). In this investigation, it provided a computer based format for linking concepts and evaluating the relationships between them.

To prepare the textual data for analysis, each participant's student identification (ID) number was placed at the top right hand corner on their questionnaires. The gender of each participant was also recorded on the top right hand corner of the SSQ. After data collection was complete, the identification number was converted to another number (an

identification code) to further ensure anonymity. These identification codes (i.e.

102pinkF to denote participant #102 *middle-achieving* female) were placed on the front

of each SSQ which enabled the researcher to link each participant to their responses and

to later group the respondents by gender and achievement level.

After each questionnaire was given an identification code, the qualitative data was

transcribed. Separate word documents were created for each study participant that

included all of their responses to the SSQ items. These documents were saved in Rich

Text Format, a Microsoft Word option.

Once all of the text data was transcribed, it was downloaded into Atlas-ti and a

Hermeneutic Unit was created (a folder which contained all of the collected data). Each

separate file was then assigned as a Primary Document (PD) to the Hermeneutic Unit

(HU). These Primary Documents were distinguished by the identification codes assigned

after data collection was complete. The participants' responses (now identified as

separate PD files) were unitized and coded (simultaneously) using the conceptual

framework (the EID perspective) as a guide for drawing inferences and conclusions about

the relationship between each of the factors. A continuous, iterative process was used to

note patterns, regularities, explanations and infer plausibility (Huberman & Miles, 1998).

During this stage of data reduction, memos were used to reflect on observations about the

data and to inform the iterative process.

After unitizing and coding of the textual data was complete, a code list was

printed. This list was used to further reduce the data (identify separate categories or

emergent themes). A cognitive map was used to conceptualize the relationship between

the numerous codes. This type of data display enabled the researcher to note patterns and themes, count, cluster and think more abstractly about plausible relationships (Huberman & Miles, 1998). Seven categories emerged from the data (tangible *support*, *standards, social support, guidance, communication, behavioral support* and *emotional support*). Once these seven categories were identified, separate PD families were created for each using the Family Manager command in Atlas-ti. After that was done, respective codes (and their units of data) were assigned to the appropriate categorical PD family. The Family Manager command was also used to create PD families for the six different groups of participants (*high-achieving males*, *high-achieving females*, *middle-achieving males*, *middle-achieving females*, *low-achieving males* and *low-achieving females).* After both of these processes were complete, the researcher was able to use Atlas-ti commands to organize the data by groups of participants and the seven separate categories. Once this was done, the researcher printed lists of the codes (and their units of data) subsumed under the seven separate categories (*tangible support, standards, social support, guidance, communication, behavioral support* and *emotional support*) for each of the six different groups of participants. Once the data was organized in this manner, the researcher was able to analyze the word data from each homogeneous group separately. During this iterative, continuous process the conceptual framework, the EID perspective, was used as a guide for drawing inferences and making conclusions about what factors logically influenced others and in what order. In the final analysis, the researcher noted patterns and themes, counted frequencies, clustered (conceptually grouped), contrasted and compared in an effort to draw inferences from the data. Once the word data was

analyzed, a narrative was written that summarized the findings for each group and explained what variables were related and which ones appeared to be more important in the sample population. The narrative summary also highlighted group similarities and differences.

Chapter 4: Results

Introduction

This investigation examined the relationship between protective influences (types of social support, social capital assets and social support use) and two achievement outcomes in a sample of African American high school seniors. This research also investigated the relationships between level of contextual risks and the two achievement outcomes in the sample and whether or not the social support variables moderated contextual risks. Cross-sectional survey design methods were used as outlined in chapter three.

This chapter presents the study findings in several sections. The first section discusses the results of data collection. The second section provides a descriptive summary of the sample. In the third section, the results of hypotheses testing will be discussed and any significant additional findings. The fourth section presents qualitative findings from the participants' responses to seven questions that comprised the School Support Questionnaire. The final section of the chapter is a synthesis of both the quantitative and qualitative findings.

Data Collection Results

In October, 2006, a systematic (stratified) sampling procedure was used to identify African American high school seniors who were subsequently recruited to

participate in the study. In late October and early November 2006, parent/guardian

consent packets or parent/guardian notification letters were mailed to 429

parents/guardians of the students selected through this process. Parent/guardian consent

packets were mailed to the homes of students who were under the age of eighteen years,

as their parents/guardians were required to sign permission for their son or daughter to

participate in the study. Parent/guardian consent was not required of students who were

eighteen years of age or older; however, their parents/guardians were mailed

parent/guardian notification letters. During this phase of data collection, letters were

mailed to the parents/guardians of 50 *high-achieving*, 65 *middle-achieving* and 78 *low-achieving* males. Letters were also mailed to the parents/guardians of 65 *high-achieving*,

84 *middle-achieving* and 87 *low-achieving* females. In late November and early

December 2006, a second parent/guardian consent packet was mailed only to those

parents/guardians in the sample who had not responded to the first mailing and who had a

son or daughter who was under the age of eighteen years of age.

Two weeks after the first mailing, the investigator began the process of obtaining

consent from those students in the sample who were eighteen years of age or older. The

investigator sought informed youth assent from those students who were under the age of

eighteen only after the receipt of parent/guardian consent.

In early January 2007, it was determined that a sufficient number of

parent/guardian, youth assent and informed consent from students who were eighteen

years of age or older had not been obtained from the first stratified sample. In an effort to

obtain the desired sample size needed for a representative sample, a second stratified

random sampling procedure was done from the group of students who remained in the sample population. In the second stratified sampling procedure, 388 students were selected and their parents/guardians were mailed parent/guardian consent packets or parent/guardian notification letters in January 2007. Sixty-five letters were mailed to parents/guardians of *middle-achieving* males and 88 were mailed to the parents/guardians of *low-achieving* males. Sixty-five letters were mailed to the parents/guardians of *high-achieving* females, 84 were mailed to *middle-achieving* females and 86 were mailed to the parents/guardians of *low-achieving* females. During this phase of data collection, letters were not mailed to the parents/guardians of *high-achieving* males who were under the age of eighteen because all of these *high-achieving* males' parents/guardians had already received two parent/guardian consent letters. There were only 50 *high-achieving* males in the total student population of African American high school seniors in the entire school district. In an effort to obtain a representative sample from this group, the researcher continued to seek informed consent from those *high-achieving* males in the sample who were eighteen years of age or older.

During all phases of data collection, the procedures for obtaining informed consent (parent/guardian, youth and student) were adhered to as outlined in chapter three. After each participant agreed to participate in the study they completed the study questionnaires. Upon completion of the questionnaires, each participant was thanked for their willingness to participate and given a pass to return to their class.

Over the course of seven months, the investigator sought face-to-face informed youth assent and student consent from 327 African American high school seniors. Ten

students declined the opportunity to participate in the study after being read either the

youth assent or student consent document. Nine of the students who declined were

eighteen years of age or older and *low-achieving* (8 males and 1 female). One male who

declined was *low-achieving* and under the age of eighteen. Another male who declined

was *high-achieving* and eighteen years or older.

Data collection was terminated during the first week in June 2007, at which time

the investigator determined that the obtained a sample size (*n*= 317) exceeded the

required sample size (*n*= 273) for representativeness (see Table 4). The required sample

size was derived at by using a confidence interval of 5% and a 95% confidence level as a

guide.

Table 4

Enrollment and Obtained Stratified Random Sample

	GPA Subset					
	.33 - 1.99		2.0 - 2.99		3.0 - 4.37	
	M	F	M	F	M	F
# enrolled	168	160	191	245	50	128
% of total group	18%	17%	20%	26%	5%	14%
Required sample size	49	46	55	71	14	38
Obtained sample size	49	50	57	71	33	57
Total (N=317)						

Description of the Sample

The study sample was taken from the total population of African American high school seniors enrolled at the five high schools located in an urban school district in southeastern Virginia. Three hundred and seventeen African American high school seniors agreed to participate in this study.

More than half (55.8%) of the study sample reported their gender to be female (see Table 5). Most of the participants (60.9%) reported that they were eighteen years of age and slightly more than half (51.4%) reported that they lived in a household with two parents. Family income was measured by the students' responses to question number nine on the School Success Profile "Do you receive free or reduced price lunches at school?" Slightly more than half of the sample (56.5%) reported that they did not receive free or reduced price lunches at school. The remaining 43.4% were considered to be economically disadvantaged as determined by their eligibility for free or reduced lunch (based on United States Department of Agriculture guidelines regarding total household income).

[See Table 5 on next page]

In an effort to further describe the sample, the researcher explored whether or not there was a significant association between gender and family constellation as well as gender and free or reduced lunch status in the sample. Chi square analysis determined that a significant association did not exist between gender and family constellation ($\chi2$ (3, N= 313) = 7. 615, p =.055); however, these findings are interpreted with caution because the data did not meet the assumption of sample size (two cells had less than five cases).

An additional chi square analysis determined that a significant association did not exist between gender and free lunch status ($\chi2$ (1,) = 1.848, p =.107).

Table 5

Sample Demographics (N=317)

Variable	Category	N	Total Sample %
Gender	Male	140	44.2
	Female	177	55.8
Ages of participants	16	2	.6
	17	109	34.4
	18	193	60.9
	19	13	4.1
Family constellation	One parent	128	40.9
	Two parent	161	51.4
	Other situation	22	7.0
	Alone	2	.6
	Missing	4	1.3
Free or Reduced lunch	Yes	135	43.4
	No	176	56.6
	Missing	6	1.9

Note. This data was obtained from participants' responses to questions included in the School Success Profile.

In 2007, Wooley and Bowen investigated the influence of contextual risk on the school engagement of middle school students. In their study, they distinguished three levels of contextual risks, as measured by the School Success Profile's *Contextual Risk Index* (CR). Study participants who reported more than five indicators were identified as experiencing high-risk. Those who reported two to five indicators were considered to be

middle-risk and those reporting less than two were described as low-risk. Because the Contextual Risk Index is one of the variables of interest in the current investigation, the same distinctions defined by Richman and Bowen were used to provide additional descriptive information about this study sample. Approximately 15% of the participants in this study had scores on the Contextual Risk Index that were in the low-risk range, 37.5% were in the middle-risk range and 44.8% were in the high-risk range. The sample's mean score on this measure was 5 and the scores on the index ranged from 0 to 14 out of a possible 20. To determine whether or not the sample proportions matched the theoretical values, a chi square goodness of fit test was calculated to compare the frequency of occurrence of each level of risk. A significant deviation was found ($\chi2$ (2, N= 307) = 49.101, p=.000). The observed values did vary significantly from the expected values. A chi square test of independence was also calculated to determine if there was a significant association between gender and the three risk levels. There was no significant association between gender and risk levels ($\chi2$ (2, N = 307) = 1.991, p =. 369). Levels of risk and gender appear to be unrelated in the sample.

In this study, gender was conceptualized as an independent variable. There were twelve other independent variables used in this investigation, all of which were measured at the interval level. Table 6 provides a descriptive summary of those variables.

Table 6

Descriptive Summary of Independent Variables

Variable	Valid N	Mean	SD
Parent support	305	14.259	3.400
Home academic environment	307	3.928	1.726
Parent education support	312	3.571	2.049
School behavior expectations	307	20.306	2.691
Family togetherness	305	17.030	3.941
Teacher support	295	8.800	2.618
Friend behavior	305	21.020	4.518
Peer group acceptance	311	22.534	1.164
Friend support	315	13.419	2.215
Social support use	312	7.000	1.655
Social capital assets index	317	13.290	3.805
Contextual risks index	317	5.000	3.023

Note. Listwise deletion method was used to handle missing data.

Two types of existing data were collected on the study participants: their weighted cumulative grade point averages at the end of their eleventh grade school year and their scores on the 11th grade English Reading Virginia Standards of Learning (SOL) Test administered in the spring of 2006. These two measures were conceptualized as dependent variables in this investigation.

In this study, three separate groups were defined based on participants' weighted cumulative grade point averages. The first group of students was defined as *high-achieving* students with weighted cumulative grade point averages of 3.0 or higher on a 4.0 point scale. The second group was defined as *middle-achieving* with weighted

cumulative grade point averages that ranged from 2.0 to 2.99. The last group was defined

as *low-achieving* students or those who had weighted cumulative grade point averages

below 1.99. Slightly less than half (40.4%) of the study participants had weighted

cumulative grade point averages that ranged from 2.0 to 2.99 (see Table 7). The

remaining was fairly evenly distributed between *high-achieving* and *low-achieving*.

Table 7

Weighted Cumulative Grade Point Averages by Group

Groups	Frequency	Valid Percent
High-achieving	90	28.4%
Middle-achieving	128	40.4%
Low-achieving	99	31.2%
Total	317	100%

The obtained sample was similar to the total study population of African

American high school seniors in terms of the distribution of weighted cumulative grade

point averages. According to information provided by the school district's designee on

January 19, 2007, one hundred seventy-eight students (18%) of the total population of

African American high school seniors were *high-achieving*, 436 (46%) were *middle-

achieving* and 327 (35%) were *low-achieving*.

The study participants' English Reading Virginia Standards of Learning (SOL)

scores were obtained from the school district's designee on January 19, 2007. Scores

were not available for fourteen (4.4%) of the participants because they did not take the

test when it was administered during the spring of 2006. The required score for passing

the SOL test is 400. Scores that ranged from 400-499 fall within the Pass/Proficient range

and scores that range above 500 to 600 are in the Advanced/Proficient range. In this

analysis, four categories were used to describe the sample's performance on this test: (1)

Failed- scores below 400, (2) *Passed*-scores between 400 and 499, (3)

Advanced/Proficient- scores that were above 500 and (4) *No Score*-to represent the

participants whose scores were not available. The sample's performance on this

achievement outcome is delineated in Table 8.

Table 8

English Reading Standards of Learning Scores

Grouping	Frequency	Valid Percent
Failed	28	8.8%
Passed	158	49.8%
Advanced/Proficient	117	36.9%
No Score	4	4.4%
Total	317	100%

A large percentage (86.7%) of the sample passed the 11th grade English Reading

SOL Test administered in the spring of 2006 and nearly 37% earned Advanced/Proficient

scores on this achievement measure. Less than 9% of the sample failed this test when it

was administered during the spring of 2006.

Hypotheses Testing

The Relationship between Gender and Perceptions of Social Support, Social Capital Assets and Social Support Use

Hypothesis #1: Male and female students differ in their perceptions of support, perceptions of social capital assets and social support usage. Females will have higher scores than males on the teacher support, peer support and parent support measures. Females will also have higher scores than males on the social capital assets and social support use summary scales.

Research Question #1: Do the females in the sample report higher levels of social support from teachers than males?

The Independent *t*-Test was used to test the hypothesis that there were statistically differences between females and males with regard to their scores on the Teacher Support (TS) scale. The results of this test indicated that there were no significant differences in the scores that males and females reported on the Teacher Support scale (*t* (df =293) = 835; *p* = .202). These results are supported by the results of the Mann-Whitney U Test finding that the difference was not statistically significant (*z* =-.771, *p* = .22).

Research Question #2: Do the females in the sample report higher levels of social support from peers than males?

Three different measures of friend support were used in an attempt to capture different aspects of peer support. The findings relative to the sample's performance on each scale are illustrated in Table 9.

Table 9

Results of Independent *t*-Test – Summary Table Peer Support Variables

Variable	N	Mean	SD	*t*	*p**
FS					
Male	139	13.2446	2.1597	1.243	.107
Female	176	13.5568	2.2544		
FB					
Male	134	20.0597	4.4210	3.339	.0005*
Female	171	21.7719	4.4629		
PGA					
Male	138	22.3116	1.6776	2.139	.016*
Female	173	22.7110	1.6022		

* One-tailed *p*

The Independent *t* –Test was used to test the hypothesis that there were statistically significant differences between the females and males with regard to their scores on three peer support measures. The results of this test show that the male and female scores on the Friend Support scale were not statistically significantly different. However, this test confirmed that there were statistically significant differences in the scores that males and females reported on both the Friend Behavior and Peer Group Acceptance scales. The results of the Mann-Whitney U test supported that females had higher scores on the Friend Behavior scale than males. The mean rank for females is 169.47 compared to 131.99 for males. The difference was statistically significant (z = -3.695; p = .000). The Mann-Whitney U results also confirm that there was a significant difference between the male and female scores on the Peer Group Acceptance scale. The mean rank for females is 166.93 and the mean rank for males is 142.30. Females had

higher scores on this measure than males. The difference was statistically significant ($z =$

-2.492, $p = .006$).

Research Question #3: Do the females in the sample report higher levels of social

support from parents/families than males?

Five different measures of parent/family support were used in an attempt to

capture different aspects of parent/guardian or family support. The findings relative to the

sample's performance on each scale are illustrated in Table 10.

Table 10

Results of Independent t-Test – Summary Table Parent Support Variables

Variable	N	Mean	SD	t	p*
SBE					
Male	134	20.2164	2.8872	.514	.304
Female	173	20.3757	2.5364		
PES					
Male	139	3.4964	2.0265	.572	.284
Female	173	3.6301	2.0718		
HAE					
Male	135	3.9037	1.7529	.221	.412
Female	172	3.9477	1.7108		
PS					
Male	137	13.9781	3.2300	1.304	.096
Female	168	14.4881	3.5257		
FT					
Male	135	17.2815	3.6419	-1.010	.156
Female	170	16.8294	4.1638		

* One-tailed p

The Independent t –Test was used to test the hypothesis that there were

statistically significant differences between the male and female scores on the five

parent/family support measures. The results of this test show that the male and female

scores on all five parent/family support measures were not statistically significantly different. The scores that males and females received on the School Behavior Expectations scale, Parent Education Support scale, Home Academic Environment scale, Parent Support scale and Family Togetherness scale were not statistically significantly different.

Research Question #4: Do the females in the sample report higher levels of social support usage than males in the sample?

The Independent t-Test examined the difference between the male and female scores on the Social Support Use (SS) scale. The difference between the two groups' scores was not statistically significantly different (t (df =310) = .525; p = .276). Mann Whitney U Test results further confirm that there was no significant difference in the scores that females and males had on this measure. The difference was not statistically significant (z =-.896, p =.185).

Research Question #5: Do the females in the sample report higher levels of social capital assets than males in the sample?

The Independent t- Test examined the difference between the male and female scores on the Social Capital Assets scale. The difference between the male and female scores on the Social Capital Assets (SC) scale was not statistically significant (t (df = 315) = 1.246; p = .107). These results are supported by the Mann Whitney U Test findings (z =-1.222, p =.111).

The Relationship between Gender and Contextual Risks

Hypothesis #2: Male and female students differ in their perceptions of contextual risks, males will report higher levels of contextual risks.

Research Question #6: Do the males in the sample report higher levels of contextual risks than the females in the sample?

The Independent *t*-Test was used to compare the scores that males and females received on the Contextual Risk Index (CR) summary scale. This test confirmed that there was no significant difference in the male and female scores on this measure (t (df= 315) = -.300; p = .382). These results were supported by the Mann-Whitney U test findings (z =-.497, p = .309).

The Relationship between Social Support and Achievement

Hypothesis #3: African American adolescents who report higher levels of social support from teachers, peers and parents will have better achievement outcomes.

Research Question #7: Which of the nine social support variables; Teacher Support (TS), Friend Support (FS), Peer Group Acceptance (PGA), Friend Behavior (FB), Family Togetherness (FT), Parent Education Support (PES), Home Academic Environment (HAE), School Behavior Expectations (SBE), and Parent Support (PS) are most influential in predicting weighted cumulative grade point average (GPA)? Are there any social support variables that do not contribute significantly to the model?

Standard linear multiple regression revealed that there were four social support variables that predicted GPA in the full regression model. The model, that included all nine social support variables, accounted for 19.1% of the variance in GPA (R^2 = .191, *F*

(13, 261) =4.726, p = .000). Teacher Support (Beta of .135; p = .041), Family

Togetherness (Beta of -.326; p = .000), Home Academic Environment (Beta of .149; p =

.033), and School Behavior Expectations (Beta of .148; p =. 018) all contributed to the

variance in GPA (see Table 11).

Table 11

Multiple Regression Analysis of the Effects of all Independent Variables on Weighted Cumulative Grade Point Average (GPA)

Predictor	Unstandardized coefficients		Standardized coefficients		
	B	Std. error	Beta	T	sig.
TS	.036	.018	.135	2.056	.041*
FS	.024	.019	.074	1.248	.213
PGA	-.035	.026	-.078	-1.316	.189
FB	-.005	.010	-.035	-.522	.602
FT	-.057	.016	-.326	-3.620	.000***
PES	-.047	.026	-.138	-1.796	.074
HAE	.061	.028	.149	2.149	.033*
SBE	.038	.016	.148	2.382	.018*
PS	-.006	.018	-.031	-.344	.731
SS	.024	.026	.058	.931	.353
CR	-.032	.015	-.138	-2.059	.041*
SC	.030	.018	.163	1.656	.099
Gender2	.209	.082	.148	2.542	.012*
(Constant)	2.469	.724		3.408	.001

*p <.05; **p <.01; ***p < .001

Note. N = 275 (male and female participants). In this model all 13 independent variables were regressed on GPA. R square = .191, R square adjusted = .150, F(13, 261) = 4.726, p is .000.

Table 12

Whole Group Correlation Matrix

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Gender	1	-.132*	-.013	-.049	-.070	-.121*	-.188**	-.075	.057	-.032	-.029	-.013	-.034	.017	-.070
2	GPA	-.132*	1	.642**	.163**	.120*	-.077	.052	-.056	-.117*	-.008	.199**	.104	.056	-.224**	.115*
3	SOL	-.013	.642**	1	.005	.181**	.031	-.059	-.167**	-.190**	-.162**	.019	.026	-.024	-.112	-.060
4	TS	-.049	.163**	.005	1	.140*	.034	.161**	.254**	.270**	.309**	.241**	.179**	.206**	-.169**	.494**
5	FS	-.070	.120*	.181**	.140*	1	.147**	.132*	.049	.072	.090	.124*	.063	.138*	-.247**	.133*
6	PGA	-.121*	-.077	.031	.034	.147**	1	.108	.177**	.117*	.022	-.040	.062	.031	-.010	.053
7	FB	-.188**	.052	-.059	.161**	.132*	.108	1	.154**	.203**	.201**	.197**	.086	.110	-.469**	.254**
8	PS	-.075	-.056	-.167**	.254**	.049	.177**	.154**	1	.680**	.558**	.209**	.469**	.398**	-.121*	.644**
9	FT	.057	-.117*	-.190**	.270**	.072	.117*	.203**	.680**	1	.462**	.298**	.450**	.294**	-.179**	.645**
10	PES	-.032	-.008	-.162**	.309**	.090	.022	.201**	.558**	.462**	1	.260**	.475**	.350**	-.161**	.602**
11	SBE	-.029	.199**	.019	.241**	.124*	-.040	.197**	.209**	.298**	.260**	1	.167**	.107	-.273**	.313**
12	HAE	-.013	.104	.026	.179**	.063	.062	.086	.469**	.450**	.475**	.167**	1	.265**	-.154**	.504**
13	SS	-.034	.056	-.024	.206**	.138*	.031	.110	.398**	.294**	.350**	.107	.265**	1	-.151**	.339**
14	CR	.017	-.224**	-.112	-.169**	-.247**	-.010	-.469**	-.121*	-.179**	-.161**	-.273**	-.154**	-.151**	1	-.277**
15	SC	-.070	.115*	-.060	.494**	.133*	.053	.254**	.644**	.645**	.602**	.313**	.504**	.339**	-.277**	1

*. Correlation is significant at the 0.05 level (2-tailed).   **. Correlation is significant at the 0.01 level (2-tailed).

Table 13

Multiple Regression Analysis of the Effects of HAE, Gender2, TS, FS, FT, SBE, SC, and CR on GPA

	Equation 1	Equation 2	Equation 3	Equation 4	Equation 5	Equation 6	Equation 7	Equation 8	Equation 9
HAE	.121 (.027)		.116 (.027)	.114 (.027)	.116 (.027)	.059 (.027)	.149* (.026)	.121 (.027)	.119 (.027)
Gender2	.111* (.078)	.107 (.079)		.111* (.079)	.118* (.079)	.140* (.081)	.119* (.078)	.115* (.078)	.107 (.079)
TS	.107 (.017)	.100 (.017)	.107 (.017)		.126 (.017)	.135* (.018)	.145* (.016)	.113 (.017)	.109 (.017)
FS	.066 (.018)	.066 (.018)	.073 (.018)	.073 (.018)	.075 (.019)	.061 (.019)	.065 (.018)		.091 (.018)
FT	-.366*** (.013)	-.338*** (.013)	-.383*** (.013)	-.377*** (.013)	-.337*** (.013)		-.309*** (.012)	-.364*** (.013)	-.369*** (.013)
SBE	.165** (.016)	.162** (.016)	.171** (.016)	.176** (.016)		.126* (.016)	.173** (.016)	.169** (.016)	.189** (.016)
SC	.126 (.016)	.174* (.016)	.144 (.016)	.186* (.015)	.147 (.016)	-.089 (.015)		.125 (.016)	.153 (.016)
CR	-.132 * (.027)	-.131* (.014)	-.128* (.014)	-.133* (.014)	-.160** (.014)	-.137* (.014)	-.144* (.014)	-.146* (.013)	
(Constant)	(.418)	(.420)	(.420)	(.418)	(.420)	(.429)	(.419)	(.350)	(.366)
R^2	.166	.156	.154	.158	.143	.097	.160	.162	.151
N	285	288	285	295	288	288	285	286	285
Sig.	.000***	.000***	.000***	.000***	.000***	.000***	.000***	.000***	.000***

Note. In each of the equations included in Table 13, the Beta and Std. errors are reported. This GPA model includes only those predictors (see Table 12) that have significant correlations with GPA except HAE (p = .068), which was added to the model because its correlation coefficient was almost significant.

A second model that included only those study variables (see Table 12) that were found to be significantly correlated with GPA were regressed on GPA in a second model (see Table 13), to further explore the predictive value of the social support variables on GPA. Home Academic Environment (HAE) was included in this regression model because its correlation coefficient was almost significant (.068). The first regression equation (see Table 13) accounted for 16.6% of the variance in GPA (R^2= .166, F (8, 276) = 6.866, p = .000). In this equation, only two of the four social support variables that were predictors in the full model remained as predictors (see Table 13). In the subsequent equations, the multiple regression remove technique was used (each of the predictors were removed one at a time). In doing this, the researcher was able to determine if the removal of one variable from the model resulted in any significant changes for the remaining variables in the model or in the model's predictive value. When a predictor emerged after a variable was removed or there was a significant change in the predictive value of another variable, the researcher explored whether or not the changes were due to mediating effects. Tests for mediating effects determined that none of the changes observed were the result of a mediating variable.

In the final analysis, the most parsimonious model was equation #7 (see Table 13) for predicting the variance in GPA. Equation #7 accounted for 16.0% of the variance in GPA (R^2 = .160, F (7, 277) = 7.525, p = 000). In this model, the same social support variables that were identified in the full regression model contributed to the variance in GPA.

In summary, a series of linear multiple regression models provide evidence that some of the variability in GPA can be explained by four social support variables. Higher scores on the Teacher Support, Home Academic Environment and School Behavior Expectation scales, are indicative of higher GPAs; however, higher scores on the Family Togetherness scale, are associated with lower GPAs. In the whole group analysis (see Table 11 and Table 13), the following social support variables did not contribute to the variance in GPA; Friend Behavior, Peer Group Acceptance, Friend Support, Parent Education Support and Parent Support.

Research Question #8: Which of the nine social support variables; Teacher Support (TS), Friend Support (FS), Peer Group Acceptance (PGA), Friend Behavior (FB), Family Togetherness (FT), Parent Education Support (PES), Home Academic Environment (HAE), School Behavior Expectations (SBE), and Parent Support (PS) are most influential in predicting weighted cumulative grade point average (GPA) for females? Are there any social support variables that do not contribute significantly to the model?

Standard linear multiple regression methods were used to determine which social support variables contributed to the variance in GPA for females. Only those predictors that were correlated with GPA (see Table 12) were included in this model. There were two social support variables, Family Togetherness and School Behavior Expectations, that predicted GPA in the first regression equation (see Table 14), which accounted for 13.7% of the variance in GPA (R^2= .137, $F(7, 155)$ = 3.504, p = .002). In the subsequent

Table 14

Multiple Regression Analysis of the Effects of HAE, FS, SBE, TS, CR, FT, and SC on GPA for Females

	Equation 1	Equation 2	Equation 3	Equation 4	Equation 5	Equation 6	Equation 7	Equation 8
HAE	.115	.112	.111	.029	.147	.111	.115	
	(.037)	(.037)	(.038)	(.038)	(.036)	(.037)	(.037)	
FS	.092	.099	.093	.070	.083	.093		.092
	(.024)	(.023)	(.024)	(.025)	(.024)	(.024)		(.024)
SBE	.182*	.192*		.139	.190*	.191*	.183*	.180*
	(.023)	(.023)		(.024)	(.023)	(.023)	(.023)	(.023)
TS	.083	.086	.104	.104	.121		.085	.078
	(.024)	(.024)	(.024)	(.025)	(.023)		(.024)	(.024)
CR	-.044		-.084	-.072	-.068	-.049	-.060	-.038
	(.018)		(.018)	(.019)	(.018)	(.018)	(.018)	(.019)
FT	-.431***	-.436***	-.399***		-.345***	-.437***	-.421***	-.398***
	(.018)	(.018)	(.018)		(.015)	(.018)	(.018)	(.018)
SC	.158	.172	.177	-.098		.198	.146	.199
	(.023)	(.022)	(.023)	(.020)		(.021)	(.022)	(.022)
(Constant)	(.617)	(.534)	(.464)	(.645)	(.617)	(.611)	(.517)	(.618)
R^2	.137	.135	.109	.048	.127	.131	.128	.128
N	163	163	163	163	168	168	163	163
Sig.	.002**	.001***	.006**	.261	.002**	.001***	.001***	.001***

$*p <. 05, **p < .01, ***p <. 001$

Note. In this Table the Beta, Std. error, and model p value are reported for each equation. The equations include the predictors (see whole group correlates Table 12) that had significant correlations with GPA. HAE (p = .068) was added to the model because its correlation coefficient was almost significant.

equations, the multiple regression remove technique was used to determine if the removal of one variable from the model resulted in any significant changes to the remaining variables in the model or in the model's predictive value. There were no notable changes in the predictors or the predictive value of the model which suggested the presence of mediating variables; however, in equation #4 the model was no longer significant when Family Togetherness was removed. In the final analysis, the most parsimonious model for females was equation #1. In this equation, School Behavior Expectations (Beta of .182; $p = .028$) and Family Togetherness (Beta of -.431; $p = .000$) are the only predictors.

Correlates for females (see Table 15) were used to build a second model. GPA was then regressed on those variables that were found to be correlates of GPA. Notably, CR was also included in this model because its correlation coefficient was .078 (almost significant at the .05 level). In this regression model (see Table 16), the most parsimonious equation was # 4 that included three social support variables and accounted for 11.9% of the variance in GPA ($R^2 = .119$, $F(4, 159) = 5.370$, $p = .000$). Peer Group Acceptance (Beta of -.149; $p = .049$), School Behavior Expectations (Beta of .200; $p = .015$), and Family Togetherness (Beta of -.236; $p = .003$) contributed to the variance in GPA. In this model, there were no social support variables that mediated another social support variable.

In summary, linear multiple regression analysis determined that for the females in the sample there were three social support variables that predicted GPA. School Behavior Expectations and Family Togetherness were consistent predictors in the model that included all of the whole group correlates for GPA. Both of these variables' predictive

Table 15

Split File by Gender Correlation Matrix

		1	2	3	4	5	6	7	8	9	10	11	12	13	14
							Females								
1	GPA	1	.669**	.098	.077	-.162*	-.024	-.160*	-.176*	-.080	.168*	.037	-.026	-.133	.043
2	SOL	.669**	1	-.054	.259**	-.004	-.068	-.284**	-.271**	-.239**	-.033	-.054	-.121	.010	-.135
3	TS	.098	-.054	1	.050	.039	.173*	.251**	.268**	.250**	.223**	.170*	.086	-.216**	.461**
4	FS	.077	.259**	.050	1	.318**	.007	.027	.036	-.014	.031	-.009	.015	-.162*	.019
5	PGA	-.162*	-.004	.039	.318**	1	.173*	.159*	.077	.031	.016	-.026	.021	-.016	-.004
6	FB	-.024	-.068	.173*	.007	.173*	1	.193*	.187*	.182*	.237**	.144	.009	-.483**	.217**
7	PS	-.160*	-.284**	.251**	.027	.159*	.193*	1	.798**	.620**	.241**	.541**	.343**	-.135	.702**
8	FT	-.176*	-.271**	.268**	.036	.077	.187*	.798**	1	.550**	.282**	.518**	.226**	-.170*	.691**
9	PES	-.080	-.239**	.250**	-.014	.031	.182*	.620**	.550**	1	.255**	.570**	.324**	-.200**	.613**
10	SBE	.168*	-.033	.223**	.031	.016	.237**	.241**	.282**	.255**	1	.176*	.016	-.290**	.294**
11	HAE	.037	-.054	.170*	-.009	-.026	.144	.541**	.518**	.570**	.176*	1	.206**	-.125	.531**
12	SS	-.026	-.121	.086	.015	.021	.009	.343**	.226**	.324**	.016	.206**	1	-.094	.204**
13	CR	-.133	.010	-.216**	-.162*	-.016	-.483**	-.135	-.170*	-.200**	-.290**	-.125	-.094	1	-.307**
14	SC	.043	-.135	.461**	.019	-.004	.217**	.702**	.691**	.613**	.294**	.531**	.204**	-.307**	1

Table 15 (continued)

		1	2	3	4	5	6	7	8	9	10	11	12	13	14
							Males								
1	GPA	1	.618**	.234**	.161	-.011	.096	.063	-.011	.077	.234**	.191*	.163	-.356**	.194*
2	SOL	.618**	1	.072	.072	.067	-.055	-.012	-.074	-.065	.082	.125	.098	-.285**	.032
3	TS	.234**	.072	1	.258**	.012	.138	.256**	.284**	.381**	.258**	.193*	.362**	-.113	.534**
4	FS	.161	.072	.258**	1	-.084	.299**	.066	.135	.225**	.234**	.153	.305**	-.367**	.278**
5	PGA	-.011	.067	.012	-.084	1	-.016	.186*	.189*	.003	-.111	.162	.037	.003	.105
6	FB	.096	-.055	.138	.299**	-.016	1	.080	.260**	.219*	.143	.022	.247**	-.465**	.286**
7	PS	.063	-.012	.256**	.066	.186*	.080	1	.516**	.471**	.170	.377**	.473**	-.098	.563**
8	FT	-.011	-.074	.284**	.135	.189*	.260**	.516**	1	.339**	.330**	.360**	.403**	-.197*	.599**
9	PES	.077	-.065	.381**	.225**	.003	.219*	.471**	.339**	1	.267**	.354**	.383**	-.107	.587**
10	SBE	.234**	.082	.258**	.234**	-.111	.143	.170	.330**	.267**	1	.159	.214*	-.255**	.334**
11	HAE	.191*	.125	.193*	.153	.162	.022	.377**	.360**	.354**	.159	1	.343**	-.193*	.472**
12	SS	.163	.098	.362**	.305**	.037	.247**	.473**	.403**	.383**	.214*	.343**	1	-.233**	.521**
13	CR	-.356**	-.285**	-.113	-.367**	.003	-.465**	-.098	-.197*	-.107	-.255**	-.193*	-.233**	1	-.234**
14	SC	.194*	.032	.534**	.278**	.105	.286**	.563**	.599**	.587**	.334**	.472**	.521**	-.234**	1

*p <. 05, **p < .01, ***p <. 001

Table 16

Multiple Regression Analysis of the Effects of PGA, CR, PS, SBE and FT on GPA for Females

	Equation 1	Equation 2	Equation 3	Equation 4	Equation 5	Equation 6
PGA	-.146 (.035)	-.152* (.036)	-.145 (.035)	-.149* (.035)		-.143 (.035)
CR	-.123 (.018)	-.183* (.018)	-.121 (.018)	-.122 (.018)	-.119 (.018)	
PS	-.040 (.025)	-.039 (.025)	-.198* (.016)		-.065 (.025)	-.035 (.025)
SBE	.200* (.023)		.180* (.023)	.200* (.023)	.205* (.023)	.239** (.022)
FT	-.204 (.021)	-.156 (.021)		-.236** (.013)	-.203 (.022)	-.201 (.021)
(Constant)	(.935)	(.828)	(.940)	(.933)	(.517)	(.895)
R^2	.120	.086	.105	.119	.099	.106
N	164	164	166	168	166	163
Sig.	.001***	.006**	.001***	.000***	.002**	.001

*p <. 05, **p < .01, ***p <. 001

Note. In each of the equations, the Beta, Std. error and model p value are reported. The equations include those predictors (for females) identified in Table 15, the split/file correlates, that had significant correlations with GPA except CR (p = .078), which was added to the model because its correlation coefficient was almost significant.

value held in a second model that included female-only correlates. In the second model,

Peer Group Acceptance also emerged as a predictor for the females in the sample. In a

series of multiple regression models, the following social support variables did not

predict GPA for the females in the study sample; Teacher Support, Friend Support,

Friend Behavior, Parent Education Support, Parent Support and Home Academic

Environment.

Research Question #9: Which of the nine social support variables; Teacher Support

(TS), Friend Support (FS), Peer Group Acceptance (PGA), Friend Behavior (FB), Family

Togetherness (FT), Parent Education Support (PES), Home Academic Environment

(HAE), School Behavior Expectations (SBE), and Parent Support (PS) are most

influential in predicting weighted cumulative grade point average (GPA) for males? Are

there any social support variables that do not contribute significantly to the model?

Standard linear multiple regression methods were used to determine which social

support variables predicted GPA for males. Only those predictors that were correlated

with GPA (see Table 12) were included in this model. In the first equation of the

regression model (see Table 17), Family Togetherness (Beta of -.302, p =.009) was one

of two predictors. This model accounted for 19.9% of the variance in GPA for males (R^2

=.199, $F (7, 114) = 4.040$, $p = .001$). In the subsequent equations, the multiple regression

remove technique was used to examine if the removal of one variable from the model

resulted in any significant changes for the remaining variables in the model or in the

model's predictive value. In equation #5, when Social Capital was removed from the

model, Teacher Support emerged as a predictor; the correlation between Teacher Support

and GPA was significant (p=.031). The relationship between Teacher Support and Social

Capital warranted further exploration; therefore, both were tested as possible mediators.

Neither support variable was a mediator of the other. In the final analysis, equation #5

provides the best explanation of the variance in GPA for the males in the sample. This

equation (see Table 17), accounted for 19.3% of the variance of the GPA (R^2= .193, F

$(6,115) = 4.590$, $p = .000$).

Table 17

Multiple Regression Analysis of the Effects of HAE, FS, SBE, TS, CR, FT, and SC on GPA for Males

	Equation 1	Equation 2	Equation 3	Equation 4	Equation 5	Equation 6	Equation 7	Equation 8
HAE	.122 (.038)	.137 (.040)	.117 (.039)	.088 (.039)	.151 (.036)	.109 (.039)	.122 (.038)	
FS	-.007 (.031)	-.077 (.030)	-.012 (.031)	.006 (.031)	-.002 (.030)	.012 (.031)		-.009 (.031)
SBE	.157 (.021)	.185 (.022)		.117 (.022)	.164 (.021)	.168 (.021)	.156 (.021)	.153 (.021)
TS	.158 (.025)	.144 (.025)	.172 (.025)	.185 (.025)	.200* (.022)		.157 (.024)	.147 (.025)
CR	-.274** (.021)		-.290** (.021)	-.253** (.022)	-.275** (.021)	-.267** (.021)	-.272** (.020)	-.279** (.021)
FT	-.302** (.020)	-.274* (.021)	-.272* (.020)		-.253* (.018)	-.319* (.020)	-.302** (.020)	-.284* (.020)
SC	.121 (.024)	.127 (.025)	.142 (.025)	-.058 (.022)		.217 (.022)	.120 (.024)	.178 (.023)
(Constant)	(.593)	(.516)	(.518)	(.587)	(.587)	(.596)	(.475)	(.593)
R^2	.199	.136	.179	.149	.193	.182	.199	.188
N	122	122	122	122	127	127	122	122
Sig.	.001***	.009**	.001***	.004**	.000***	.001***	.000***	.000***

$*p < .05, **p < .01, ***p < .001$

Note. In the equations in this model, the Beta, Std. error, and model p value are reported. These male equations include only those predictors (see the whole group correlation matrix in Table 12) that had significant correlations with GPA except HAE (p = .068), which was added to the model because its correlation coefficient was almost significant.

A second model was built that included the correlates for males from the split/file correlation matrix as noted in Table 15. Friend Support and Social Support Use were also included in the second model (see Table 18) because their correlation coefficients were respectively .058 and .057 (almost significant at the .05 level). GPA was regressed on all seven variables. The first equation in the model, which included all five social support correlates, accounted for 15.3% of the variance in GPA ($R^2 = .153$, $F(7,113) = 2.915$, $p = .008$). In this equation, there were no social support variables that predicted GPA; however, in equation #5, which accounted for 14.2% of the variance in GPA, Teacher Support emerged as a predictor. In this equation, School Behavior Expectations was removed and both Teacher Support and Contextual Risk emerged as predictors. Because there appeared to be a relationship between Teacher Support and School Behavior Expectations in the model, both Teacher Support and School Behavior Expectations were tested to determine if either mediated the other on GPA. To test for mediating effects, first Teacher Support (the mediator) was regressed on School Behavior Expectations (the independent variable), then SOL was regressed on School Behavior Expectations, and finally SOL was regressed on both Teacher Support and School Behavior Expectations. If the mediating hypothesis is correct, the effect of the independent variable on the dependent variable is less in the third equation (with the mediator) than in the second equation (without the mediator). This procedure confirmed that Teacher Support mediated School Behavior Expectations on SOL.

Table 18

Multiple Regression Analysis of the Effects of SS, FS, SBE, HAE, TS, CR and SC on GPA for Males

	Equation 1	Equation 2	Equation 3	Equation 4	Equation 5	Equation 6	Equation 7	Equation 8	Equation 9
SS	.028 (.044)	.047 (.045)		.029 (.043)	.025 (.044)	.034 (.043)	.047 (.044)	.009 (.041)	
FS	.012 (.032)	.085 (.032)	.015 (.032)		.025 (.032)	.010 (.032)	.028 (.032)	.009 (.032)	
SBE	.112 (.022)	.142 (.022)	.112 (.022)	.113 (.022)		.111 (.022)	.127 (.022)	.102 (.021)	
HAE	.076 (.040)	.091 (.041)	.079 (.039)	.076 (.040)	.074 (.040)		.062 (.040)	.054 (.036)	
TS	.196 (.026)	.180 (.027)	.198 (.026)	.197 (.026)	.206* (.026)	.189 (.026)		.171 (.024)	.200* (.020)
CR	-.250** (.022)		-.252** (.022)	-.254** (.021)	-.264** (.022)	-.254** (.022)	-.241* (.022)	-.248** (.022)	-.302*** (.019)
SC	-.073 (.023)	-.059 (.024)	-.062 (.022)	-.072 (.023)	-.044 (.023)	-.033 (.021)	.026 (.021)		
(Constant)	(.605)	(.523)	(.590)	(.498)	(.505)	(.601)	(.611)	(.601)	(.225)
R^2	.153	.100	.152	.153	.142	.149	.128	.151	.145
N	121	121	122	122	124	122	127	121	126
Sig.	.008**	.056	.004**	.004**	.007**	.005**	.015*	.004**	.000***

*p <.05; **p <.01; ***p < .001

Note: In the equations included in this table, the Beta, Std. error and p value are reported. The equations in this model include the predictors for males (see Table 15). FS (p = .058 and SS (p = .057 were added to the model because their coefficients were almost significant.

Equation #5 was compared to a model with only Teacher Support and Contextual Risk to determine which of the two models had greater predictive value. In equation #9, the model with only Teacher Support (Beta of .200; $p = .018$) and Contextual Risk accounted for 14.5% of the variance in GPA ($R^2 = .145$, $F(2,124) = 10.509$, $p = .000$).

In summary, there were two social support variables that contributed to the variance in GPA for the males in the sample. Family Togetherness emerged as a predictor in a model that included all whole group correlates for GPA. Teacher Support was a predictor in a model that included only those predictors that were male only correlates for GPA; however, in the second model Teacher Support mediated School Behavior Expectations (Teacher Support was an intervening variable for School Behavior Expectations on GPA). A series of different linear multiple regressions determined that the following social support variables did not predict GPA for the males in the sample; Peer Group Acceptance, Friend Support, Friend Behavior, Home Academic Expectations, Parent Support, and Parent Education Support.

Research Question #10: Which of the nine social support variables; Teacher Support (TS), Friend Support (FS), Peer Group Acceptance (PGA), Friend Behavior (FB), Family Togetherness (FT), Parent Education Support (PES), Home Academic Environment (HAE), School Behavior Expectations (SBE), and Parent Support (PS) are most influential in predicting SOL test performance? Are there any social support variables that do not contribute significantly to the model?

Standard linear multiple regression methods determined that were four social support variables that predicted SOL in the full regression model (see Table 19).

Table 19

Multiple Regression Analysis of the Effects of all Independent Variables on SOL Scores (SOL)

Predictor	Unstandardized coefficients			Standardized coefficients		
	B	Std. error		Beta	t	Sig.
TS	.091	1.579		.004	.058	.954
FS	4.199	1.771		.148	2.371	.018*
PGA	1.066	2.391		.028	.446	.656
FB	-.819	.931		-.061	-.879	.380
FT	-4.122	1.430		-.274	-2.882	.004**
PES	-6.677	2.387		-.226	-2.797	.006**
HAE	6.299	2.563		.180	2.457	.015*
SBE	.766	1.477		.034	.519	.604
PS	-1.407	1.687		-.080	-.834	.405
SS	1.633	2.377		.045	.687	.493
CR	-2.022	1.404		-.102	-1.441	.151
SC	2.632	1.693		.164	1.555	.121
Gender2	3.063	7.394		.025	.414	.679
(Constant)	450.947	66.850			6.746	.000

*p <.05; **p <.01; ***p < .001

Note. N = 264 (male and female participants). In this model all 13 independent variables were regressed on SOL. R square = .139, R square adjusted = .094, F(13, 250) = 3.107, p is .000.

The full model accounted for 13.9% of the variance in SOL (R^2 = .139, *F* (13, 250) =

3.107, *p* = .000). Friend Support (Beta of .148; *p* =.018), Family Togetherness (Beta of -

.274; *p* = .004), Home Academic Environment (Beta of .180; *p* = .015) and Parent

Education Support (Beta of -.226; *p* = .006) all contributed to the variance in SOL.

Table 20

Multiple Regression Analysis of the Effects of FS, FT, PS, PES, and CR on SOL

	Equation 1	Equation 2	Equation 3	Equation 4	Equation 5	Equation 6	Equation 7
FS	.175**	.171**	.203***	.175**		.166**	.174**
	(1.657)	(1.662)	(1.627)	(1.651)		(1.667)	(1.611)
FT	-.192*	-.210**	-.169*	-.187**	-.176*		-.180**
	(1.217)	(1.212)	(1.213)	(.983)	(1.231)		(.971)
PS	.010	-.045	.003		-.005	-.109	
	(1.483)	(1.388)	(1.491)		(1.501)	(1.210)	
PES	-.123		-.114	-.120	-.114	-.143*	-.133*
	(2.014)		(2.022)	(1.874)	(2.040)	(2.015)	(1.844)
CR	-.127*	-.121*		-.127*	-.166**	-.108	-.130*
	(1.175)	(1.178)		(1.172)	(1.163)	(1.174)	(1.159)
(Constant)	(29.981)	(29.883)	(26.648)	(28.992)	(19.098)	(29.448)	(28.553)
R^2	.103	.093	.089	.103	.075	.085	.105
N	285	285	285	285	285	285	289
Sig.	.000	.000	.000	.000	.000	.000	.000

*$p < .05$; **$p < .01$; ***$p < .001$

Note: In each of the equations included in Table 20, the Beta, Std. error, and significance level are reported. This model includes only those predictors (see Table 12) that were significantly correlated with SOL; however, CR ($p = .052$) was added to the model because its correlation coefficient was almost significant.

To further investigate the relationship between the social support variables and SOL test performance, SOL was regressed on those variables identified as correlates of SOL (see Table 12). One additional variable was added to the model Contextual Risk (CR) because its correlation coefficient was almost significant (p=.052). Linear multiple regression results (see Table 20, equation #1) indicate an overall model of three variables that account for 10.3% of the variance in SOL (R^2 = .103, F (5,279) = 6.432, p = .000). Two of the three were social support variables. Friend Support (Beta of .175; p=.003) and Family Togetherness (Beta of -.192; p= .017) were predictors of SOL. In the subsequent equations, the multiple regression remove technique was used to evaluate any model changes. In equation #2, the removal of Parent Education Support from the model resulted in slight changes in Family Togetherness. Both variables were tested to see if one or the other was a mediating variable. The test for mediating effects confirmed that Family Togetherness mediated Parent Education Support on SOL. Significantly Parent Education Support was a predictor in equation #6, when Family Togetherness was removed from the model. There were no other notable changes related to the predictive value of the social support variables in the equations #1 through #6.

Only the predictors that were identified in equations 1 through 6 were included in equation #7, which accounted for 10.5% of the variance in SOL (R^2 =.105, F (4, 285) = 8.366, p = .000). In this model, the following social support variables contributed to the variance in SOL; Parent Education Support (Beta of -.133; p = .036), Friend Support (Beta of .174; p = .003), and Family Togetherness (Beta of -.180; p = .005).

In summary, in the full regression model with all independent variables (see Table 19) there were four predictors (Friend Support, Family Togetherness, Parent Education Support and Home Academic Environment). However, Home Academic Environment was not a predictor in other regression models (see Table 20) that included only those correlates of SOL that were identified in the correlation matrix (see Table 12). A series of multiple regression models provided additional evidence that some of the variability in SOL is explained by three social support variables (Friend Support, Family Togetherness and Parent Education Support). The following social support variables were not found to be predictors of SOL; Friend Behavior, Peer Group Acceptance, Teacher Support, Parent Support and School Behavior Expectations in the whole group analysis (see Table 19 and Table 20).

Research Question #11: Which of the nine social support variables; Teacher Support (TS), Friend Support (FS), Peer Group Acceptance (PGA), Friend Behavior (FB), Family Togetherness (FT), Parent Education Support (PES), Home Academic Environment (HAE), School Behavior Expectations (SBE), and Parent Support (PS) are most influential in predicting SOL test performance for females? Are there any social support variables that do not contribute significantly to the model?

Standard linear multiple regression methods were used to determine which social support variables contributed to the variance in SOL scores for the females in the study sample. Only those predictors that were correlated with SOL (see correlation matrix Table 12) were included in this model; however, Contextual Risk (CR) was added to the model because its correlation coefficient was .052 (almost significant).

Table 21

Multiple Regression Analysis of the Effects of CR, PS, FS, PES, and FT on SOL for Females

	Equation 1	Equation 2	Equation 3	Equation 4	Equation 5	Equation 6
CR	-.018	-.069	-.009		.008	-.021
	(1.490)	(1.513)	(1.488)		(1.472)	(1.488)
PS	-.115	-.121	-.233**	-.116	-.154	
	(2.248)	(2.326)	(1.641)	(2.239)	(2.103)	
FS	.261***		.254***	.264***	.267***	.262***
	(2.139)		(2.139)	(2.093)	(2.128)	(2.137)
PES	-.083	-.113	-.098	-.079		-.113
	(2.799)	(2.884)	(2.785)	(2.759)		(2.619)
FT	-.163	-.132		-.161	-.176	-.238**
	(1.815)	(1.873)		(1.802)	(1.800)	(1.321)
(Constant)	(38.153)	(24.507)	(37.822)	(34.156)	(38.107)	(37.285)
R^2	.164	.099	.154	.164	.160	.159
N	158	158	158	158	158	158
Sig.	.000	.003	.000	.000	.000	.000

*p <.05; **p <.01; ***p < .001

Note: In this Table, the Beta, Std. error, and significance level are reported. The equations in this Table include only those predictors (see Table 12) that are significantly correlated with SOL. CR (p = .052) was added to the model because its correlation coefficient was almost significant.

As noted in Table 21, Friend Support was the only social support variable that predicted SOL in the first regression equation, which accounted for 16.4% of the variance in SOL ($R^2 = .164$, F (5, 152) = 5.956, p =.000). In the subsequent equations, the multiple regression remove technique was used to determine if the removal of one variable from the model resulted in any significant changes for the other variables in the model or in the model's predictive value. Two other predictors emerged (see equation #3 and equation #6). Parent Support was a predictor in equation #3, when Family Togetherness was removed and Family Togetherness was a predictor in equation #6 when Parent Support was removed. To further explore the relationship between these two variables, both Family Togetherness and Parent Support were tested to see if either mediated the other on SOL. Neither variable was found to be a mediator (intervening variable); however, there appears to be a relationship between the two variables which is beyond the scope of this investigation (perhaps it is curvilinear) or that one moderates the other's influence on SOL.

Correlates for females only (see Table 15) were used to build a second regression model. The four correlates Friend Support, Family Togetherness, Parent Support, Parent Education Support and Social Capital Assets were included in the second model (see Table 22).

Table 22

Multiple Regression Analysis of the Effects of FS, FT, PS, PES, and SC on SOL for Females

	Equation 1	Equation 2	Equation 3	Equation 4	Equation 5	Equation 6	Equation 7
FS	.262*** (2.078)	.269*** (2.079)	.251*** (2.086)		.265*** (2.081)	.264*** (2.093)	.269*** (2.080)
FT	-.231 (1.879)	-.235 (1.885)		-.194 (1.942)	-.324** (1.542)	-.161 (1.802)	-.175 (1.777)
PS	-.166 (2.272)	-.212 (2.206)	-.302** (1.874)	-.178 (2.356)		-.116 (2.239)	-.154 (2.087)
PES	-.141 (2.910)		-.144 (2.931)	-.165 (3.011)	-.172 (2.822)	-.079 (2.759)	
SC	.207 (1.866)	.153 (1.762)	.144 (1.789)	.214 (1.935)	.177 (1.829)		
(Constant)	34.208	33.966	34.369	22.001	33.432	34.156	(33.798)
R²	.181	.171	.163	.113	.173	.164	.160
N	159	159	159	159	158	158	158
Sig.	.000	.000	.000	.001	.000	.000	.000

*p <.05; **p <.01; ***p < .001

Note: In each of the equations, the Beta, Std. error and p value are reported. The equations in Table 22 include only those predictors (for females) identified in Table 15 that had significant correlations with SOL. SC (p = .081) was included in the model because its correlation coefficient was almost significant.

The first equation in the model accounted for 18.1% of the variance in SOL ($R^2 = .181$, F (5,152) = 6.732, p = 000). Friend Support (Beta of .262; p =. 001) was the only predictor in this equation. In the subsequent equations, the multiple regression remove technique was used to examine if the removal of one variable from the model resulted in any significant changes for the other variables in the model or in the model's predictive value. In equation #3, Family Togetherness was removed and Parent Support (Beta of -.302; p =. 006), emerged as a predictor. In equation #5, Parent Support was removed and Family Togetherness (Beta of -.324; p =. 002) was a predictor. To better understand the relationship between Family Togetherness and Parent Support relative to SOL, both Family Togetherness and Parent Support were tested to see if either mediated the other on SOL. Neither variable was a mediator; however, there appears to be some relationship between the two variables, relative to the females in the sample. The investigation of the relationship between the two variables is beyond the scope of this investigation (i.e. it is possible that one variable moderates the other or that they have a curvilinear relationship).

In summary, a series of linear multiple regression models determined that Friend Support was a consistent predictor of the SOL test performance for the females in the sample. In the regression equations noted in Table 22, two other predictors emerged (Family Togetherness and Parent Support). Given these findings, an additional model was built that included only these three support variables (see Table 22, equation #7). This model accounted for 16.0% of the variance in SOL (R^2 = .160, F (3, 155) = 9.812, p

= .000); however, in this model only Friend Support was statistically significant (p=.000) in the model.

Research Question #12: Which of the nine social support variables; Teacher Support (TS), Friend Support (FS), Peer Group Acceptance (PGA), Friend Behavior (FB), Family Togetherness (FT), Parent Education Support (PES), Home Academic Environment (HAE), School Behavior Expectations (SBE), and Parent Support (PS) are most influential in predicting SOL test performance for males? Are there any social support variables that do not contribute significantly to the model?

Standard linear multiple regression methods were used to explain which social support variables contributed to the variance in SOL for the males in the sample. Only the predictors that were correlated with SOL (see Table 12) were included in the first model; however, Contextual Risk (CR) was also included because its correlation coefficient was .052 (almost significant). As noted in Table 23, there were no social support variables that predicted SOL in the first regression equation, which accounted for 10.5% ($R^2 =$ .105, $F (5, 121) = 2.849$, $p =$.018) of the variance in SOL. In the first equation, the only predictor for SOL test performance was the Contextual Risk Index (CR). Contextual Risk's predictive value was further confirmed in the subsequent regression equations where each of the predictors were removed one at a time (see Table 23). The process of removing one variable at a time yielded no new predictors.

As noted in Table 15, for the males in the sample, the only independent variable that was significantly correlated with SOL was Contextual Risk (CR). Therefore, a second regression model (with male only correlates) was not indicated.

Table 23

Multiple Regression Analysis of the Effects of CR, PS, FS, PES, and FT on SOL for Males

	Equation 1	Equation 2	Equation 3	Equation 4	Equation 5	Equation 6
CR	-.303***	-.309***	-.276**		-.309***	-.302***
	(1.898)	(1.808)	(1.883)		(1.892)	(1.897)
PS	.100	.097	.012	.096	.067	
	(2.003)	(1.980)	(1.774)	(2.082)	(1.874)	
FS	.020		.007	.110	.003	.010
	(2.671)		(2.681)	(2.655)	(2.604)	(2.648)
PES	-.086	-.081	-.104	-.109		-.054
	(2.948)	(2.867)	(2.953)	(3.057)		(2.759)
FT	-.179	-.177		-.118	-.189	-.133
	(1.694)	(1.681)		(1.733)	(1.682)	(1.488)
(Constant)	(48.305)	(30.280)	(46.676)	(42.820)	(46.915)	(45.919)
R²	.105	.105	.085	.025	.100	.099
N	127	127	127	127	126	126
Sig.	.018	.018	.028	.530	.012	.012

*p <.05; **p <.01; ***p < .001

Note: In the equations in this model, the Beta, Std. error, and model p value are reported. These male-only equations include only those predictors (see Table 12) that have significant correlations with SOL except CR (p = .052), which was added to the model because its correlation coefficient was almost significant.

In summary, a series of linear multiple regression equations demonstrated that the only consistent predictor for males with regard to SOL was Contextual Risk Index (CR). For the males in the sample, higher scores on the CR Index were associated with lower SOL tests scores. None of the nine social support variables contributed to the variance in SOL for the males in the study sample.

The Relationship between Contextual Risks and Achievement Outcomes

Hypothesis # 4: African American adolescents who report higher levels of contextual risk will have poorer achievement outcomes.

Research Question #13: Do African American adolescents who report higher levels of contextual risk have poorer achievement outcomes?

Different statistical analysis techniques were used to determine if the participants who reported higher levels of contextual risk had poorer achievement outcomes. In this section, each will be discussed separately.

Higher scores on the Contextual Risk Index (CR) predicted lower grade point averages in several different standard linear multiple regression models. In the whole group analysis (see Table 11), CR was one of six predictors that contributed to the variance in GPA. With a Beta of -.138, a negative partial correlation existed between CR and GPA; higher scores on CR were associated with lower GPAs. The correlation was significant (t= -2.059, p = .041). When GPA was regressed on the eight correlates in Table 13, CR was also a consistent predictor. In Table 14, CR was not a predictor in the regression model for females that included the whole group correlates; however, in the model (see Table 16) that included the female correlates, CR was a predictor but only in

148

equation #2 when SBE was removed from the model. In that equation, there was a negative partial correlation between CR and GPA (Beta = -.183, $p =$. 018). In the regression models for males, CR was a consistent predictor of GPA. In the first model, with seven predictors (see Table 17); a negative partial correlation was found between CR and GPA. Consistent with other findings relative to the males in the sample, higher scores on CR were associated with lower GPAs. In the second model, that included only the male correlates, CR was also a consistent predictor (see Table 18). In each of the equations that included CR there was a negative partial correlation between CR and GPA; higher scores on the Contextual Risk Index (CR) were indicative of lower GPAs.

Contextual Risk (CR) was not a predictor of SOL test performance in the full regression model (see Table 19) that included all 13 independent variables; however, it was a predictor in the second model (see Table 20) that included the five correlates identified in the correlation matrix. To investigate further the relationship between CR and SOL test performance, a series of other linear multiple regression equations were analyzed. The findings demonstrated that there were gender differences relative to the predictive value of CR on SOL. CR did not contribute to the variance in SOL for the females in the sample (see Table 21); however, CR did contribute to the variance in SOL test performance for males (see Table 23). In Table 23 that included the whole group correlates, higher scores on CR were predictive of lower SOL test scores. Notably, when CR was removed from the model, it was no longer a significant model ($p =$.530).

The Kruskal-Wallis Test was used to compare the mean scores on the Contextual Risk Index (CR) of *high-achieving*, *middle-achieving* and *low-achieving* participants

within each gender group. This test was used because CR, the dependent variable, was measured at the interval level and did not meet the assumption of normality. Additional conditions for test use were met; the sample was representative and the independent variable was nominal and had three levels. This test confirmed that there were no statistically significant differences in the three group means for the females in the sample (χ^2 = 4.305, 2 df; *p* =.053) with regard to their scores on CR; *high-achieving, middle-achieving* and *low-achieving* females in the study sample had similar scores on CR. The Kruskal-Willis test was also utilized to compare the mean scores of *high-achieving, middle-achieving* and *low-achieving* males. There were significant differences in the three groups of males (χ^2 = 12.291, 2 df; *p* =.001) relative to their scores on CR.

Table 24

Comparison of Male Scores on CR by Achievement Level

(I) GPA range	(J) GPA range	Mean difference (I-J)	Std. error	Sig.
High achieving	Middle achieving	-1.00512	.49998	.137
	Low achieving	-2.40827*	.60418	.000
Middle achieving	High achieving	1.00512	.49998	.137
	Low achieving	-1.40315*	.57411	.049
Low achieving	High achieving	2.40827*	.60418	.000
	Middle achieving	1.40315	.57411	.049

*p<.05

Note: Tamhane Post Hoc GPA Range

The Tamhane post hoc test was utilized to identify which groups were significantly different. This test was used because the equality of variance was not assumed (*p*=. 007, *p* <. 05). Results of the Tamhane post hoc indicated that *high-*

achieving and *middle-achieving* males had similar scores on CR. Results also indicate

that *middle-achieving* males had lower scores than *lower-achieving* males on CR (*p*

=.049) and *high-achieving* males had lower scores on CR than *low-achieving* males (*p* =

.049). This finding supports the hypothesis that *low-achieving* males had higher scores on

the Contextual Risk Index.

The Kruskal-Wallis Test was used to compare the mean scores on the Contextual

Risk Index (CR) of the four different SOL test performance groups (*No Score*, *Failed*,

Passed and *Advanced/Proficient*) within each gender group. This test was used because

CR, the dependent variable, was measured at the interval level and did not meet the

assumption of normality. Additional conditions for test use were met; the sample was

representative and the independent variable was nominal and had at least three levels.

The results confirm that there were no statistically significant differences in the four

group means for females (χ^2= 2.672, 3 df, *p* =.222). The mean scores of females on CR

were not significantly different with regard to their SOL test performance (*No Score,*

Failed, *Passed,* and *Advanced Proficient*). The Kruskal-Wallis Test was also used to

compare the mean scores of the males. There were differences in the mean scores the

males received on CR relative to their performance on the SOL test (χ^2 = 12.387, 3 df, *p*

=.003).

Table 25

Comparison of Male Scores on CR by SOL Group

(I) SOL range	(J) SOL range	Mean difference (I-J)	Std. error	Sig.
No score	Failed	1.71462	1.98456	.963
	Passed	1.95485	1.83530	.919
	Advanced/Proficient	3.62000	1.82432	.518
Failed	No score	-1.71462	1.98456	.963
	Passed	.24023	.90928	1.000
	Advanced/Proficient	1.90538	.88690	.241
Passed	No score	-1.95485	1.83530	.919
	Failed	-.24023	.90928	1.000
	Advanced/Proficient	1.66515*	.46526	.003
Advanced/Proficient	No score	-3.62000	1.82432	.518
	Failed	-1.90538	.88690	.241
	Passed	-1.66515*	.46526	.003

*p<.05

Note: Tamhane Post Hoc SOL Range

The Tamhane post hoc test was used to identify which groups were significantly different. This post hoc test was indicated because the equality of variance was not assumed ($p = .007$, $p <.05$). Tamhane post hoc analysis found that those males who earned *Advanced/Proficient* scores on the SOL test had lower scores on the Contextual Risk Index (CR) than the males who *Passed* the SOL test ($p =.003$). There were no other statistically significant differences between the four groups of males relative to their scores on CR and their performance on the SOL test.

The Relationship between Social Support, Contextual Risks and Achievement

Hypothesis #5: Social support variables will moderate the effects of contextual risks on achievement.

Research Question # 14: Do any of the social support variables that contribute to the variance in grade point average (GPA) moderate the influence of Contextual Risk (CR) on GPA?

The following social support variables; Family Togetherness, School Behavior Expectations, Home Academic Environment and Teacher Support were entered into separate regression equations with the Contextual Risk Index (CR) score and an interaction term (the product of the support variable and CR) to determine if there was an interaction between each of them and CR. If the *p* value for the product of the two variables was significant in the regression equation, then it was concluded that there was evidence in the data that the effect of CR depends on the support variable. This analysis confirmed that the only support variable that was found to statistically interact with CR was Family Togetherness (FT). Family Togetherness moderated CR on GPA for the males only.

Table 26

How Does the Effect of CR on GPA Vary by Scores on FT?

Scores on FT	Effect of CR on GPA
16	.10
12	-.144
6	-.21
5	-.221
4	-.232

For those males who had a score of 16 on Family Togetherness, each additional change in Contextual Risk (CR) yielded an increase of .10 on GPA. For those with a score of 4 on Family Togetherness, each additional unit change in CR yielded an increase of -.232 on GPA.

Research Question #15: Do any of the social support variables that contribute to the variance in SOL test performance (SOL) moderate the influence of Contextual Risk (CR) on SOL?

The following social support variables; Friend Support, Family Togetherness, Parent Education Support and Home Academic Environment were entered into separate regression equations with Contextual Risk (CR) and an interaction term (the product of the support variable and CR) to determine if there was any interaction between each of the support variables and CR. If the p value for the product of the two variables was significant in the regression equation, then it was concluded that there was evidence in the data that the effect of CR depends on the support variable. Regression analysis confirmed that the only support variable that was found to statistically interact with CR was Friend Support and the interaction was only held for the males in the sample.

Table 27

How Does the Effect of CR on SOL Vary by Scores on FS?

Scores on FS	Effect of CR on SOL
13	-6.388
12	-7.987
6	-17.581
5	-19.480

For those males who had a score of 13 on Friend Support (FS), each additional

unit change in Contextual Risk (CR) yields a -.6.388 decrease in SOL. For those with a

score of 5 on FS, each additional unit change in CR yields a -19.18 decrease in SOL.

<div align="center">Additional Quantitative Findings</div>

In this investigation the researcher did not examine the differences that exist

within the study sample with regard to family income. The decision to not investigate

family income differences was based in part on the fact that limited information was

available regarding the family income of the study participants; however, free and

reduced lunch status was used as a family income proxy in describing the sample.

Acknowledging that the data on family income was limited, the researcher did use

standard linear multiple regression analysis to explore whether or not free or reduced

lunch status (Free Lunch) contributed to the variance in both grade point average (GPA)

and Standards of Learning test score (SOL) in models with all possible predictors.

In a regression model where GPA was regressed on all 13 variables and Free

Lunch, Free Lunch did contribute to the variance in GPA ($R^2 = .204$, $p = .000$). With a

Beta of -.130 ($p = .010$), there was a negative partial correlation between Free Lunch and

GPA. Notably, adding Free Lunch to the GPA model did result in some notable changes

with regard to the model. Contextual Risk was not a predictor in the model with Free

Lunch; however, Parent Education Support and School Behavior Expectations were

predictors. Parent Education Support and School Behavior Expectations were not

predictors in the model without Free Lunch (see Table 11). Notably, Teacher Support,

Home Academic Environment, Family Togetherness and Gender 2 were predictors in

models with and without Free Lunch. In Table 11 the full model accounted for 19.1% of the variance in GPA compared to 20.4% of the variance in GPA that was accounted for by the model with Free Lunch and the 13 other predictors. When SOL was regressed on the 13 predictors and Free Lunch, Free Lunch also contributed to the variance in SOL (R^2 = .172, p =.000). With a Beta of -.186 (p = .002), a negative partial correlation was found between Free Lunch and SOL. When Free Lunch was added to the model with 13 predictors, the model's predictive value increased to 17.2%. As noted in Table 19, the model without Free Lunch accounted for 13.9% of the variance in SOL. When Free Lunch was added to the model, the same predictors remained (Friend Support, Family Togetherness, and Parent Education Support & Home Academic Environment) and there were no additional predictors. What these findings suggest is that there appears to be a relationship between family income and the two achievement outcomes that were the focus of this study.

In this study, Family Togetherness (FT) was conceptualized as a social support variable that measured perceptions of emotional connection and bonding among family or household members. Several different regression models determined that Family Togetherness predicted GPA. FT was a predictor of GPA in the full model (see Table 11) and also in models for females (see Table 14) and males (see Table 17). The finding that Family Togetherness was a significant predictor for GPA and SOL was expected; however, the researcher did not anticipate that, in those instances when it did contribute to the variance in the outcome variables, FT would have a negative partial correlation with both GPA and SOL.

Non-parametric procedures were used to investigate whether or not there were gender and achievement level differences with regard to the samples' scores on the Family Togetherness (FT) summary scale. The Kruskall-Wallis test was used to explore whether or not the mean scores on Family Togetherness were significantly different within the male and female samples based on their achievement level (*high-achieving, middle-achieving* and *low-achieving*). The Kruskall-Wallis test was used because Family Togetherness was measured at the interval level, it did not meet the assumption of normality and the independent variable (in this analysis) was categorical (*high-achieving, middle-achieving & low-achieving*). There were no statistically significant differences in the group means in the male sample (χ^2= 1.471, 2 df, *p* = .239); *high-achieving, middle-achieving* and *low-achieving* males had similar scores on the Family Togetherness summary scale; however, there were significant differences in the mean scores within the female sample (χ^2 = 6.751, 2 df, *p* = .017). The Bonferroni post hoc test was used to determine which achievement groups within the female sample were significantly different. This test is indicated when homogeneity of variance is assumed (*p* =.108, *p* >.05).

Table 28

Comparison of Female Scores on FT by Achievement Level Groups

(I) GPA Range	(J) GPA Range	Mean Diff.	Std. Error	Sig.
High-Achieving	Middle-Achieving	-1.35795	.73811	.203
	Low-Achieving	-2.18955*	.81188	.023
Middle-Achieving	High-Achieving	1.35795	.73811	.203
	Low-Achieving	-.83160	.78435	.872
Low-Achieving	High-Achieving	2.18955*	.81188	.023
	Middle-Achieving	.83160	.78435	.872

*p<.05; one tailed

Note. The Bonferroni Post Hoc test was used to determine which groups were significantly different with respect to their mean scores on FT.

Bonferroni post hoc analysis confirmed that *low-achieving* females reported higher levels of Family Togetherness than *high-achieving* females (mean difference = 2.18; p = .023). The differences in the mean scores on Family Togetherness for the *middle-achieving* and *high-achieving* females were not significantly different.

The Kruskall-Wallis test was used to investigate whether or not the mean scores on Family Togetherness (FT) were significantly different within the male and female samples based on their SOL test performance (*No Score, Failed, Passed,* and *Passed/Advanced*). There were no statistically significant differences in the group means in the male sample ($\chi^2 = 1.296$, 3 df, $p = .360$). The scores males received on Family Togetherness were similar across all four SOL test performance groups. There were significant differences in the group mean scores on Family Togetherness in the female sample ($\chi^2 = 9.761$, 3 df, $p = .010$). The Tamhane post hoc test was used to identify more

specifically which groups were different. This post hoc test is indicated when

homogeneity of variance is not assumed (p =.013, p < .05).

[See Table 29 on next page]

Tamhane post hoc analysis confirmed that females who *Failed* the test reported higher

levels of Family Togetherness than those who *Passed* the test (p = .028) and females who

Failed the test reported higher levels of Family Togetherness than those who had

Advanced/Proficient scores (p = .000). The nonparametric findings provide a more

definitive description of the study sample with regard to similarities and differences

within each gender group relative to their levels of Family Togetherness. The similarities

and differences within both the male and female samples were noteworthy and may help

to explain some of the variance in the regression models.

Table 29

Comparison of Female Scores on FT by SOL Test Performance Group

(I) SOL Range	(J) SOL Range	Mean Diff.	Std. Error	Sig.
No Score	Failed	-3.07143	2.25743	.769
	Passed	-.82143	2.22223	1.000
	Advanced/Proficient	.65079	2.24488	1.000
Failed	No Score	3.07143	2.25743	.769
	Passed	2.25000*	.72395	.028
	Advanced/Proficient	3.72222*	.79077	.000
Passed	No Score	.82143	2.22223	1.000
	Failed	-2.25000*	.72395	.028
	Advanced/Proficient	1.47222	.68381	.183
Advanced/Proficient	No Score	-.65079	2.24488	1.000
	Failed	-3.72222*	.79077	.000
	Passed	-1.47222	.68381	.183

*$p<.05$

Note. The Tamhane Post Hoc test was used to determine which groups were significantly different with respect to their mean scores on FT.

In this investigation, Parent Education Support was conceptualized as a social support that assessed students' perceptions of parent-school contacts and the extent to which the parents provide structure at home to encourage school achievement. Higher scores on this scale indicate greater parental educational support. The finding that Parent Education Support was a significant predictor for GPA and SOL was expected; however, the researcher did not anticipate that Parent Education Support would have a negative partial correlation with SOL. Given this finding, the One Way ANOVA Test was used to

determine whether the mean scores on Parent Education Support were significantly different within the male and female samples relative to their SOL test performance. This test was used to compare the means of the groups because the shape of the distribution of Parent Education Support, the dependent variable, approximated the shape of a normal curve and the independent variable was nominal (four SOL test performance groups—*No Score*, *Failed, Passed,* and *Advanced/Proficient*). Additionally, the homogeneity of variance was equal (*p* >. 05) for both males (*p* = .140) and females (*p* = .688). The Results of the One Way ANOVA demonstrated that the difference in the mean scores that males received on Parent Education Support did not vary significantly by SOL performance groups (*F* (df=3, 138) = 1.172, *p* = .161); however, the difference in the mean scores for the females in the sample were significantly different by SOL performance groups (*F* (df = 3, 172) = 3.554, *p* = .008). To determine which groups were different, Bonferroni post hoc analysis (see Table 30) was utilized because the homogeneity of variance was assumed (*p* =.688, *p* >.05). In this analysis, there were significant differences identified with regard to the scores on Parent Education Support of females who earned *Advanced/Proficient* scores and those who *Failed* (one tailed *p* = .046). There were also statistically significant differences found between those who *Passed* the test and those who earned *Advanced/Proficient* scores (one tailed p = .038).

Table 30

Comparison of Female Scores on PES by SOL Test Performance Group

(I) SOL Range	(J) SOL Range	Mean Diff. (I-J)	Std. Error	Sig.
No Score	Failed	-1.79167	.92528	.327
	Passed	-1.06818	.74859	.933
	Advanced/Proficient	-.23269	.75955	1.000
Failed	No Score	1.79167	.92528	.327
	Passed	.72348	.62382	1.000
	Advanced/Proficient	1.55897	.63693	.092
Passed	No Score	1.06818	.74859	.933
	Failed	-.72348	.62382	1.000
	Advanced/Proficient	.83549	.33154	.076
Advanced/Proficient	No Score	.23269	.75955	1.000
	Failed	-1.55897	.63693	.092
	Passed	-.83549	.33154	.076

Note. Bonferroni Post Hoc analysis; Two tailed *p* reported.

Peer Group Acceptance was also conceptualized as a support variable in this investigation. Peer Group Acceptance measured perceptions of students' relative standing within their peer group and their ability to be themselves and resist peer pressure. Higher scores on this measure indicate greater peer acceptance. It was hypothesized that Peer Group Acceptance would predict SOL and GPA; however, the researcher did not expect that a negative partial correlation would exist between Peer Group Acceptance (PGA) and GPA (PGA did not predict SOL). A non-parametric test, the Kruskal-Wallis test, was used to investigate whether or not the mean scores on Peer Group Acceptance were

significantly different within the male and female samples based on their achievement level (*high-achieving, middle-achieving, low-achieving*). Kruskal-Wallis test was used because Peer Group Acceptance was measured at the interval level, it did not meet the assumption of normality and the independent variable was categorical (*high-achieving, middle-achieving & low-achieving*). There were no statistically significant differences in the group means in the male sample (χ^2= .207, 2 df, *p* = .451). Similarly, there were no significant differences in the group means in the female sample (χ^2= .3.353, 2 df, *p* = .096).

Finally, the researcher investigated if there were gender and achievement level differences with regard to the samples' scores on the Parent Support (PS) summary scale. Parent Support was another social support variable in this study which measured the students' perceptions of ways in which the adults in their home provide them with emotional support. Higher scores on this scale indicated more parent emotional support. The finding that a negative partial correlation existed between Parent Support and GPA as well as Parent Support and SOL in the female sample was unexpected. The Kruskal-Wallis Test was utilized to investigate whether or not the mean scores on Parent Support were significantly different within the male and female samples based on their achievement level (*high-achieving, middle-achieving, low-achieving*). This was used because Parent Support was measured at the interval level, it did not meet the assumption of normality and the independent variable was categorical (*high-achieving, middle-achieving & low-achieving*). There were no statistically significant differences in the group means in the male sample (χ^2= 1.996, 2 df, *p* = .184). There were statistically

significant differences in the group means within the female sample ($\chi^2 = 5.097$, 2 df, $p =$ .039). The Bonferroni post hoc test was used (the equality of variance was assumed $p =$ .082; $p > .05$) to investigate the differences.

Table 31

Comparison of Female Scores on PS by Achievement Level Group

(I) GPA Range	(J) GPA Range	Mean Diff. (I-J)	Std. Error	Sig.
High-Achieving	Middle-Achieving	-1.25110	.63382	.150
	Low-Achieving	-1.60881	.68570	.060
Middle-Achieving	High-Achieving	1.25110	.63382	.150
	Low-Achieving	-.35771	.66854	1.000
Low-Achieving	High-Achieving	1.60881	.68570	.060
	Middle-Achieving	.35771	.66854	1.000

Note. Bonferroni Post Hoc analysis; Two tailed *p* reported.

The Bonferroni post hoc analysis confirmed that females who were *low-achieving* females reported significantly higher levels on Parent Support than those who were *high-achieving* (one tailed *p* = .030)**.** These results also demonstrate that *high-achieving* and *middle-achieving* females scores on Parent Support were similar, not significantly different (*p* = .150). The mean scores of the *middle-achieving* and *low-achieving* females were also similar (*p* = 1.000).

The Kruskal-Wallis test was used to investigate whether or not the mean scores on Parent Support were significantly different within the male and female samples based on their SOL test performance (*No Score, Failed, Passed,* and *Passed/Advanced*). There were no statistically significant differences in the group means in the male sample ($\chi^2 =$

1.052, 2 df, *p* = .285). The scores males received on Parent Support were similar across all four SOL test performance groups. There were no statistically significant differences in the group means in the female sample (χ^2 = 2.989, 2 df, *p* = 112); the scores females received on Parent Support were similar across all performance groups.

The additional quantitative findings reported in this section provide a more definitive description of the study sample with regard to similarities and differences within each gender group. It is speculated that the similarities and differences within both the male and female samples may account for some of the variance not explained by the multiple regression models.

<div align="center">Qualitative Findings</div>

Qualitative data from three hundred fourteen School Support Questionnaires (SSQ) were transcribed and analyzed and will be discussed in this section. The participants' responses to the items on the SSQ cannot be generalized beyond the study population; however, they do represent the unique perceptions of the African American high school seniors who participated in the study and are presented here for the purpose of illuminating the quantitative findings. The qualitative findings may also provide impetus for future research in this area to the extent that the participants identified factors that they perceived as having had an influence on their school achievement that were not accounted for in the quantitative findings. It is speculated that some of these factors may help to account for the unexplained variance in the multiple regression models.

For the purposes of qualitative data analysis, the participants' were grouped by gender and achievement level. The six groups were *high-achieving* males, *high-achieving*

females, *middle-achieving* males, *middle-achieving* females, *low-achieving* males and

low-achieving females. In this section, each group will be discussed separately followed

by a summary of the findings which will focus on group similarities and differences.

Atlas ti, a software program, was used as a primary tool for analysis of the textual

data generated from the items contained in the School Support Questionnaire. The

processes of sorting, unitizing, coding and identifying emergent themes were followed as

prescribed in chapter three. Seven categories or themes emerged from the data (*tangible*

support, *standards*, *social support*, *guidance*, *communication*, *behavioral support* and

emotional support). In each of the following sections, the findings for each group will be

discussed relative to these seven themes.

In the qualitative analysis, *tangible support* was conceptualized to include any

type of material support (providing or locating resources, tutoring support, help with

homework or other school-related tasks etc.). *Standards* refer to practices that convey a

level of quality attained or advanced by someone other than the student. It also includes

any reference to values conveyed by significant others. *Social support* was

conceptualized as perceptions of support related to affiliations, interactions, and

participation. Any references to role models as well as negative or positive social

influences were subsumed under this category. *Guidance* was defined as advice or

direction from others. *Communication* support was defined as talking, listening,

conferencing or collaborating. *Behavioral support* includes the following actions or

behaviors that could potentially influence student engagement and performance;

reinforced (negatively or positively), monitored, rewarded, disciplined/punished, nothing,

and pushed. Finally, *emotional support* was conceptualized to include the following;

encouragement, discouragement, affirmation, motivation, recognition, attention, love and

"being there for me."

High-Achieving Male Findings

SSQ Item #1: Do you think that you are a successful student?

Thirty-two *high-achieving* males provided usable data for analysis. All 32 *high-achieving* males answered yes to the first item on the SSQ.

Table 32

Counts of Responses of High-Achieving Males by Support Type

	SSQ Items					
Support type	Item #2	Item #3	Item #4	Item #5	Item #6	Item #7
Tangible support	20	11	4	1	2	2
Standards	8	5	5	1	1	0
Social support	0	12	9	0	1	0
Guidance	2	4	9	0	0	0
Communication	6	0	1	0	0	0
Behavioral support	4	8	17	1	0	0
Emotional support	13	9	7	0	2	1

Note. The responses to each item of the School Support Questionnaire (see Appendix I) were categorized by support type and totaled. The actual counts are the number of times the type of support was mentioned by the respondents in this achievement group.

SSQ Item #2: What kinds of things have your teachers done during the last twelve years

to help you be a successful student?

Twenty comments from *high-achieving males* were related to the theme of

tangible support from teachers. Ten respondents noted that their "teachers stayed after

school to give extra help." Tutoring support (mentioned eight times) was also identified as one type of *tangible support* that some *high-achieving* males perceived as having had an impact on their success.

In the group data from *high-achieving* males there were eight responses related to the theme of *standards*. One respondent noted that his teachers "had shown him the importance of success." Another respondent noted that his "teachers have given me hard work rather than an assignment just to get an easy grade" and another student reported that his teachers "forced him to take tough classes." Five of the eight responses were related to the quality of instruction provided by teachers.

None of the *high-achieving* males identified *social support* provided by their teachers as a contributive factor to their success in school; however, there were two references to *guidance* from teachers as a school success factor. The first respondent noted that his teachers "have helped him with personal problems and health problems that may have affected school." The second respondent reported that his teachers "gave him advice on how to do things such as assignments."

Six responses were identified for the theme of *communication*. Teacher contact with parents was identified by two respondents as a *communication* factor that contributed to their school success. One student noted that teachers "called his parents when trouble arose" and the other reported that teachers "kept in close contact with his parents." Individual teacher feedback and feedback in the classroom setting were cited as other *communication* support success factors. One respondent stated that "most of his teachers have had classroom environments so I can ask questions and understand things

clearly." Another respondent noted that his teachers provided "critical, but fair input" and another reported that his teachers "listened to my thoughts and feelings."

Four of the responses to item number two from *high-achieving* males were related to the theme of *behavioral support*. Three respondents reported that their teachers pushed them to do their best or to make better grades and one respondent also noted that his teacher "monitored his schoolwork" which he identified as a contributive factor to his success in school.

Thirteen references to *emotional support* provided by the teachers were found in the data from *high-achieving* males. Eight respondents reported that their teachers encouraged them to exert their best effort and three other respondents noted that their teachers affirmed their capabilities. One *high-achieving* male also reported that "my teachers have treated me as if I were one of their own children."

SSQ Item #3: What kinds of things have your peers done during the last twelve years to help you be a successful student?

In the data from the *high-achieving* males, there were 11 references to *tangible support* from peers as a contributive factor. The most frequently cited type of *tangible support* provided by the peers of *high-achieving* males was participation in study groups and/or tutoring support. This was noted by six respondents. Four others reported that their peers "helped them with homework" and one noted that his peers provided needed transportation to school events.

Five references to *standards* from peers as a school success factor were identified in the group data of *high-achieving* males. One *high-achieving* male noted that his peers

"have taught him about good decisions and how they impact your life" and another noted that "my peers and I see eye to eye and [sic] realized at an early age to be dedicated to our studies and help keep one another informed." Three others reported that their peers "had taught them life lessons."

There were twelve references to *social support* from peers. Four *high-achieving* male respondents noted that their peers provided support when it was needed and four others indicated that they associated with a positive peer group. For example, one respondent wrote "my peers have been a positive group to associate with and keep myself focused." Two of the other respondents noted that peer competition was a factor in their success and two wrote that their peers "challenged them to earn higher grades."

In the data obtained from this group, four responses related to *guidance* from peers as a school success factor were identified. One student reported that his peers "have given me advice on how to do things and show me that even if the problem or task seems impossible that I can handle it and will most likely enjoy it or learn something new in the process." Another noted that his peers "advised me to go to college" and the other reported that his peers helped him make decisions.

There were no references to *communication* support from peers; however, there were eight respondents who commented about *behavioral support* from peers as a school success factor. The most common type of *behavioral support* mentioned was monitoring ($n = 4$). One *high-achieving* male respondent noted that his peers "stayed on his back about getting his work done" and another reported that his peers "told him about test and quizzes when he was absent" and one student also reported that his peers "helped him

stay away from the wrong crowd of people." Only one *high-achieving* male wrote that his peers did "nothing I can think of."

There were nine references to *emotional support* from peers, as a school success factor, in the data from *high-achieving* males. Among this group "encouragement from peers" was mentioned four times. Three other respondents reported that their peers motivated them and one respondent noted that his peers affirmed his capabilities. Finally, one respondent reported that his peers "were there for me when I needed them."

SSQ Item #4: What kinds of things have your parents done during the last twelve years to help you be a successful student?

There were four references to *tangible support* in the *high-achieving* male responses. Three of the respondents noted that their parents helped them with homework and/or school projects. The other respondent stated that "my mom has always provided me with the things I need to be successful."

Five references to *standards* from the parents of *high-achieving* males were found in the data. Three notations were related to academic standards. One student wrote that "I believe my parents are the greatest factor in my success as a student. From the beginning they have taught me discipline, perseverance and to give 110% percent." Another stated that "my parents demand academic excellence" and another noted that his parents "set standards I had to strive for." In addition to academic standards, some reported behavioral standards as a contributive factor to their success. For example, one student noted that his parents "held me liable to all their rules."

There were nine comments about *social support* from parents as a contributive factor. One *high-achieving* male respondent wrote "my parents are wonderful role models." Two other respondents noted that their parents supported their participation in school activities and six others reported that their parents supported them.

There were nine references to *guidance* from parents as a success factor. One student noted that his parents "taught me right from wrong" and another reported that his parents "showed me how to achieve my goals" and still another noted that his parents "talked to me about their mistakes and their expectations of me." Overall, their responses suggested that for *high-achieving* males their parent's provision of guidance about choices and concerns were critical to their success in school.

Only one response was found for the theme of *communication*. The respondent reported that his parents "kept in close contact with his teachers."

Seventeen responses were found related to *behavioral support* provided by parents. Seven respondents reported that their parents "pushed them to do their best." Three *high-achieving* males reported that their parents rewarded them for good work and three others reported that they were disciplined for bad grades. One respondent stated that "they never accepted bad grades from me. When I got bad grades, they disciplined me for it, so that it wouldn't become a habit."

High-achieving males referenced *emotional support* from parents as a success factor seven times. The most frequently noted comment was that their parents provided encouragement (*n*=3). For example, one respondent wrote that his parents "have helped,

loved, encouraged, comforted and have shown compassion." Notably, only one *high-achieving* male reported that his parents affirmed his capabilities.

Even though all of the *high-achieving* males reported that they perceived themselves as successful students and therefore were not asked to complete the last three items on the SSQ, a few respondents did provide answers to items five, six and seven. Their responses were considered usable data.

SSQ Item #5: What kind of support from your teachers do you feel would have helped you be a more successful student?

There was only one comment from the *high-achieving* males who responded to this item about *tangible support* from teachers as a school success factor. The respondent commented that "more individual assistance" would have been beneficial. There was also one reference to *standards* from teachers with the student writing " I would say if they would have took [sic] more time explaining the courses" it would have helped me be a more successful student.

There were no responses related to the themes of *social support*, *guidance*, or *communication* for this item; however, there was one *behavioral support* notation. The respondent wrote that "teachers could provide support not only when a student is doing bad [sic] but also when they are successful." There were no responses related to the theme of *emotional support* for item number five.

SSQ Item #6: What kind of support from your peers do you feel would have helped you be a more successful student?

There were two references to *tangible support* from peers as a success factor. The respondents noted that "help from peers with school work" would have made a difference.

One response to item number six was related to *standards* from peers. In this case, the reference was about shared values. The respondent wrote "if peers were more study-oriented, then I would be more successful." There was also one reference to *social support* from peers. The respondent noted that "some competition with peers would have made a difference."

Within this group, there were no responses for item number six related to the themes of *guidance*, *communication* and *behavioral support*; however, there were two comments related to the theme of *emotional support*. One respondent noted that "motivation from peers" and the other indicated that "encouragement from his peers" would have helped them to be more successful students.

SSQ Item #7: What kind of support from your parents do you feel would have helped you be a more successful student?"

There were two references to *tangible support* from parents in the responses to this query. One respondent stated that "if they knew how to do some of my homework, so I could receive help from them that would have made a difference" and the other student commented that if his parents who were military connected had limited the number of times they moved it would have helped him be more successful.

There were no comments related to the themes of *standards*, *social support*, *guidance*, *communication*, and *behavioral support*; however, there was one reference to

emotional support from parents. The respondent wrote that "parents provide love and support others can not give."

In summary, the most frequently noted type of support from teachers identified by *high-achieving* males was *tangible support* (*n*=20), followed by *emotional support* (*n*=12) and *standards* (*n*=8). In contrast, the most frequently mentioned type of support from peers was *social support* (*n*=12), followed by *tangible support* (*n*=11) and *emotional support* (*n*=9). The most frequently reported type of support from parents was *behavioral support* (*n*=17), followed by *social support* (*n*=9) and *guidance* (*n*=9). These findings suggest that the *high-achieving* males in the sample experienced the receipt of different types of support from their teachers, peers and parents. Additionally, some respondents endorsed a need for more *tangible support*, *social support* and *emotional support* from peers. A few respondents also acknowledged that more *tangible support* from teachers and parents would have helped them to be a more successful student.

High-Achieving Female Findings

SSQ Item #1: Do you think that you are a successful student?

Fifty-six *high-achieving* females provided usable data for analysis. Fifty- two females answered yes to the first item on the SSQ. Four *high-achieving* females answered no to this item.

Table 33

Counts of Responses of High-Achieving Females by Support Type

	SSQ Items					
Support type	Item #2	Item #3	Item #4	Item #5	Item #6	Item #7
Tangible support	29	28	19	1	1	2
Standards	8	0	24	4	0	1
Social support	1	19	24	0	3	0
Guidance	9	5	7	1	0	0
Communication	10	4	4	0	0	0
Behavioral support	6	13	22	1	2	5
Emotional support	31	28	34	1	0	0

Note. The responses to each item of the School Support Questionnaire (see Appendix I) were categorized by support type and totaled. The actual counts are the number of times the type of support was mentioned by the respondents in this achievement group.

SSQ Item #2: What kinds of things have your teachers done during the last twelve years to help you be a successful student?

There were 29 comments from *high-achieving* females about *tangible support* as a contributive factor. The most frequently mentioned type of *tangible support* reported by the *high-achieving* females was that "teachers stayed after school to give extra help" (*n=* 12). Other respondents' acknowledged that teachers provided resources with one student stating "My teachers have provided me with enough resources to be successful." Also mentioned was help with organizational skills and assistance with projects.

There were eight references to *standards* in response to item number two. Two respondents reported that their teachers set high academic standards with one noting that

"my teachers challenged me and pushed me to think on a higher level than the normal curriculum." Another respondent wrote "they have made it clear the work that was due and when it was due." The other responses were about the quality of instruction provided by teachers. For example, one respondent wrote "they come up with creative ways to teach and care about meeting students learning needs."

Only one respondent identified *social support* provided by their teachers as a contributive factor to her success in school; however, there were nine comments about *guidance* from teachers as a success factor. Notably, seven different types of *guidance* responses were identified. They included guidance about personal problems, how to improve the quality of school work, how schooling relates to future career choices and character development. Two respondents noted that their teachers recommended programs/curriculum.

Ten comments related to the theme of communication were identified by *high-achieving* females and all were related to individual teacher feedback. For example, one respondent stated that her "teachers have helped me understand what I was doing wrong and how I can improve my grades." Another respondent reported that her teachers "criticize me when I need it (good or bad)."

Within the *high-achieving* female group, six comments were identified related to the theme of *behavioral support* from teachers. Four of the respondents reported that their teachers "pushed them to do their best" or to make better grades and two reported that their teachers "were flexible."

There were 31 references to *emotional support* from teachers among the group of *high-achieving* females. Teachers "encouraged students' best effort" was cited 19 times. One respondent remarked "Over the last twelve years, my teachers have all encouraged me to do my best and never settle for average." Eight other respondents noted that their teachers affirmed their capabilities. Notably, one student reported that the discouragement she received from her teachers was a contributive factor to her success as a student. She wrote that "My teachers have aided in my success by telling me what I can't do…but this discouragement for most just fuels my drive to better myself.

SSQ Item #3: What kinds of things have your peers done during the last twelve years to help you be a successful student?

Among the high-*achieving* female group, there were 28 comments identifying *tangible support* from peers as a success factor. The most frequently reported types of *tangible support* provided by peers were participation in study groups ($n = 9$) and help with homework ($n=5$). Five respondents also reported that their peers tutored them if they needed it.

There were no responses related to the theme of *standards* from peers as a school success factor; however, 19 respondents identified *social support* themes. Five respondents noted that "peers were supportive" and five others mentioned that "friendly peer competition" were success factors. Participation in extracurricular activities with peers was cited four times as a factor that influenced success. Some of the other types of *social support* reported were moral support and shared educational experiences.

Among the *high-achieving* female group, there were five references to *guidance* from peers as a school success factor. Respondents reported that they either gave and/or received advice from their peers. For example, one respondent wrote "I am very picky when it comes to the people I really hang out with. I give them advice and vice versa. They are my escape when I need one."

There were four responses related to the theme of *communication* as a school success factor. Listening was mentioned three times and being "open with each other" were mentioned once.

There were 13 comments identifying *behavioral support* from peers as a success factor. Peers "monitored school work" was mentioned five times with one student reporting that "My peers have been helpful in keeping me accountable with my work… we work as a group to keep one another accountable so that we will all succeed." Three other respondents reported that their peers did "nothing" to support their success in school and one respondent noted that her peers "do not pick on me for being smart."

There were 28 references to *emotional support* from peers in response to item number three. Encouragement to do their best was mentioned the most ($n = 12$). For example, one respondent wrote "My peers like to see their fellow African American students succeed, so they encourage me to do well also." Other respondents noted that their peers encouraged school attendance, encouraged to them come to school on time and encouraged them to stay in a difficult course. Three respondents reported that their peers affirmed their capabilities. Only one respondent noted that their peers "were not there for me."

SSQ Item # 4: What kinds of things have your parents done during the last twelve years to help you be a successful student?

There were nineteen references to *tangible support* from parents in the data from *high-achieving* females. The provision of resources was mentioned seven times. One respondent wrote "My parents have provided me the essentials such as pens, pencils and paper" and another noted that her parents "made sure I had everything I needed to be successful." Other types of *tangible support* reportedly provided by parents were help with projects (*n*=1), help with schoolwork (*n*= 5) and accessing needed resources (*n*= 1). Notably, one other respondent noted that even though her parents were concerned about her performance in school "the only problem is that they really can't help me with my work when I really need it."

There were 24 comments about *standards* from parents. Twelve *high-achieving* females reported that their parents emphasized the importance of best effort; five respondents noted that their parents placed a high value on education and three reported that their parents established clear expectations.

Two responses were found related to the theme of *social support*. The support of school-related activities was noted by one *high-achieving* female respondent as a contributive factor. The other respondent suggested a lack of support from her parents when she wrote "My parents have been a bad example. I try hard so I don't end up like them. I use them as an example to better myself."

Seven *high-achieving* females identified *guidance* from parents as a success factor. Two of these respondents reported that their parents helped them plan for the

future, with one noting that "My mom specifically helped me with my college preparation and is still helping me." Two others acknowledged that their parents discussed future opportunities and one other noted that her parents directed her to someone else who could help with school work. One respondent reported that her parents made decisions about her courses.

Communication support from parents as a school success factor was mentioned five times. One *high-achieving* female reported that her parents asked probing questions about school, another reported that her parents lectured her and three others noted that their parents listened to them when they had concerns about school.

There were 22 references to *behavioral support* from parents as a school success factor. Four *high-achieving* females reported that their parents disciplined them when they did not perform as expected in school. Three others noted that they were rewarded for their accomplishments. Some of the other types of behavioral support reported by this group were that their parents pushed them to do better ($n=8$), ensured school attendance ($n=3$) and monitored study time ($n=2$).

There were 34 references to *emotional support* from parents as a success factor. Eleven respondents noted that their "parents encouraged them." Some of the other types of emotional support from parents noted by the respondents were; praise ($n=4$), support of efforts ($n=5$), love and affection ($n=3$) and caring about my academics and extracurricular activities ($n=1$).

Although 52 out of 56 *high-achieving* females indicated that they were successful students, there were four respondents in this group who did not perceive themselves as

successful students. Those respondents were asked to complete the last three items on the SSQ (number five, six and seven). Notably, some of the *high-achieving* females who indicated that they were successful also answered the last three items. In the following analysis, all of responses to the items from the *high-achieving* respondents were included.

SSQ Item # 5: What kind of support from your teachers do you feel would have helped you be a more successful student?

There was only one response to this item related to the theme of *tangible support*. That respondent noted that "teachers could provide more extra credit enforcing no child left behind."

There were four references to *standards*, all related to teaching strategies. One respondent wrote "if teachers spent more time explaining rather than rushing through instruction" it would have helped her be a more successful student and three others commented that more individual (instructional) attention from teachers would have helped them to be more successful students. For example, one respondent wrote "I think my teachers could have focused more on me and my needs as a student. I know it's hard to focus on an individual student, but students need one on one time."

There were no comments related to the theme of *social support;* however, one reference to *guidance* was identified. The *high-achieving* female respondent wrote that "if they had told me sooner I needed AP & Honors classes to be considered to be accepted into better colleges I may have tried more."

There were no responses related to the *communication* theme and only one response related to *behavioral support*. The respondent remarked "I feel a lot of good

support from my teachers because they continue to push me and help me; I don't think there is much more that they could do to help me."

There was one reference to *emotional support* from teachers as a success factor. The respondent wrote that her teachers "could give us more encouragement."

<u>SSQ Item # 6</u>: What kind of support from your peers do you feel would have helped you be a more successful student?

There was only one response related to the theme of *tangible support*. The *high-achieving* female respondent stated that "My peers could have given me support by us working together more to put us at the same level instead of putting me above them or vice versa."

There were no responses among this group related to *standards*; however, there were three related to *social support*. One respondent stated "their support has helped me make it through, but even if they were not there I would still have to answer to myself alone." Another noted "If they had left drama out of my life I wouldn't have had a grade slippage" and still another reported that "I feel some support, but not very much. Sometimes I feel a little jealousy from them."

There were no comments related to the themes of *guidance* and *communication* support; however, two responses related to *behavioral support* were identified. One respondent wrote "I do not believe that my peers influence my success. I am the only one who has control of my situation and who I become." The other respondent reported that "I think my friends gave me excellent support. They never let me slack off and tell me I

need to get things done." There were no responses for item number six related to the provision of *emotional support*.

<u>SSQ Item # 7</u>: What kind of support from your parents do you feel would have helped you be a more successful student?

Two comments related to *tangible support* from parents were identified. One *high-achieving* female respondent commented that "I think if my mom would have had more time to help me with school assignments, then I could have been more successful." The other respondent stated "be more involved in extracurricular activities at school, not just grades."

There was one response related to *standards*, with the respondent commenting that "I don't feel a lot of support, as far as schoolwork, but more of expectations. I think my parents could ask more about my school assignments and activities to be more supportive."

Among the responses to item number seven, there were no references to the themes of *social support*, *guidance* and *communication*; however, there were five comments related to *behavioral support* as a success factor. Four of the five references were related to <u>parent monitoring of school work</u>. One respondent stated "If they had checked my homework and limited all the free time I had to study. I would have a better sense of how to balance school work and leisure time." Another respondent commented "I think my parents could ask more about my assignments and activities to be more supportive" and another noted that because her parents did not monitor or push her she was able to get away with not doing all of her homework or not coming to school. None

of the responses to item number seven targeted factors related to *emotional support* from parents.

In summary, among the sample of *high-achieving* females, the most frequently noted type of support from teachers was *emotional support* (n=31), followed by *tangible support* (n=29) and *communication* support (n=10). The most frequently reported types of support from peers were *tangible support* (n=28) and *emotional support* (n=28), followed by *social support* (n= 19). In contrast, the most frequently reported types of support from parents were *emotional support* (n=34), *standards* (n=24) and *behavioral support* (n=22). The provision of *tangible support* from parents (n=19) was also notable. For *high-achieving* females, *emotional support* from teachers, peers and parents was frequently associated with their success in school. These findings also suggest that *social support* from peers had an influence on their school outcomes. Furthermore, the data provided by these female respondents, appears to affirm the importance of *standards* and *behavioral support* from their parents and *tangible support* from teachers, peers and parents.

The data obtained from those *high-achieving* females who responded to items number five, six and seven suggest that these students would like to see teachers spend more individual time with students helping them with subject matter they don't readily understand. Some of these respondents also suggested that parent monitoring of school work would have helped them to be more successful students.

Middle-Achieving Male Findings

SSQ Item # 1: Do you think that you are a successful student?

Fifty-six *middle-achieving* males provided usable data for analysis. Fifty- three

males answered yes and three *middle-achieving* males answered no to this item.

Table 34

Counts of Responses of Middle-Achieving Males by Support Type

	SSQ Items					
Support type	Item #2	Item #3	Item #4	Item #5	Item #6	Item #7
Tangible support	19	20	19	0	0	2
Standards	31	2	8	3	0	0
Social support	0	12	5	1	0	0
Guidance	7	7	13	0	0	1
Communication	3	0	2	0	1	0
Behavioral support	9	11	15	1	6	2
Emotional support	11	13	15	0	1	1

Note. The responses to each item of the School Support Questionnaire (see Appendix I) were categorized by support type and totaled. The actual counts are the number of times the type of support was mentioned by the respondents in this achievement group.

SSQ Item # 2: What kinds of things have your teachers done during the last twelve years

to help you be a successful student?

Middle-achieving males mentioned *tangible support* from teachers as a success

factor 19 times. The most frequently noted type of *tangible support* was "staying after

school to give extra help" ($n= 5$). Other types of *tangible support* identified as success

factors for *middle-achieving* males were the provision of extra credit, help with college

applications, help with staying focused and help with time management.

Middle-achieving males referenced the theme of *standards* 31 times. Most of the comments were about the quality of instruction provided by teachers. One respondent noted that his teachers "have made their classes fun and easy to pay attention in" and another noted that his teachers "made sure all their students understood what they were teaching." Another type of *standard* acknowledged by these respondents had to do with the conveyance of values, with one respondent reporting that his teachers "taught me valuable things that I can use in everyday life" and another noting that his teachers "taught me life lessons as well as school lessons." Only one respondent identified the provision of "challenging work" as a *standard* success factor. He remarked that "they have given me work that was above high school level to prepare me for my college career."

There were no references to *social support* from teachers as a success factor; however, there were seven related to the theme of *guidance* from teachers. Five *middle-achieving* males reported that their teachers gave them guidance or advice. One respondent stated that "they sat down and had one on one talks with me telling me how much I could achieve in my future if I finish my educational study."

There were only three comments related to the theme of *communication* support as a success factor. One student noted that his teachers contacted his parents about his behavior; another reported that his teachers listened to him and another noted that his teachers gave him critical but positive feedback.

Middle-achieving males referenced *behavioral support* from teachers as a success factor nine times. Teachers "monitored student progress" was mentioned more often than

other types of behavioral support. One student stated that "many of my teachers have been working with me to become a better student" and another noted that his teachers "stay persistent to ensure that I do what needs to be done."

There were 11 references to *emotional support* from teachers as a success factor. All of these respondents mentioned that their teachers "encouraged" them and this contributed to their success in school

SSQ Item # 3: What kinds of things have your peers done during the last twelve years to help you be a successful student?

Middle-achieving males identified the provision of *tangible support* from peers as a success factor twenty times. The most frequently reported type of *tangible support* provided by *middle-achieving* males' peers was help with studying ($n = 7$) and help with homework ($n = 5$).

Only two responses were related to the theme of *standards* from peers. One *middle-achieving* male commented that "my peers showed me that everyone is different and the way you are in high school is a reflection of who you will be in the future." Another respondent noted that "my peers have always encouraged me to do great things."

There were 12 references to *social support* from peers as a success factor. Several different types of responses were found. Unspecified *social support* from peers was mentioned four times by *middle-achieving* males. Other types of social support identified as success factors were friendly competition ($n = 1$), affiliation with a positive peer group ($n = 2$), and peers provided a positive role models for school engagement ($n = 2$). One respondent noted that his peers "have done their work and that has motivated me to do

mine" and another stated "I made sure I stayed with the right crowd of peers to stay on track."

There were seven comments about *guidance* from peers as a contributive influence on school success. Six of the seven *middle-achieving* male respondents indicated that their peers gave them advice about academic performance, decision-making and life in general. One other respondent noted that his peers gave him advice about his behavior stating that "they tell me to stay out of trouble."

There were no responses related to the theme of *communication* from peers as a success factor; however, there were 11 references to *behavioral support* from peers. Six *middle-achieving* male respondents noted that their peers "did nothing" to support their academic success. Other students reported that their peers monitored (n=3) or reinforced academic success (n=1). For example, one student noted that his peers "helped him to remember deadlines for things to be turned in" and another reported that his peers "ask me if I studied and reminded me to do my homework" and another noted that his peers "stay on my back about grades."

There were 13 references to *emotional support* from peers as a factor that influenced their success in school. Seven *middle-achieving* male respondents noted that their peers encouraged them. One student noted that my peers "encouraged me to always do well and never give up" and another stated that "they just encouraged me to keep going." Notably, three respondents reported that their peers motivated them and two noted that their peers affirmed their capabilities.

SSQ Item # 4: What kinds of things have your parents done during the last twelve years to help you be a successful student?"

Nineteen responses from *middle-achieving* males were related to the theme of *tangible support* from parents as a contributive influence on their success in school. The provision of resources needed for school was mentioned six times. "Help with homework" and unspecified help were mentioned three times. Other types of support noted were help with the college preparation process ($n = 1$), solicitation of assistance from others ($n = 1$) and assistance with studying ($n = 2$).

There were eight comments related to the theme of *standards* from parents as a school success factor. Three *middle-achieving* male respondents reported that their parents maintained clear expectations about grades and three others noted that their parents emphasized religious or moral values.

There were five responses related to *social support* from parents as a success factor. For example, one *middle-achieving* male student wrote "my parents have done everything to help me become successful, without them I don't think that I would be the person I am today."

Thirteen comments about *guidance* from parents as success factors were identified. Most of the responses were related to advice about school and academic choices. For example, one student noted that his parents have "shown him both aspects of the spectrum … I've seen where I could be with and without an education" and another noted that his mother "talks to me about why it is important to graduate and to make good

grades." Another student reported that his parents "gave me good advice on how to be a successful person in life" and another noted that his parents "kept me on a positive track."

Two *middle-achieving* male respondents identified *communication* support from their parents as a success factor. Both of these respondents noted that their parents communicated with teachers and/or the school counselor.

Behavioral support from parents as a factor that influenced their success in school was mentioned 15 times by *middle-achieving* males. Four students noted that their parents monitored their school work; two reported that their parents monitored school attendance and one respondent noted that his parents disciplined him when he didn't perform well in school. Four others reported that their parents "pushed them to do their best."

There were 15 references to *emotional support* from parents as a school success factor. Encouragement from parents was mentioned seven times by *middle-achieving* males. Notably, two respondents commented about the quality of the emotional environment in their home with one student reporting "they have provided a safe environment for me to live and prosper in" and another noting that they have "provided a loving home."

Although 53 of 56 *middle-achieving* males indicated that they were successful students, there were three *middle-achieving* male respondents who reported that they were not successful students. Those respondents were asked to complete the last three items on the SSQ (number five, six and seven). Notably, some of the *middle-achieving*

males who indicated that they were successful also answered the last three items. Their responses were also analyzed and are included in the following discussion.

SSQ Item # 5: What kind of support from your teachers do you feel would have helped you be a more successful student?"

There were no references to *tangible support* from teachers as a success factor; however, three responses were related to the theme of *standards* from teachers. All three had to do with teaching strategies or the quality of instruction with one respondent noting that his "teachers could make lesson plans more interesting and hands on…be fair with grades and…keep plans organized."

There was only one response related to the theme of *social support* from teachers as a success factor. That student noted "they were supportive…I just wasn't a good student."

There were no responses related to the themes of *guidance* and *communication*; however, there was one reference to *behavioral support* from teachers. That student noted that teachers could "enforce policies to reward those who succeed." There were no references to *emotional support* from teachers as a school success factor.

SSQ Item # 6: What kind of support from your peers do you feel would have helped you be a more successful student?

Among this group of respondents, there were no references to the themes of *tangible support*, *standards*, *social support* and *guidance* from peers; however, one comment related to the theme of communication was identified. The *middle-achieving*

male respondent noted that more communication with his peers would have helped him be a more successful student.

There was one response to item number six related to *behavioral support* from peers as a success factor. That respondent noted that "nothing really" from his peers would have helped him be a more successful student.

There was one reference to *emotional support* from peers. The *middle-achieving* male respondent noted that encouragement from his peers would have helped him be a more successful student.

<u>SSQ Item # 7</u>: What kind of support from your parents do you feel would have helped you be a more successful student?

There were two responses identified related to the theme of tangible *support* from parents. One *middle-achieving* male student noted that if his parents had helped him with homework it would have helped him be a more successful student.

There were no references to the themes of *standards* and *social support* from parents; however, one comment was identified related to *guidance* from parents. The respondent noted that advice from his parents would have helped him be a more successful student.

There were no comments related to the theme of *communication* support as a success factor; however, two respondents noted that <u>parent monitoring</u>, a type of *behavioral support*, would have helped them be more successful students.

In the responses to item # 7, there was one reference to *emotional support* from parents as a success factor. That respondent noted that encouragement from his parents would have helped him be a more successful student.

In summary, in the sample of *middle-achieving* males the most frequently noted type of support from teachers was *standards* (*n*=31), followed by *tangible support* (*n*=19) and *emotional* support (*n*=11). The most frequently reported types of support from peers were *tangible support* (*n*=20), *emotional support* (*n*=13) and *social support* (*n*=12). *Behavioral support* from peers was mentioned eleven times. The most frequently noted types of parent support were *tangible support* (*n*=19), *behavioral support* (*n*=15) and *emotional support* (*n*=15). Notably, *guidance* from parents was mentioned thirteen times by *middle-achieving* males as a type of support that contributed to their success in school. These findings suggest that for *middle-achieving* male respondents *tangible support* from teachers, peers and parents was an important influence on their school outcomes. Furthermore, the data provided by these male respondents appears to affirm the importance of *standards* from their teachers and *emotional support* from teachers, peers and parents.

There were only a few responses to the last three items of the SSQ. However, three respondents noted that *standards* (specifically the quality of instruction provided teachers) could have helped them to be more successful in school. There were very few comments about peer support, which suggest that these respondents may perceive their peers as having a limited role in their success as a student. There were also only a few comments about parent support and their responses suggested that *tangible support*

(parent involvement with homework), behavioral *support* (monitoring of school progress) and *guidance* could have helped these students be more successful in school.

Middle-Achieving Female Findings

SSQ Item # 1: Do you think you are a successful student?

Seventy *middle-achieving* females provided usable data for analysis. Sixty-two *middle-achieving* females answered <u>yes</u> and eight answered <u>no</u> to this query.

Table 35

Counts of Responses of Middle-Achieving Females by Support Type

	SSQ Items					
Support type	Item #2	Item #3	Item #4	Item #5	Item #6	Item #7
Tangible support	36	29	2	1	1	2
Standards	17	5	17	2	0	0
Social support	1	14	2	0	5	1
Guidance	10	9	5	0	0	2
Communication	7	0	7	0	0	1
Behavioral support	12	13	19	3	4	4
Emotional support	26	13	30	6	2	7

Note. The responses to each item of the School Support Questionnaire (see Appendix I) were categorized by support type and totaled. The actual counts are the number of times the type of support was mentioned by the respondents in this achievement group.

SSQ Item # 2: What kinds of things have your teachers done during the last twelve years to help you be a successful student?

Thirty-six references to *tangible support* from teachers as a success factor were identified. The most frequently cited type of *tangible support* was staying after school (*n* =12), followed by help with class work (*n* =5) and unspecified help (*n* =5). Some of the

other types mentioned by *middle-achieving* females were extra credit (*n*=4), help with college applications (*n* =3), the provision of recommendations for college (*n*=1) and assistance with study habits (*n* =1).

There were 17 references to the theme of *standards* from teachers as a school success factor. Most of these had to do with the quality of instruction provided by teachers (*n* =13) or expectations for performance (*n* = 3). Only one *middle-achieving* female respondent noted that her teachers emphasized the importance of education when she commented "my teachers have helped me understand that school is very important."

Among the *middle-achieving* females, there was one comment identifying *social support* from teachers as a success factor. That respondent commented that "my teachers have always…provided a shoulder for me to lean on."

There were ten comments related to the theme of *guidance* from teachers. One *middle-achieving* female respondent reported that her teachers recommended programs in and outside of school. Some of the others noted that their teachers provided advice and three respondents reported that their teachers provided guidance about future plans.

Seven references to *communication* support as a success factor were identified. Critical feedback from teachers was noted four times and contact with parents was mentioned three times. One respondent commented that "teachers when I was younger kept up with my parents…they would call if my grades fell off" and another wrote "teachers talk to my parents about ways to improve my grades or interest in the classes."

There were 12 references to the theme of *behavioral support* from teachers. "Teachers monitored school progress" was mentioned four times and "teachers monitored

school work" was mentioned three times. One *middle-achieving* female respondent commented that "my teachers guided me through all of my school work" and another wrote that "my teachers kept up with my grades- missing work, tardiness, absences etc." Notably, two respondents reported that their teachers reinforcing good school attendance and three others mentioned that their teachers reinforced good work study habits. Only one student noted that her teachers did "nothing."

There were 26 comments identified related to the theme of *emotional support* from teachers as a school success factor. Eight *middle-achieving* female respondents reported that their teachers provided encouragement. Four others noted that their teachers encouraged them to do well and four reported that their teachers encouraged persistence. Six respondents reported that their teachers affirmed their capabilities and one noted that her teacher affirmed her value.

SSQ Item # 3: What kinds of things have your peers done during the last twelve years to help you be a successful student?

Among the *middle-achieving* female group, there were 29 comments identifying *tangible support* from peers as a success factor. For this group of females, the most frequently reported type of tangible support provided by peers was help with homework (*n* = 5). Four *middle-achieving* females also reported that they participated in study groups with one respondent writing that "I have a couple of study partners, but I don't receive a lot of support from my friends." There were four references to the provision of unspecified help and three comments about help with class work from peers as factors

that contributed to their success in school. One respondent commented that "my best friend helps me whenever I need her, especially in school."

There were five references to *standards* from peers as a school success factor. Most of the comments had to with placing a value on education (the benefits of it, the need to set educational goals etc.). For example, one *middle-achieving* female respondent wrote "my peers were concerned about my grades, so I can go to a good college."

There were fourteen references to the theme of *social support* from peers. Most of these comments had to do with positive peer affiliations. One respondent wrote "my best friend _____ is always doing something that makes me want to be on her level or above her. So, she really influenced me" and another stated that "my peers have encouraged me to my best because most of my friends have GPA's of 2.5 or higher so they all believe in success." Two of the *middle-achieving* female respondents noted that peer competition contributed to their success in school.

There were nine responses identified related to the theme of *guidance* from peers as a success factor. Six of the comments were related to advice about school work or educational options. "Peers provided advice about social concerns" was mentioned four times by *middle-achieving* females. For example, one respondent wrote "they helped me understand to be grateful for the support I have, because everybody's life is not always going to be peaches and cream" and another wrote "they guide me to the right path, they give me options of what will happen and what won't happen."

In the data from the *middle-achieving* female respondents, there were no references to *communication* support from peers; however, there were 13 references to

behavioral support from peers as a contributive influence. Seven respondents noted that their peers monitored their school performance. "Nothing" was mentioned five times. One respondent also commented that negative peer behavior had an influence on her success in school. She wrote "they've helped me to be more confident by not caring about the things they've said."

There were 28 references to *emotional support* from peers as a school success factor. Fourteen of the comments were related to the receipt of encouragement from peers. Five of the respondents reported that their peers encouraged them "not to give up." Three *middle-achieving* females noted that their peers affirmed their value.

SSQ Item # 4: What kinds of things have your parents done during the last twelve years to help you be a successful student?

Only two references to *tangible support* from parents as a success factor were identified. One *middle-achieving* female respondent noted that her parents sought information and the other reported that her parents secured tutorial support. In contrast, there were 17 references to the theme of *standards* from parents as a success factor. Eleven respondents noted that their "parents placed an emphasis on best effort." For example, one respondent wrote "my mother has always encouraged me to do well in school so I can live a descent life and have money to make it" and another stated "they want me to do something with my life, so I have to be a successful student." Three respondents reported that their parents emphasized the value of a good education.

Among the *middle-achieving* female respondents, there were only two references to *social support* from parents as a factor that influenced their success in school. One

respondent wrote "my parents support me each step of the way" and the other commented that "my mother supports me in all my extracurricular activities."

There were five references to *guidance* from parents as a school success factor. Four comments were related to advice about schooling options, with one respondent noting that her mother "enlisted me in vocational programs to help me steer towards my major."

There were seven references to *communication* support from parents as a success factor. Five respondents reported that their parents communicated with their teachers and/or school counselor. One *middle-achieving* female wrote "my parents have met with my counselor and teachers and have kept in contact with them and by doing so they have been able to help me" and another commented that "my parents came to conferences, other things parents do to show that they care about school work." One respondent reported that her mother questioned her about her performance and another wrote "my mother has always been a listening ear."

There were 19 references to *behavioral* support from parents as a school success factor. "Pushing to do their best" was mentioned six times, followed by monitoring overall school progress (n =3) and monitoring school attendance (n=3). Discipline as a means of reinforcing good school performance was mentioned once and "nothing much" was mentioned twice by *middle-achieving* female respondents.

There were 30 references to *emotional support* from parents as a success factor. Love and support from parents was mentioned eight times, followed by encouragement (n=5). Five respondents also noted that their parents affirmed their value with one

respondent commenting that "my parents have helped me to become a successful student by believing in my in all the choices I have made" and another wrote "they have faith in me and are proud of the decisions I make and if I didn't have them I don't think I would have made it to my senior year." Four of the *middle-achieving* female respondents reported that their parents "were there for me."

Sixty-two *middle-achieving* females indicated that they were successful students. Eight *middle-achieving* female respondents reported that they did not perceive themselves as successful students. Those eight respondents were asked to complete the last three items on the SSQ (number five, six and seven); however, some of the other respondents who indicated that they were successful students also responded to the last three items on the SSQ. All of the responses collected were considered usable data.

SSQ Item # 5: What kind of support from your teachers do you feel would have helped you be a more successful student?

There was one response identified related to the provision of *tangible support* from teachers as a success factor. The *middle-achieving* female respondent noted that tutoring support would have helped her to be a more successful student.

There were two references to *standards* from teachers as contributive influences. Both of the comments were related to the quality of instruction provided by teachers. One respondent wrote that teachers "could put more effort into students" and the other commented that "some teachers just gave work or did not really teach."

There were no responses identified related to the themes of *social support*, *guidance* or *communication* support from teachers; however, there were three references

to *behavioral support* from teachers as a school success factor. One student wrote "that if my teachers had stayed on me more and not let me slip after the first semester I could have done better" and another commented that "I wish I was pushed more to make better grades in some of these classes." Finally, one respondent asserted that "nothing, the teachers don't really care about what you do honestly…And I don't feel if they did care my behavior would've changed so I say nothing."

    Middle-achieving females commented about *emotional support* from teachers as a school success factor six times. Three respondents commented that teachers' affirmation of their capabilities would have helped, with one respondent noting "telling me I can do it…just more support in general." Encouragement from teachers was mentioned twice and attention to students was mentioned once as success factors.

<u>SSQ Item # 6</u>: What kind of support from your peers do you feel would have helped you be a more successful student?

    There was one reference to *tangible support* from peers as a school success factor. The *middle-achieving* female respondent wrote "peers working together on homework and projects" would have helped her be a more successful student.

    There were no comments about *standard*s from peers as a contributive influence to school success; however, there were five references to *social support* from peers. Two respondents noted that friendly peer competition would have been beneficial. Peer support in general and negative peer influences were both mentioned once. One respondent wrote "well I feel that it is a choice of whether your peers want to help or support you or not…most people at _____ are not very supportive of each other when it

comes to school work." Another commented that "until this year I did not have many friends who made really good grades…now looking back I wish I would have surrounded myself with people who were striving to be better than average…my grades are okay but not as great as my peers."

There were no comments related to the themes of *guidance* or *communication* support from peers as success factors; however, there were four references to *behavioral support* from peers. One respondent commented that peers "could do nothing" to support her success, because "they don't have a big part in my school work/life." Two others reported that peers could pressure them more; with one respondent writing that "pressuring each other to do our work and get better grades" would have been beneficial.

There were two references to *emotional support* from peers as a success factor. One *middle-achieving* female wrote "positive motivation…it seems to me [sic] as if my friends <u>used</u> to find it "un-cool" to go to class…now its habitual…I can't help but <u>not go</u> to class" and the other commented that encouragement from peers would have helped her to be a more successful student.

<u>SSQ Item # 7</u>: What kind of support from your parents do you feel would have helped you be a more successful student?

Among the *middle-achieving* female responses, there were two references to *tangible support* from parents. One respondent wrote "my parents give great help and support" and the other commented "my parents could spend more time with me helping me with my studies."

There were no references related to the theme of *standards* from parents; however, there was one reference to *social support* from parents as a school success factor. The respondent noted that support from her parents would have helped her to be a more successful student.

There were two references to *guidance* from parents. One respondent commented that moral guidance and help with future planning would have helped her to be a more successful student.

There was one response related to the theme of *communication* as a success factor. The respondent wrote "… being willing to listen and understand my struggle rather than getting mad and limiting my free time…" would have helped her to be more successful.

There were four references to *behavioral support* from parents. Two *middle-achieving* females noted that <u>parent monitoring</u> (of schoolwork and progress) would have helped them to be more successful students. One respondent reported that if her parents had pushed her more that would have helped and the other noted that if they had not "yelled at her about her school work" she believes that would have been helpful.

There were seven references to *emotional support* from parents as having an influence on their success in school. Two respondents noted that reassurance from their parents rather than criticism would have been helpful. Another wrote "telling me I am smart and I have potential and spending more time with me" would have helped me to be a more successful student. Similarly, another respondent noted that "if I felt like my father cared about me" that would have helped her be a more successful student.

Acknowledgement of effort was also mentioned by one respondent as a type of support from her parents that would have helped her to be a more successful student.

In summary, the most frequently noted type of support from teachers identified by *middle-achieving* females was *tangible support* (*n*=36), followed by *emotional support* (*n*=26) and *standards* (*n*=17). The most frequently reported type of support from peers was *tangible support* (*n*=29), followed by *emotional support* (*n*=28) and *social support* (*n*=14). *Behavioral support* from peers was mentioned thirteen times. In contrast, the most frequently reported types of support from parents were *emotional support* (*n*=30), *behavioral support* (*n*=19) and *standards* (*n*=17). Interestingly, *middle-achieving* females affirmed the importance of *tangible support* from teachers and peers, but did not identify this as an influential type of support from parents. The data obtained from this group also suggest that *emotional support* from all three sources was perceived to be important with regard to their success in school.

Eight *middle-achieving* females answered <u>no</u> to the first item on the SSQ and therefore were asked to respond to the last three items on the SSQ. A few other middle-achieving respondents who perceived themselves as successful students also answered the last three items on the SSQ. Their comments suggested that certain teacher behaviors would have made a difference. Some of them noted that <u>quality instruction</u> would have helped. Others affirmed a need for teachers to help them by monitoring and "pushing." A few respondents also asserted that if teachers had affirmed their potential that would have helped them to be more successful in school. The comments about peer support were mixed, with some respondents indicating that peers did not influence their school

outcomes and others noting that positive peer affiliations would have made a difference.

Middle-achieving female respondents who answered the last three items on the SSQ

acknowledged several different types of parent support that would have helped them to

be more successful. Help with school work, parent monitoring of school progress,

guidance about future plans and emotional support were all cited as potential contributive

influences on their school achievement.

Low-Achieving Male Findings

SSQ Item # 1: Do you think you are a successful student?

Forty-eight *low-achieving* males provided usable data for analysis. Forty *low-achieving* males answered <u>yes</u> and eight answered <u>no</u> to this item.

Table 36

Counts of Responses of Low-Achieving Males by Support Type

	SSQ Items					
Support type	Item #2	Item #3	Item #4	Item #5	Item #6	Item #7
Tangible support	19	14	17	5	2	0
Standards	11	1	8	2	1	0
Social support	4	9	3	0	5	0
Guidance	6	6	7	0	0	3
Communication	1	0	0	0	0	2
Behavioral support	8	12	14	3	4	5
Emotional support	11	9	15	5	4	7

Note. The responses to each item of the School Support Questionnaire (see Appendix I) were categorized by support type and totaled. The actual counts are the number of times the type of support was mentioned by the respondents in this achievement group.

SSQ Item #2: What kinds of things have your teachers done during the last twelve years to help you be a successful student?

Nineteen references to *tangible support* from teachers were identified as school success factors by *low-achieving* males. The most frequently mentioned types of tangible support were "teachers stayed after school to give extra help" (*n*= 5), followed by help with study habits (*n*=3).

There were eleven references to *standards* from teachers as a school success factor. Three *low-achieving* males noted that their teachers emphasized standards for behavior and one noted that his teachers stressed the importance of exerting your best effort. Most of the other comments were related to the quality of instruction provided by teachers. Only one *low-achieving* male respondent noted that his teachers "have prepared me for another level in my educational career."

Social support from teachers was mentioned four times by *low-achieving* males as a factor that contributed to their success in school. For example, one respondent wrote "there were teachers who knew the situation I was facing with my mother and did, are yet doing, everything in their power to ensure I graduate and attend college." Another respondent wrote that "being a support in the classroom and outside of the classroom, just knowing that teachers want you to become something makes me a successful student."

Guidance from teachers was mentioned six times by *low-achieving* males as a school success factor. Four respondents noted that their teachers gave advice and two commented that their teachers gave specific advice related to future planning. Only one

reference to the theme of communication was identified. That student noted that student/teacher conferences had been helpful to his success in school.

Among the responses from the *low-achieving* male group, there were eight references to *behavioral support* from teachers. Four respondents noted that their teachers monitored their school work (*n*=2) or their overall school progress (*n*=2). One respondent wrote that his teachers "did nothing" and another commented that "through my life many teachers said I would fail in life. So, with their negativity it allowed me an (opportunity) to prove them wrong." Another student reported that his teachers rewarded positive behavior and this behavior contributed to his success in school.

There were eleven references to *emotional support* from teachers as a school success factor. Two respondents noted that their teachers encouraged their best effort; two reported that "encouragement from teachers" was a contributory factor and two others reported that their teachers encouraged them to "do the right thing." One respondent noted that his teachers showed that they care about students; two reported that their teachers affirmed their value and two others noted that their teachers affirmed their capabilities.

SSQ Item # 3: What kinds of things have your peers done during the last twelve years to help you be a successful student?

Among the *low-achieving* male respondents, there were 14 references to the theme of *tangible support* provided by peers as a school success factor. Help with class work was mentioned the most (four times) followed by unspecified help which was

mentioned three times. Help with studying and help with homework were both mentioned once. One student reported that his peers provided needed supplies.

There was only one reference to *standards* from peers as a school success factor. The respondent noted that his peers emphasized the importance of exerting his best effort in school.

There were nine references related to the theme of *social support* from peers. Four *low-achieving* male respondents reported that their peers supported them when it was needed and two commented that friendship with peers helped them to be a successful student. One respondent noted that peer competition was a factor and two others referenced positive peer influence as contributing to their success in school.

Six responses were identified related to the theme of *guidance* from peers. Most of the guidance provided was school-related. However, one *low-achieving* male student noted that his peers gave him advice about future options and another wrote "they told me to do all of my work, don't play in class and ask for help as needed."

There were no references to the theme of *communication*; however, there were 12 references to *behavioral support* from peers as a school success factor. Six respondents noted that their peers "did nothing" to support their success as a student. Two others reported that their peers "kept them away from trouble" and one noted that his peers "protected him."

There were nine references to the theme of *emotional support* from peers. Four respondents noted that their peers were "there for me." One reported that his peers affirmed his capabilities and four others reported that their peers encouraged them.

SSQ Item # 4: What kinds of things have your parents done during the last twelve years to help you be a successful student?

The *low-achieving* male respondents identified *tangible support* from parents 17 times as a school success factor. Help with homework was mentioned the most (four times). There were eight references to the theme of *standards* from parents. Three *low-achieving* male respondents reported that their parents emphasized the importance of exerting their best effort and three others noted that their parents articulated clear expectations about school performance or behavior.

There were three comments from *low-achieving* males related to the theme of *social support* from parents as a school success factor, with one respondent writing that "my parents give me all the support I need." There were seven references to *guidance* from parents as a success factor. Four respondents noted that their parents gave them advice about school or made decisions about school options.

Among the *low-achieving* male respondents there were no references to the theme of *communication* support from parents; however, *behavioral support* from parents was mentioned 14 times. Nine respondents noted that their parents ensured school attendance. Three respondents noted that their parents "forced me to go to school" and another wrote that "my parents made sure I stayed in school." Two respondents reported that their parents monitored their homework and two others noted that their parents monitored their school progress. Two *low-achieving* male respondents reported that they were disciplined for unsatisfactory performance in school.

There were 15 comments identified related to the theme of *emotional support* from parents. Encouragement was mentioned five times. Three *low-achieving* male respondents noted that their parents affirmed their value and four reported that their parents "were there for me."

Although 48 low-*achieving* males indicated that they perceived themselves as a successful students, there were eight *low-achieving* male respondents who did not perceive themselves as successful students. Those respondents were asked to complete the last three items on the SSQ (number five, six and seven). Their responses and those of other *low-achieving* male respondents who indicated that they perceived themselves as successful students but also responded to the last three items on the SSQ were collected and analyzed.

SSQ Item # 5: What kind of support from your teachers do you feel would have helped you be a more successful student?

There were five comments related to the theme of *tangible support* from teachers. Two *low-achieving* male respondents commented that if their teachers had stayed after school to help them, it would have been beneficial. One respondent noted that make-up work would have helped and another indicated that one on one tutoring would have helped him be a more successful student. Notably, the provision of resources was mentioned once. The respondent wrote "a couple of teachers in this school made sure I had a safe and stable place to reside and bring me to and from school."

There were two references to *standards* from teachers as a success factor. Both comments were related to teaching strategies.

There were no references to the themes of *social support*, *guidance* or *communication*s; however, there were three references to *behavioral support* from teachers. "Nothing" was mentioned twice with one respondent writing "I believe they have done all they should do for me to succeed." One other student commented that his teachers could "push me harder."

There were five references to *emotional support* from teachers as a success factor. Two were five references to *emotional support* from teachers as a success factor. Two respondents noted that teachers "could care more." Encouragement, motivation and understanding were all mentioned once in the *low-achieving* males' responses to item number five.

SSQ Item # 6: What kind of support from your peers do you feel would have helped you be a more successful student?

There were two references to *tangible support* from peers as a school success factor. The first *low-achieving* male respondent noted that peers could have "helped me when I needed it" and the second commented that peers "could help each other graduate."

There was only one reference to the theme of *standards* from peers as contributing to success in school. The respondent wrote that if peers had "better ideals and values" that would have helped him be a more successful student.

There were five references to *social support* from peers as a school success factor. One respondent noted that if peers would have spent more time with him that would have helped him be more successful. Two other *low-achieving* male respondents indicated that affiliation with a different peer group would have helped them be more successful in

school. Notably, two respondents acknowledged that negative behavior by their peers adversely influenced how well they did in school.

There were no comments identified related to the themes of *guidance* or *communication*; however, there were four references to *behavioral support* from peers. One *low-achieving* male noted that his peers really didn't influence his success and another wrote that "nothing, they should help themselves." One other respondent reported that if peers "pushed each other" it would have helped him be a more successful student. Another wrote that if my peers "stop persuading me to skip" it would have helped me be a more successful student.

There were four references to *emotional support* from peers as a success factor. One respondent noted that if peers were more patient it would have helped him. Another respondent wrote "to be more accepting of me wanting to be smart, instead of teasing me about getting an A on a test…" in contrast, another commented that "my peers encouraged me to perform to my full potential and to not drop out." If peers "had been there for me" was also mentioned once as something that could have helped a *low-achieving* male respondent to be a more successful student.

SSQ Item # 7: What kind of support from your parents do you feel would have helped you be a more successful student?

Among the *low-achieving* males, there were no comments in response to item #7 related to the themes of *tangible support, standards* or *social support* from parents; however, there were three references to *guidance* from parents as a school success factor.

The respondents noted that the provision of advice from parents would have helped them be more successful students.

There were two references to the theme of *communication*. Both respondents noted that parent/ teacher conferences would have helped them be more successful students.

There were five references to *behavioral support* from parents as a success factor. The need for <u>parent monitoring</u> was mentioned three times. One *low-achieving* male respondent noted that if his parents had monitored his progress with his teachers that would have helped. Another commented that monitoring his homework would have been beneficial and the third student indicated that if his parents had monitored his grades it would have helped him be a more successful student.

There were seven comments identified related to the theme of *emotional support*. Two respondents noted that if their parents would have had patience that would have helped them to be more successful in school; however, one of the respondents also wrote "but my mom has done everything for me that she could." Similarly, two other respondents also suggested that they had received emotional support from their parents, but it was not necessarily all that they needed to be more successful. For example, one respondent wrote "they have been there to do everything they could" and another remarked "nothing, because my mother has supported me through my whole academic career." Love and attention from parents was mentioned once as something that would have helped one *low-achieving* male respondent to be a more successful student.

In summary, the most frequently noted types of teacher support identified by *low-achieving* males were *tangible support* (*n=19*), *standards* (*n=11*) and *emotional support* (*n=11*). This group of respondents also mentioned *tangible support* (*n=14*) from peers the most, followed by *behavioral support* from peers (*n=12*). Notably, *social support* and *emotional support* from peers were both mentioned nine times. The most frequently mentioned types of parent support were *tangible support* (*n=17*), *emotional support* (*n=15*) and *behavioral support* (*n=14*). These findings suggest that the *low-achieving* males, in the sample, acknowledged a high regard for *tangible support* from teachers, parents and peers. *Emotional support* from these three sources was also perceived by *low-achieving* males as having an influence on their achievement outcomes.

Those *low-achieving* males who responded to the last three items on the SSQ identified *tangible support*, *standards* (teaching strategies), *behavioral support* and *emotional support* from teachers as factors that they believe could have contributed to their success in school. The respondents similarly acknowledged a need for *tangible support* from peers; however, some also affirmed a need for "better ideals or values," *social support* and *emotional support*. Notably, some of the respondents also acknowledged that *behavioral support* from peers would have helped them to be more successful in school. Finally, this group of respondents acknowledged a need for *guidance*, *communication support*, *behavioral support* and *emotional support* from their parents.

Low-Achieving Female Findings

SSQ Item #1: Do you think that you are successful student?

Fifty *low-achieving* females provided usable data for analysis. Forty-seven *low-achieving* females answered <u>yes</u> and three answered <u>no</u> to item #1 on the SSQ.

Table 37

Counts of Responses of Low-Achieving Females by Support Type

Support type	SSQ Items					
	Item #2	Item #3	Item #4	Item #5	Item #5	Item #6
Tangible support	26	14	21	4	3	0
Standards	16	1	5	0	0	1
Social support	0	10	2	0	3	0
Guidance	9	7	12	0	1	1
Communication	2	0	2	1	0	2
Behavioral support	10	11	9	1	1	1
Emotional support	18	25	24	5	3	5

Note. The responses to each item of the School Support Questionnaire (see Appendix I) were categorized by support type and totaled. The actual counts are the number of times the type of support was mentioned by the respondents in this achievement group.

<u>SSQ Item #2</u>: What kinds of things have your teachers done during the last twelve years to help you be a successful student?

There were 27 comments identified related to the theme of *tangible support* from teachers. Notably, eleven *low-achieving* female respondents noted that their "teachers stayed after school to provide extra help" and five also mentioned that their teachers provided unspecified help.

There were 16 references to *standards* from teachers as a school success factor. All of the references were related to <u>teaching strategies</u> or the <u>quality of instruction</u> provided. For example, one *low-achieving* female respondent wrote that her teachers "let

me re-take quizzes that I may have failed" and another noted that "my teachers have

helped me by explaining things to me that I may not fully understand."

There were no comments identified related to the theme of *social support*;

however, there were nine references to *guidance* from teachers as a school success factor.

The provision of advice about school was mentioned the most (four times). One

respondent wrote "some of my teachers try to give me advice about what I need to do this

year and how I need to do them" and another noted "they told me to focus more on

school work, study harder…" There were only two comments related to the theme of

communication support. One student noted that her teachers gave her critical feedback

and another reported that her teachers answered her questions.

There were ten references to *behavioral support* from teachers as a school success

factor. Four *low-achieving* female respondents noted that their teachers "pushed them to

do better" and three reported that their teachers monitored their school progress. Notably,

one respondent reported that her teachers "kept her out of trouble" and another

respondent wrote "the teachers at _____ in my 10th and 11th grade year were very

mean and nasty towards me."

There were 18 comments identified related to the theme of *emotional support*

from teachers. Encouragement from teachers was mentioned 12 times. Four *low-achieving* female respondents reported that their teachers encouraged them to do their

best. Two respondents noted that their teachers encouraged them to persist at school and

one reported that her teachers encouraged her to stay in school. One other respondent

commented that her teachers encouraged her to attend school daily.

SSQ Item #3: What kinds of things have your peers done during the last twelve years to help you be a successful student?

There were 14 references to *tangible support* provided by peers. Tutoring support was noted four times and participation in study groups was mentioned twice by *low-achieving* females. There was only one comment identified related to the theme of *standards*. The respondent wrote "my peers want me to go to college and be the best I can be."

There were 10 comments about *social support* from peers as a school success factor. Support from peers was mentioned five times. Four of the *low-achieving* female respondents reported that they associated with a positive peer group, which helped them to be a successful student. One respondent wrote "most of my friends make good grades and that [sic] encouraged me to do the same and I thank them for that." There were seven references to *guidance* from peers as a success factor. Four of the respondents noted that their peers gave them advice about school.

There were no comments related to the theme of communication; however, there were 11 references to *behavioral support* from peers as a school success factor. Three *low-achieving* female respondents reported that their peers "pushed them to do better," two noted that their peers "kept them out of trouble" and two noted that their peers monitored their work/study habits.

There were 25 comments identified related to the theme of *emotional support* from peers. Encouragement from peers was mentioned 20 times by *low-achieving* female respondents. Six of these respondents reported that their peers encouraged them to go to

school. Others reported that their peers encouraged them to do their best in school (*n*=6) and still others noted that their peers encouraged them "not to give up."

SSQ Item # 4: What kinds of things have your parents done during the last twelve years to help you be a successful student?

Among the *low-achieving* female respondents, there were 21 references to *tangible support* from parents as a school success factor. Help with homework and unspecified help were both mentioned seven times. Three respondents noted that their parents provided the resources they needed. For example, one respondent wrote "my parents provided any and everything I need to be successful."

There were five comments about *standards* from parents in the data from *low-achieving* females. Three respondents noted that their parents set high expectations (college) and one respondent reported that her parents stressed the importance of education. There were two references to *social support* from parents. Both respondents noted that their parents supported them.

There were 12 comments related to the theme of guidance. The types of guidance varied and included advice about personal problems (*n*=1) and advice about future plans (*n*=3). Four respondents noted that their parents provided direction in terms of school-related choices.

There were two comments related to the theme of *communication* as a school success factor. Both respondents reported that their parents participated in parent/teacher conferences.

There were nine comments identified related to the theme of *behavioral support* as a school success factor. One *low-achieving* female respondent wrote "my parents made me do my homework" and another noted "they pushed me forward so I won't be left behind. One other respondent reported that she was disciplined for poor grades and another noted that "my parents awarded me for doing well."

There were 24 references to *emotional support* from parents from the *low-achieving* female respondents. Encouragement was mentioned 13 times. Notably, one respondent commented that "my mom and dad used to tell me I could always do better when I was little. But when I got in high school they lost faith in me, so it made me want to prove them wrong! I'm doing it too." Love and attention from parents was mentioned twice and three respondents noted that their parents "inspire them."

Although 47 of the 50 *low-achieving* females indicated that they were successful students, there were three *low-achieving* female respondents who did not. Those respondents were asked to complete the last three items on the SSQ (number five, six and seven); however, some *low-achieving* respondents who were not asked to respond to these items did so. All of the responses to these items were considered usable data for the purpose of data analysis.

SSQ Item # 5: What kind of support from your teachers do you feel would have helped you be a more successful student?

There were four comments identified related to the theme of *tangible support* from teachers. One on one (tutoring) help was mentioned once and help with study habits

was also mentioned once. Two other respondents noted that (unspecified) help from teachers would have enabled them be a more successful student.

There were no comments identified related to the themes of *standards*, *social support* or *guidance*; however, there was one reference to *communication* support as a school success factor. The respondent wrote "taking time to listen to me" would have helped her to be a more successful student.

There was one comment about *behavioral support* from teachers as a success factor. The respondent wrote "I think if some of the teachers weren't so stuck on being strict and nasty towards the students that would have [sic] caused a lot more success out of the teens."

There were five comments identified related to the theme of *emotional support*. Three of the five comments were related to "affirming student's capabilities." For example, one respondent wrote "telling me I am capable of doing better" would have helped her be a more successful student. Another noted that "when they believe in you a lot, then you think you can do it." Notably, one respondent also wrote "my teachers were pretty decent in encouraging me to do well. I just slacked off a lot."

SSQ Item # 6: What kind of support from your peers do you feel would have helped you be a more successful student?

There were three references to *tangible support* from peers as a school success factor. Two of the three *low-achieving* female respondents noted that if peers had helped them with their studies that would have helped them to be a more successful student.

There were no comments related to the theme of *standards*; however, there were three comments about *social support* from peers. One respondent noted that "my peers have challenged me." The second respondent appeared to place a value on the social support from peers she received in her comment "they have faith in me and they can see me walking across the stage with them." The third respondent noted that her "peers could leave the drama alone" and that would have helped her to be a more successful student.

There was only one comment identified related to the theme of *guidance*. The *low-achieving* female respondent commented that peers could have offered her advice about her performance in school.

There were no comments identified related to the theme of *communication* and only one reference to *behavioral support* from peers as a school success factor. That respondent reported that if her peers would have "pushed her to not give up" that would have helped her to be more successful in school.

There were three comments about *emotional support* from peers. Two respondents noted that their peers could have affirmed their capabilities and one of them also commented that "if somebody every now and again say [sic] you can do better than what you're doing." The third respondent wrote "telling me not to give up because I am better than that" would have helped her to be a more successful student.

SSQ Item # 7: What kind of support from your parents do you feel would have helped you be a more successful student?

Among the *low-achieving* females who responded to this SSQ item, there were no comments identified related to the theme of *tangible support*; however, there was one

reference to *standards* from parents. The respondent noted that if her parents had "reminded me that I have to be a successful person if I want money" that would have helped her to be a more successful student.

There was one response to item number seven related to the theme of *social support* from parents. The respondent wrote "if they would have put a little more effort and support into me and my grades…their motto is "if you don't care I don't care."

There was one reference to *guidance* from parents as a success factor. The respondent noted that advice from her parents about the relevance of school to future opportunities would have helped her to be a more successful student.

There were two comments related to the theme of *communication* support. One respondent noted that if her parents had come to meetings at the school that would have helped her to be a more successful student. The other respondent commented that "we have a family chat every Sunday and talk about everything."

There was only one reference to *behavioral support* as a school success factor. The respondent commented that if her parents "had pushed her more" that would have helped her to be a more successful student.

There were five comments related to the theme of *emotional support*. One respondent commented that her parents could have encouraged school attendance and another noted that her parents could have encouraged her to do her best. Two *low-achieving* female respondents noted that if their parents had "shown that they care" that would have helped them to be a more successful student. The last respondent commented

that if her parents had "been there for me" that would have helped her to be a more successful student.

In summary, the most frequently noted types of support from teachers identified by *low-achieving* female respondents were *tangible support* (*n=26*), *emotional support* (*n=18*) and *standards* (*n=16*). The most frequently mentioned types of support from peers were *emotional support* (*n=25*), *tangible support* (*n=14*) and *behavioral support* (*n=11*). Notably, *social support* from peers was mentioned ten times. The most frequently reported types of support received from parents were *emotional support* (*n=24*), *tangible support* (*n=21*) and *guidance* (*n=12*). These findings suggest that for *low-achieving* females in the sample, *emotional support* and *tangible support* from teachers, peers and parents were perceived as important. The findings also suggest that *standards* from teachers, *behavioral support* from peers and *guidance* from parents were also valued by this group of respondents.

The respondents who answered items number five, six and seven provided additional data for analysis. Their responses suggested that teachers could provide more tutoring support to *low-achieving* females and also affirm that they are capable students. These respondents also indicated that if peers assisted them with their school work and acknowledged their capabilities it may have helped some of them to be more successful in school. The comments about parent support suggested that some of the respondents believed that they needed more *social* and *emotional support* from their parents in order to be successful in school.

Qualitative Summary

The following discussion will focus on salient similarities and differences in the qualitative findings from each of the six groups. As noted in Table 38, males across all achievement groups referenced *tangible support* more than the other types of support. Males across all achievement levels also commented more about *behavioral support* than the females within their achievement group and females across all achievement levels referenced *emotional support* more often than males in the same achievement grouping.

Table 38

Similarities and Differences by Group

Support type	Groups					
	HM	HF	MM	MF	LM	LF
Tangible support	24%	23%	25%	23%	26%	26%
Standards	12%	11%	18%	13%	10%	9%
Social support	13%	14%	8%	7%	9%	6%
Guidance	9%	6%	12%	8%	10%	12%
Communication	5%	5%	2%	5%	1%	3%
Behavioral support	18%	14%	18%	17%	21%	13%
Emotional support	19%	27%	17%	27%	23%	31%

Note. The percentages for each category were determined by first calculating the number of times each type of support was mentioned. This number was then divided by the total number of comments for the group to arrive at a percentage for each category.

Even though the overall percentage of references to *tangible support* was higher for males compared to females, females in all three achievement groups commented more

about *tangible support* from teachers than the males within their same achievement

grouping. A similar pattern was found with regard to *tangible support* from peers. *High-*

achieving females made twenty-eight comments about the receipt of *tangible support*

from peers and *middle-achieving* females made twenty-nine comments. *High-achieving*

males (*n*=11) and *low-achieving* males (*n*=14) and females (*n*=14) had the fewest

comments about the receipt of *tangible support* from peers. For those *low-achieving* male

and female respondents who answered the last three items on the SSQ there were no

references to the need for more *tangible support* from parents. Instead, their responses

suggested that they believed that *tangible support* from teachers and peers would have

helped them to be more successful in school.

  Middle-achieving males had the highest percentage of comments about *standards*.

Thirty-one of their comments were about the quality of instruction provided by teachers.

High-achieving males and females mentioned *standards* from teachers fewer than any of

the other groups (eight times each). *Standards* from peers was mentioned the least and

was only mentioned once by *low-achieving* males and *low-achieving* females. *High-*

achieving females mentioned *standards* from parents more than any other group (*n*=24)

followed by *middle-achieving* females (*n*=17). *High- achieving* males (*n*=5) and *low-*

achieving females (*n*=5) mentioned *standards* from parents the least. There were a few

references to *standards* from those who answered the last three items on the SSQ. Most

of those comments were about *standards* from teachers or peers. Some respondents

commented on teaching strategies that they believed would have helped them to be more

successful in school. Others noted that peers could have placed a higher value on school

engagement and performance and that would have helped them to be more successful in school.

In all six groups, peers were mentioned far more frequently than teachers and parents as an important source of *social support*. However, *high-achieving* males and *females* also acknowledged that parents were an important source of *social support*. None of the other groups identified parents as an important source of *social support* and there were only a few comments about teachers as a source of *social support*.

Across all groups, teachers, peers and parents were all perceived to be sources for *guidance*. However, *low-achieving* females, *low-achieving* males, *middle-achieving* males and *high-achieving* males commented more about the receipt of guidance from parents than guidance from teachers and peers. Of those respondents who answered the last three items on the SSQ, there were several comments about the need for more *guidance* from parents. Only *high-achieving* males and females did not endorse this need.

Communication support was mentioned more by *high-achieving* males, *high-achieving* females and *middle-achieving* females than any of the other groups of respondents. These respondents indicated that communication with teachers, peers and parents enabled them to be more successful in school. There were also a few who noted that their parents communicated with their teachers and counselors. Notably, three of the *low-achieving* female and male respondents who answered the last three items on the SSQ acknowledged that more parent/teacher meetings would have helped them to be more successful in school.

Within each group there were a number of different types of *behavioral support* mentioned by the respondents. Teachers, parents and peers were all sources of *behavioral support*. All of the groups, except *low-achieving* females, commented more often about *behavioral support* from parents, *high-achieving* females and *high-achieving* males had considerably more comments about *behavioral support* from parents than from teachers and peers. In contrast, *low-achieving females* had slightly more comments about *behavioral support* from peers than from parents. A number of male and female respondents who answered items number five, six and seven on the SSQ commented that they would have been more successful in school if they had received more *behavioral support* from peers and parents. There were fewer comments from the respondents suggesting that more *behavioral support* from teachers would have made a difference.

Females commented more than males about the relationship between *emotional support* and their achievement in school. For the females in all three achievement groups, teachers, peers and parents were acknowledged as important sources of *emotional support*. This was also noted by those females who answered the last three items on the SSQ with the exception of *high-achieving* females who did not endorse a need for more *emotional support* from peers and teachers. Notably, the *low-achieving* males who responded to the last three items on the SSQ endorsed a need for more *emotional support* from teachers (*n*=5), peers (*n*=4) and parents (*n*=7). In contrast, *high-achieving* and *middle-achieving* males only commented once each regarding a need for more emotional support from peers and parents.

Summary of Quantitative and Qualitative Findings

In the current investigation, more than half of the representative sample was female (55.8%) and almost half received free or reduced lunch (a proxy for family income). Significantly, almost half (44.8%) had scores on the Contextual Risk Index that fell within the high-risk range.

There were five study hypotheses. There was partial support for the first hypothesis that females would report higher scores on support measures. Females reported higher scores on only two peer support measures. However, their scores on one other peer support measure, five parent support measures and one teacher support measure were not statistically significantly different than the males' scores on these measures. The hypothesis that males would report higher scores on the Contextual Risk Index was not supported. Both males and females reported high scores on this measure. As hypothesized, some support measures were associated with better achievement outcomes; however, others were predictive of poorer achievement outcomes. Contextual risk was a consistent predictor of poorer achievement outcomes for the males in the sample. However, this finding was not held for the females in the sample. Even though it was hypothesized that support variables would moderate the influence of Contextual Risk on achievement, there were only two support variables found that moderated the influence of Contextual Risk on male student achievement only.

Qualitative analysis provided evidence that important gender similarities and differences exist with regard to what types of support are associated with school success. Females endorsed emotional support as a success factor more often than males and males

endorsed behavioral support more often than females. Both males and females endorsed

tangible support as a success factor.

Chapter 5: Discussion

The achievement problems that exist among African American adolescents have been a longstanding concern for educators, scholars and school social work practitioners. In response to this concern, there has been considerable scholarly discourse about the causes and correlates of poor achievement among this population of students. Although the issue has been an integral part of educational dialogue for a number of years, it continues to be a social justice concern because there are implications at the individual, family, institutional, community and societal levels.

There is substantial consensus in the empirical literature about the relationship between parent support and African American adolescents' achievement outcomes (Fisher, 2000; Floyd, 1996; Forsbach et al., 2002; Gonzales et al., 1996; Gutman et al., 2002; Maton, et al., 1998; Shearin, 2002). Teacher support has also been found to have an influence on African American adolescent achievement (Floyd, 1996; Forsbach et al., 2002) and some findings suggest that teacher support (Floyd, 1996; Forsbach, 2002; McClendon et al., 2000) can make a critical difference in the achievement outcomes of these students. The findings on peer support have been varied and an overall consensus regarding the influence of peer support on African American adolescents' achievement has not been reached (Cooper & Datnow, 2000; Fisher, 2000; Fordham & Ogbu, 1986; Gutman et al., 2002). Acknowledging the complex nature of this issue, some (Franklin,

2000; Masten, 1994; Taylor, 1994) contend that ecological models that consider contextual influences can provide the best framework for understanding an issue as multifaceted as school achievement.

This chapter will critically examine the study findings and discuss them relative to the conceptual framework, en ecological model, and prior research. Limitations of the study that may affect the validity or generalizability of the results will also be presented. The final two sections of this chapter will include a brief discussion on implications for applied settings and recommendations for future research.

<div align="center">Interpretation of Study Findings</div>

One of the objectives in this process of inquiry was to identify variations that exist by level of achievement within the sample. From a descriptive standpoint, there were a few findings that were noteworthy. Within both gender groups there were fewer participants who were *high-achieving* than *middle-* and *low-achieving* and the overall percentage of *high-achieving* participants was the lowest (28.4%) of the three defined achievement groups. However, their representation in the study sample exceeded what was found in the total study population during the 2006-07 school year. During that school year, only 18% of the African American high school students in the total study population (N= 942) were *high-achieving*. There were only 50 *high-achieving* African American males (5%) in the total population of African American high school seniors. Thirty-three of those males participated in this study. Similarly, there were only 128 *high-achieving* females in the study population and 57 were study participants.

The under-representation of *high-achieving* African American high school seniors in the total study population is particularly disconcerting given the fact that 35% of the African American high school seniors enrolled at the five high schools in the sample school district were *low-achieving* as defined by their weighted cumulative grade point averages. Remarkably, the samples' performance on the second achievement measure, the 11th grade English Reading SOL test, was different. More than one third of the sample (36.9%) earned Advanced/Proficient scores on the English Reading SOL test administered at the end of their 11th grade school year. Almost half (49.8%) of the sample earned Passed/Proficient scores and only 8.8% failed this test. As a second outcome measure, SOL scores were normally distributed whereas the distribution of weighted cumulative grade point averages were positively skewed (the skewness value was more than twice the standard error which indicates a significant departure from symmetry). Taken in combination, these findings suggest that a number of students who demonstrated advanced proficiency in Reading were not *high-achieving* as defined by their weighted cumulative grade point averages. Moreover, this finding calls attention to the complex nature of the problem of school achievement within the African American adolescent community.

In this investigation, there was partial support for the first study hypothesis that females would report higher scores than males on measures of social support. The mean scores of females were higher than the mean scores of males two of the three peer support measures Friend Behavior (FB) and Peer Group Acceptance (PGA); however, the differences between the mean scores for males and females on the third peer support

measure Friend Support (FS) and six other support measures were similar and not statistically significantly different. Additionally, the difference in the mean scores for males and females on both the Social Capital Assets Index (SC) and Social Support Use (SS) measures were not statistically significantly different. The finding that the mean scores of the males and females on the five parent and one teacher support measures were similar and not significantly different is in contrast to the findings of others (Fisher, 2000; Sanders & Herting, 2000) who found that African American adolescent females reported higher levels of parent and teacher support than African American adolescent males.

The second study hypothesis was that males would report higher levels of contextual risk than the females in the sample. This hypothesis was not supported. The mean scores that males and females received on the Contextual Risk Index (CR) were not significantly different. This is a salient finding especially in light of the fact that both males and females had higher scores on the Index than what would be expected.

The hypothesis that African American adolescents who reported higher levels of social support from teachers, peers and parents would have better achievement outcomes was only partially supported. Some support variables were predictive of better achievement outcomes whereas others were predictive of poorer achievement outcomes.

In the full regression model (see Figure 3), four support variables contributed to the variance in grade point averages (GPA). However, subsequent regression models confirmed that there were gender differences relative to what predictors held for males and females. For example, School Behavior Expectations (SBE) was a reliable predictor for females but it was not a predictor for males. Teacher Support (TS) was a predictor for

males, but not for the females and only one support variable, Family Togetherness (FT), was a predictor for both males and females. In all of the regression models, higher scores on FT were associated with lower GPA. There were no peer support measures that were predictors in the male models; however, Peer Group Acceptance (PGA) was negatively correlated with GPA in some of the female regression models. The current findings on teacher and parent support are in contrast to the findings of others (Fisher, 2000; Richman et al., 1998) who found that both teacher and parent support for older adolescents were associated with better (self-reported) grades. It is also inconsistent with others (Gonzales, et al., 1996) whose findings suggest that for African American adolescents certain types of parent support (maternal restrictive control for those in high risk neighborhoods) were associated with better grades. Significantly, none of these studies focused solely on the experiences of African American high school seniors.

As noted in Figure 4, there were four support variables that helped to explain the variance in the English Reading Standard of Learning Test score (SOL) in the regression model that included all possible study variables. (Figure 3 and Figure 4 can be found at the end of chapter five.) In the whole group analysis, Home Academic Environment (HAE) and Friend Support (FS) were predictive of higher SOL test scores and Family Togetherness (FT) and Parent Education Support (PES) were associated with lower SOL test scores. Additional analysis of the female data verified that higher scores on Parent Support (PS) were associated with lower SOL test scores. Conspicuously, there were no support variables that predicted SOL for the males.

The findings that three parent support measures were negatively correlated with one or both of the achievement outcomes is a discomfirmatory finding. It is also a compelling finding in light of the fact that a number of other studies involving African American adolescents provide evidence that parent support (Gonzales, et al., 1996; Gutman, et al., 2002; Lagana, 2004; Shearin, 2002) is associated with better achievement outcomes.

The fourth study hypothesis was that African American adolescents who reported higher levels of contextual risk would have poorer achievement outcomes. There was considerable, although partial, confirmatory support for this hypothesis. In a number of regression models, higher scores on the Contextual Risk Index (CR) predicted lower grade point average (GPA). CR was a consistent predictor in both the GPA and SOL regression models for males. However, it was not a consistent predictor in the female regression models; for females, higher levels of contextual risk were not associated with poorer achievement outcomes. The findings that CR did not contribute to the variance in GPA for females differs from the findings of Gutman et al. (2002) who found that African American 7th grade adolescents, both male and female, had lower grade point averages and lower achievement scores as their exposure to risk increased.

The final study hypothesis was that social support variables would moderate the effects of Contextual Risk (CR) on achievement. This hypothesis was only partially supported. For the males in the sample, there were only two social support variables that moderated contextual risk. There was an interaction between Family Togetherness (FT) and Contextual Risk (CR). FT altered the influence of CR on GPA; it decreased the

impact (moderated) of CR on GPA. However, the decrease was minimal. The interaction between Friend Support (FS) and Contextual Risk (CR) on SOL also resulted in a decrease in CR's effects on SOL.

Examining the Study Findings in a Theoretical Context

The eco-interactional-developmental [EID] perspective advanced by Richman and Bowen (1997) and Richman et al. (2004) considers individual variations in students' educational outcomes from the perspective of risk, protection and resilience. The EID perspective also advances the notion that individuals are evolutionary and adaptive in response to their social environments. Central to this perspective is the Bronfenbrenner (1979) conceptualization of each individual being situated in four social environments or regions and each of these regions is embedded within the next region. This study focused solely on the interactions that occur in the microsystems or the social environments in which adolescents' directly and actively participate (i.e. home, school or peer group). According to Bronfenbrenner and others (Swanson & Spencer, 1997; Taylor, 1994), what occurs in these social environments is critically important to a number of different developmental outcomes for adolescents including achievement in school.

Males and females in the sample were similar with regard to reported levels of social support from significant others within their home and school microsystems. Gender differences were found within the microsystem of the peer group, females reported higher levels of Friend Behavior and Peer Group Acceptance support from peers than males. The finding that females reported more peer support than males was partially upheld in the qualitative findings. Females who were *high-achieving* and *middle-*

achieving reported more *tangible support* from their peers than the males in their achievement grouping. Similarly, females that were *high-achieving* and *low-achieving* reported more *emotional support* from their peers than the males in their achievement group.

Qualitative evidence suggests that other important gender differences exist with regard to perceptions of support provided within the samples' home, school and peer group environments. Across all three achievement level groups (*high-achieving*, *middle-achieving* and *low-achieving*) females reported the receipt of more *emotional support* from their teachers, peers and parents than their male counterparts. In contrast, males referenced *behavioral support* as a success factor more often than females. Males in the sample also mentioned *tangible support* from teachers as a success factor less often than the females within their same achievement group. Notably, *communication* support was mentioned more by *high-achieving* males and females and *middle-achieving* females than any of the other groups of respondents. What is significant about the findings on *communication* support is that *communication* support can be conceptualized as a measure of the quality of interactions at the mesosystem level (the relationships between two or more settings in which an adolescent participates or interacts). As such, it was mentioned the least by the respondents as a success factor (see Table 38).

A compelling finding in this study was that three of the parent support measures (conceptualized as protective influences) were negatively associated with one or both of the achievement outcomes. Higher scores on these measures were associated with poorer achievement outcomes. One plausible explanation for this finding is related to the timing

of the investigation, during the participants' senior school year. According to Rutter

(1987), timing is particularly important in understanding protective processes and pivotal

points in time offer the best opportunity for understanding the relationship between

vulnerability, risk and protection. Arguably for all high school students, their senior year

represents a key turning point or a pivotal point in time that determines the direction or

trajectory for years to follow. Presumably, at this point in their educational career many

of the *low-achieving* study participants were at increased risk for not meeting the

requirements for graduation (passing required courses and standardized tests). Applying

Rutter's framework to our understanding, higher scores on these parent support measures

could be a consequence of these students' heightened need for protection (i.e. support).

From this standpoint, Family Togetherness (FT), Parent Education Support (PES), and

Parent Support (PS) operate to increase the likelihood of a more positive outcome

(completion of high school). This view is consistent with the EID perspectives' emphasis

on the quality of interactions or "goodness of fit" between the individual and the

environment in which they directly participate. In this analysis, *low-achieving*

participants could be described as seeking the "best fit" and therefore relying more on

certain types of resources provided by their parents during this pivotal point in time. An

alternative plausible explanation for this finding has to do with "context." Does this

finding suggest that *low-achieving* participants' home environments offer some types of

parent support that are not found in more academically competent participants' home

environments? Or does it suggest that academically competent African American high

school seniors are more autonomous in terms of their needs for the aforementioned types

of parent support during their senior year in high school? Given the limited focus of this study (relying solely on the participants' perspective) and the fact that this study did not include longitudinal data, the answers to these questions are unattainable.

An examination of the study findings would be incomplete without some discussion of relevant findings regarding contextual risks. The finding that a large percentage (44.8%) of the sample acknowledged exposure to situations and conditions in their social environments (family, school, peer group and neighborhood) that increased the likelihood for poor developmental outcomes is noteworthy. Not only does this suggest that almost half of the participants were at increased risk for poor developmental outcomes, but it also suggests that issues of safety and security may be more paramount for a sizable portion of the study population. According to Maslow's (1954) hierarchy, safety and security are basic needs that must be met in order for an individual to attain higher level needs such as self-respect, adequacy, mastery and self-actualization (Hutchison, 2003). The finding that contextual risk effects were more predictive of poorer achievement outcomes for males than for females suggest that African American males may have been more vulnerable to these effects.

<div align="center">Limitations of the Generalizabilty of the Study Findings</div>

In this investigation, a functionalist epistemological approach was used to investigate the relationship between several different variables and the achievement outcomes of African American high school seniors. This type of approach to inquiry requires that the researcher set limits on the options of responses based on observable, measurable and agreed upon indicators with the goal of confirming *a priori* research

and/or theory. In this investigation, the researcher used the EID perspective as the conceptual framework to provide explanations of the "objective" reality that is based on *a priori* theory and research. Quantitative and qualitative data were obtained simultaneously with quantitative inquiry being considered as the dominant approach and the qualitative findings included as a supplementary component for analysis. The standards for qualitative inquiry based on a functionalistic approach are similar to those required of quantitative inquiry. Functionalist qualitative inquiry by design reduces word data to constructs that limit the opportunities for participants to provide more rich, meaningful and explanatory data. In qualitative inquiry "thick descriptions" are necessary to meet one of the criteria for external validity (one aspect of trustworthiness). Without it, there is limited support for generalizing qualitative findings beyond the sample under study (Rudestam & Newton, 2001).

The process of stratified random sampling yielded a representative sample that enabled the researcher to generalize the results of the study from the sample to the study population. However, the generalizability of the findings is limited to that population.

When a representative sample is obtained, cross-sectional survey methods can be used to describe or explain the population. However, this type of research does not allow the investigator to infer causality. Cross-sectional survey methods are time and context bound, but they often cannot capture the full range of possibilities within the context of social life (Rubin & Babbie, 2001). The present study only captured the self-reports of the participants based on their recollections or prospective actions and the evidence gained in this inquiry did not include the perspectives of others (parents, teachers and

peers) that could have provided more substantial data about the relationship between the variables of interest and the participants' achievement outcomes.

<div align="center">Implications of the Findings for Applied Settings</div>

McLoyd (1998) argues that within ethnic group studies, or those that focus on a single group, enable a researcher to study adolescents who belong to ethnic groups without comparing them to others groups that may or may not have the same or similar cultural experiences. Not only does it allow the researcher an opportunity to identify and describe issues of particular importance to the group, this type of research can also be used to document the impact of cultural factors on particular outcomes (McLoyd, 1998).

As older adolescents, African American high school seniors actively participate in microsystems that provide context-linked experiences that optimally offer the necessary supports required for them to successfully transition into adulthood. Not only are these context-linked experiences particularly critical to adolescents' beliefs about themselves including their capabilities and potentialities, but they also form the basis for the development of autonomy. During late adolescence, the development of autonomy is critically important because it is during this stage that individuals are expected to successfully transition into an adult role where there are increasing demands for responsible and independent behavior (Spencer, 2001). Irrespective of social status or individual challenges, one of the other normative developmental tasks associated with this stage of adolescence is the acquisition and demonstration of academic competence. Arguably, the acquisition and demonstration of academic competence provides the

foundation skills for a successful transition into college or a host of careers after high school.

Given what is known about adolescent development, there is a growing consensus (Franklin, 2000; Gutman et al, 2002; Sameroff & Gutman, 2004; Taylor, 1994) that decisions about appropriate interventions for students at risk should be carefully considered and informed by research and practice wisdom (Fraser & Allen-Meares, 2004). Fraser and Allen-Meares (2004) argue that interventions for students at risk should be tailored based on a number of different factors such as gender, race/ethnicity, cultural background, and socio-economic status. For example, the evidence obtained in this investigation support that there are important gender differences that should be considered especially with regard to what influences are associated with participants' achievement outcomes during their senior year in high school. Even though it is difficult to speculate from this study's findings about what protective or risk factors were present prior to the participants' senior year, the evidence suggests that for a large segment of the study sample, regardless of gender, there appears to be a need for earlier intervention if the goal is to improve their achievement outcomes.

Within the existing literature, there is growing evidence that although African American adolescent males report lower levels of teacher support than African American adolescent females the effect of teacher support on African American male adolescent behavior may be stronger than it is on African American female adolescent behavior (Fisher, 2000; Mickelson & Greene, 2006). This study's finding that Teacher Support (TS) contributed to the variance in GPA for the males provides more evidence that there

are school level factors that can potentially mitigate other influences on African American adolescent males' school achievement. Furthermore qualitative findings suggest that certain types of teacher support (e.g. staying after school for extra help) were perceived to be especially beneficial to males at every achievement level. The qualitative findings also confirm that the African American adolescents are concerned about the quality of instruction provided by teachers. This concern was identified by male and female participants within all three achievement groups.

The role of parent or family support is well documented in the support literature and the present study's findings increase our knowledge about types of parent support that are associated with better achievement outcomes. The empirical evidence obtained also heightens are awareness of the quality of interactions that may be occurring within the home environments of African American high school seniors who are *low-achieving*. Notably, two types of parent support predicted better achievement outcomes, clear expectations about school behavior and performance and opportunities to discuss with parents a variety of school-related topics as well as future plans. The latter finding is consistent with Honora's (2002) finding that higher achieving African American adolescents used family members as role models of what to expect in the future and that their parents offered guidance about future plans. Taken in combination, these findings suggest that guidance from parents is especially beneficial to African American adolescents. The current study findings also support the need for intervention at the family level that facilitates stronger connections between homes and schools as

mesosystem level connections are associated with better developmental outcomes

(Epstein, 1995; Fraser, Kirby & Smokowski, 2004; Kirby & Fraser, 1997).

Finally, the current findings that gender differences exist with regard to peer

support increases our understanding about African American adolescent peer behavior in

the context of their schooling experiences. Moreover, the analysis of qualitative data

confirmed that African American adolescents have ambivalent feelings about the role of

peer support relative to their achievement in school. Some participants acknowledged the

need for more peer support whereas others did not feel as though peer support was a

"necessary" type of support in terms of their schooling outcomes. When you combine the

findings on peer support with those on contextual risks and consider the knowledge that

peers exert significant influence on the daily behavior of adolescents (Wang et al., 1998)

they provide a strong argument for intervention with African American adolescents that

addresses some of their "peer related" issues. For example, in the qualitative analysis

standards from peers was mentioned the least as a success factor relative to standards

from teachers and parents. Even though many of the respondents did not identify

standards as a success factor, some of the lower achieving respondents acknowledged the

need for their peers to place a higher value on education. Notably, the qualitative findings

also confirmed that study participants placed a high value on the receipt of *tangible*,

social and *emotional* support from their peers.

The study findings support a systemic conceptualization of academic achievement

(Epstein, 1995; Sanders, 1998) that considers spheres of influence (peers, families,

schools and communities) on African American adolescents' academic achievement.

According to Epstein (1995), there is a critical need to understand the role of support systems and ecological factors in our efforts to facilitate stronger connections between families, schools and communities with the goal of providing supportive contexts for urban African American adolescent students to develop and sustain academic competence.

<div align="center">Recommendations for Future Research</div>

In the current study, 92% of the participants reported that they were successful students. This was an unexpected finding because nearly 32% of the participants were *low-achieving* as defined in this study as having a weighted cumulative grade point average below 1.99. Given the fact that most of the respondents perceived themselves as successful in spite of their grades in school, there appears to be a need for future research that examines how African American adolescents define success in school. Qualitative inquiry, perhaps an interpretivist or constructivist approach, could expand our understanding about how African American adolescents define this aspect of their "social reality." From an interpretivist perspective, social reality is defined by the study participants as opposed to that of an observer. The primary goal of interpretivist inquiry is to expand understanding of the subjective experience in question.

Multiple regression analysis revealed that 19.1% of the variance GPA was accounted for and 81.9% of the variance was not explained by the model with all possible predictors. Similarly, only 13.9% of the variance in SOL was accounted for by the model with all of the predictors. Measurement error could account for some of the unexplained variance in both models or it may be that the scope of this study was too limited and

future research that includes other external influences and internal factors potentially will offer more in terms of increasing our understanding of what factors influence African American adolescent achievement outcomes.

Absent from this study are the perspectives of others who participate within the microsystems within which African American high school seniors actively participate. Future research that includes their perceptions would help us to understand more about the role of risk and protection during this pivotal point in time for these students. Also absent from the existing literature are the perspectives of parents and teachers of *low-achieving* students and this suggest that their experiences are not well documented and perhaps not an integral part of the dialogue regarding African American adolescent school achievement.

This study focused solely on the experiences of African American high school seniors enrolled in an urban school district in southeastern Virginia. Even though there are distinct benefits to within ethnic group studies, there is also a need for more culturally sensitive comparative research that examines contextual influences on school achievement to extend our understanding about how context-linked experiences differ along a number of dimensions including race/ethnicity, gender and socio-economic status.
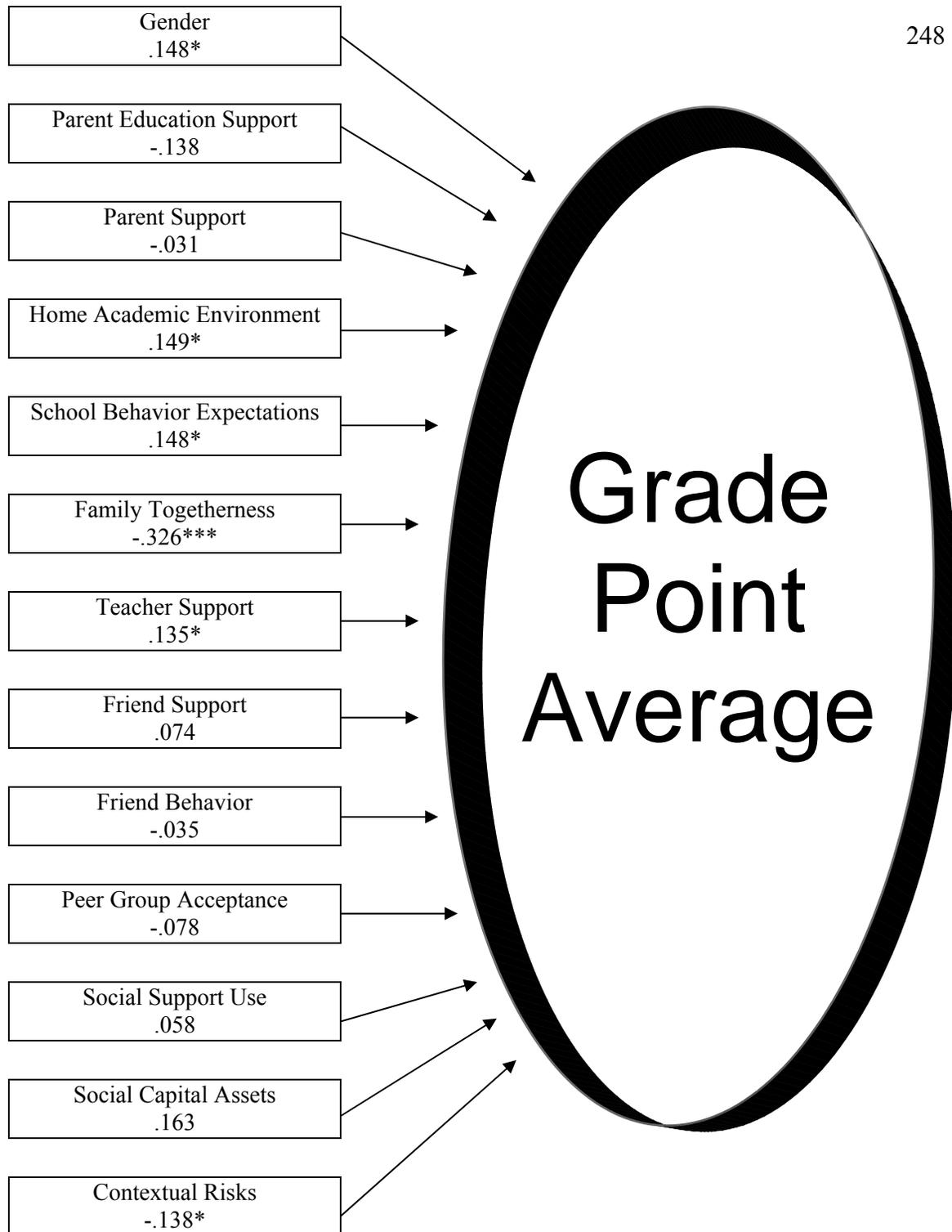
Figure 3. Full Regression Model for Predicting GPA

Note. Results are from the whole group analysis (N = 317). Model contains all possible predictors. Standardized coefficients reported.
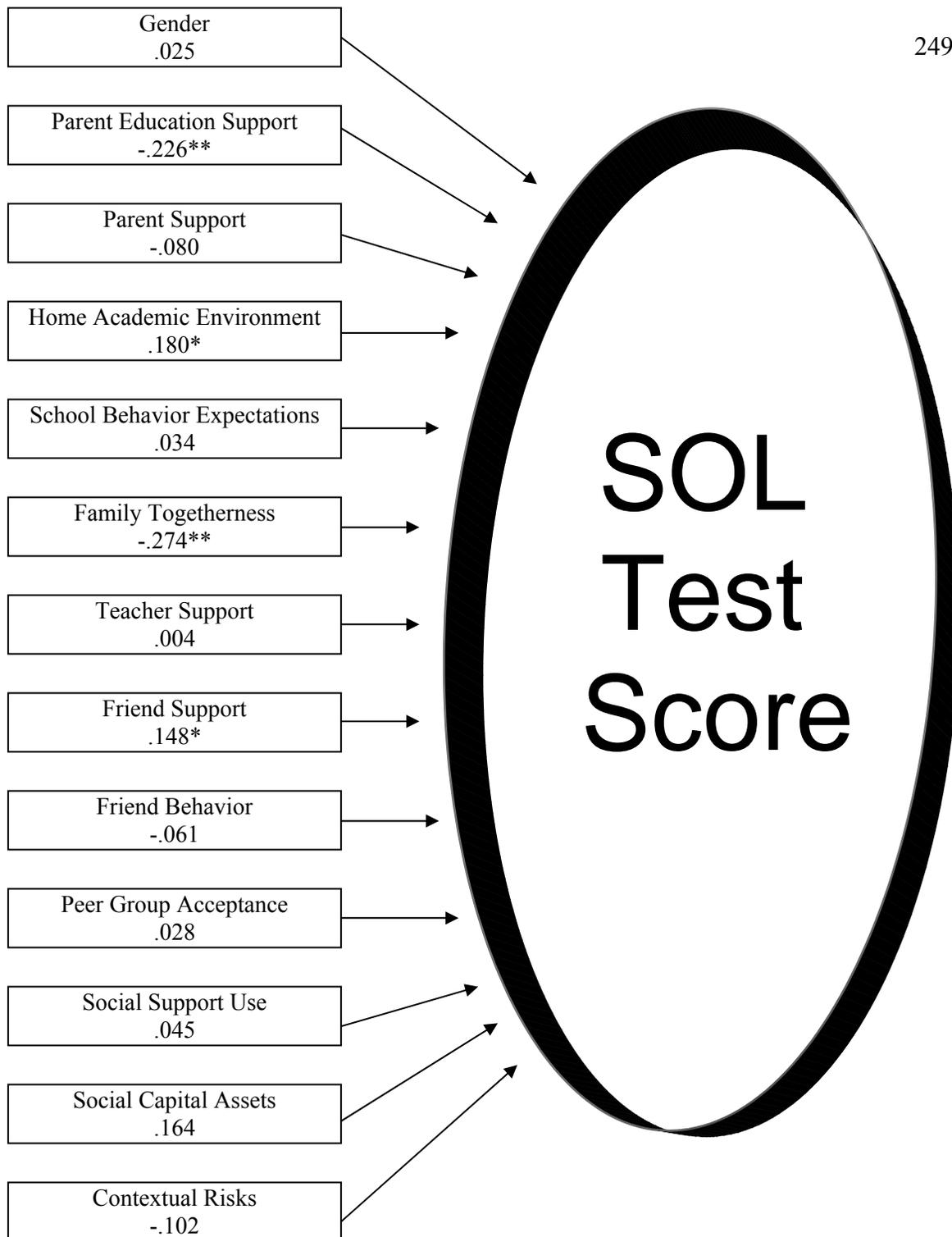
Figure 4. Full Regression Model for Predicting SOL Test Performance

Note. Results are from the whole group analysis (N= 317). Model contains all possible predictors. Standardized coefficients reported.

REFERENCES

References

Allen-Meares, P. (1999). African American males: Their status, educational plight, and the possibilities for their future. In L. Davis (Ed.), *Working with African American males: A guide to practice* (pp.117-128). Thousand Oaks, CA: Sage Publications.

Anderson, J.D. (1988). *The education of blacks in the south, 1860-1935*. Chapel Hill, NC: The University of North Carolina Press.

Antonovsky, A. (1991). The structural sources of salutogenic strengths. In C.L. Cooper & R. Payne (Eds.), *Personality and stress: Individual differences in the stress process* (pp.67-104). Chichester, England: John Wiley & Sons.

Baker, M., (1985). *What will tomorrow bring: A study of the aspirations of adolescent women.* Ottawa, ON: The Advisory Council on the Status of Women.

Bempechat, J. (1998). *Against all odds: How at-risk students exceed expectations*. San Francisco, Jossey-Bass Publishers.

Benard, B. (1991). *Fostering resilience in kids: Protective factors in the family, school and community*. Portland, OR: Western Center for Drug Free Schools and Communities.

Boocock, S. (1972). *An introduction to the sociology of learning*. Boston: Houghton Mifflin Co.

Bowen, G.L. & Richman, J.M. (2002). *School success profile: Detailed group report*. The University of North Carolina at Chapel Hill, NC: Jordan Institute for Families.

Bowen, G.L., Rose, R.A., & Bowen, N.K. (2004). *The reliability and validity of the School Success Profile* [Monograph]. The University of North Carolina at Chapel Hill, NC: Jordan Institute for Families.

Bowen, N.K., & Bowen, G.L. (1998). The effects of home microsystem risk factors and school microsystem protective factors on student academic performance and affective investment in schooling. *Social Work in Education*, *20*(4), 219-231.

Bowen, N.K., & Bowen, G.L. (1999). Effects of crime and violence in neighborhoods and schools on the school behavior and performance of adolescents. *Journal of Adolescent Research*, *17*, 319-342.

Bowser, B.P. & Perkins, H. (1991). Success against odds: Young gifted black men tell what it takes. In B.P. Bowser (Ed.), *Black male adolescents: Parenting and education in community context*. Lanham, MD: University Press of America.

Bradley, R.H., Whiteside, L., Mundfrom, D.J., Casey, P.H., Kelleher, K.J., & Pope, S.K. (1994). Early indications of resilience and their relation to experiences in the home environments of low birth weight, premature children living in poverty. *Child Development, 65*, 346-360.

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

Bronfenbrenner, U. (1986). Ecology of the family as a context to human development: Research perspectives. *Developmental Psychology*, *22*, 723-742.

Caplan, R.D. (1983). Person—environment fit: Past, present, and future. In C.L. Cooper (Ed.), *Stress research* (pp. 35-78). New York: John Wiley & Sons.

Caplan, R.D. (1987). Person—environment fit theory and organizations: Commensurate dimensions, time perspectives, and mechanisms. *Journal of Vocational Behavior*, *31*, 248-267.

Carl, M.L., Pawlak, E. J., & Dorn, D.M. (1982). Research on truancy. In R. Constable & J. Flynn (Eds.), *School social work: Practice and research perspectives* (pp. 164-180). Homewood, IL: Dorsey Press.

Cauce, A.M. (1986). Social networks and social competence: Exploring the effects of early adolescent friendships. *American Journal of Community Psychology*, *14*, 607-628.

Cauce, A.M., Felner, R.D., Primavera, J. (1982). Social support in high- risk adolescents: Structural components and adaptive impact. *American Journal of Community Psychology*, *10*, 417-428.

Cazden, C., John, V., & Hymes, D. (Eds.). (1972). *Functions in the classroom*. New York: Teachers College Press.

Chenoweth, K. (1998). The College Board decries preparation gap. *Black Issues in Higher Education*, *15*(15),…

Chess, S. (1989). Defying the voice of doom. In T. Dugan & R. Coles (Eds.), *The child in our times* (pp. 179-199). New York: Brunner/Mazel.

Cichetti, D. (1993). Developmental psychopathology: Reactions, reflections, projections. *Developmental Review*, *13*, 471-502.

Cichetti, D., & Toth, S.L. (1992). The role of developmental theory in prevention and intervention. *Development and Psychopathology*, *4*, 489-493.

Clarke, P. (1995). Risk and resilience in adolescents: The current status of research on gender differences. *Equity Issues*, *1* (1), 1-13.

Clarke, R. (1983). *Family life and school achievement: Why poor black children succeed or fail*. Chicago: University of Chicago Press.

Cobb, S. (1976). Social support as a moderator of life stress. *Psychosomatic Medicine*, *38*, 300-314.

Coie, J.D., Watt, N.F., West, S.G., Hawkins, J.D., Asarnow, J.R., Markman, H.J., Ramey, S.L., Shure, M.B., & Long, B. (1993). The science of prevention: A conceptual framework and some directions for a national research program. *American Psychologist, 48*, 1013-1022.

Coleman, J.S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, *94* (Suppl.), S95-S120.

College Board, 1999. 1999 profile of college-bound seniors. New York.

Connell, J.P., Spencer M.B., & Aber, J.L. (1994). Educational risk and resilience in African-American youth: Context, self, action, and outcomes in school. *Child Development*, *65*, 493-506.

Connell, J.P., & Wellborn, J.G. (1991). Competence, autonomy and relatedness:

    A motivational analysis of self-esteem processes. In M.Gunnar & A.

    Sroufe (Eds.), *Minnesota Symposium on Child Psychology* (Vol. 23,

    pp. 43-77). Hillsdale, NJ: Erlbaum.

Cooper, R., & Datnow, A. (2000). African-American student success in Independent

    Schools: A model of family, school, and peer influences. In M.G.

    Sanders (Ed.), *Schooling students placed at risk: Research, policy, and practice in*

    the education of poor and minority adolescents (pp. 187-205). Mahway, NJ:

    Lawrence Erlbaum Associates, Publishers.

Cotterell, J.L. (1992). The relation of attachments and supports to adolescent well-being

    and school adjustment. *Journal of Adolescent Research*, *7*, 28-42.

Cronbach, L.J., Linn, R. L., Brennan, R.L., & Haertel, E.H. (1997). Generalizabiltiy

    analysis for performance assessments of student achievement or school

    effectiveness. *Educational and Psychological Measurement*, 57 (3), 373-399.

Croninger, R.G., & Lee, V.E. (2001). Social capital and dropping out of high school:

    Benefits to at-risk students of teachers' support and guidance. *Teachers College*

    Record, *103* (4), 548-581.

Duncan, G. (1984). *Years of poverty, years of plenty*. Ann Arbor, MI: University

    of Michigan of Social Research.

Dupper, D.D. (1993). Preventing school dropouts: Guidelines for school social work

    practice. *Social Work in Education, 15* (3*),* 141-147.

Ekstrom, R.B., Goertz, M.E., Pollack, J.M., & Rock, D. A. (1986). Who drops out of high school and why? Findings from a national study. *Teachers College Record*, *87*, 356-373.

Epstein, J. (1995). School/family/community partnerships: Caring for the children we share. *Phi Delta Kappan*, *76*, 701-712.

Farkas, G., Grobe, R., Shuan, Y. (1990). Cultural differences and school success: Gender, ethnicity, and poverty groups within an urban school district. *American Sociological Review*, *55*, 127-142.

Farmer, L. (2001). Longitudinal exploration of the caste theory of educational aspirations. *Children and Schools*, *23* (3), 160-170.

Fisher, T.A. (2000). Predictors of academic achievement among African-American adolescents. In Sheila T. Gregory (Ed.), *The academic achievement of minority students: Perspectives, practices, and prescriptions* (307- 334. Lanhan, MD: University Press of American, Inc.

Floyd, C. (1996). Achieving despite the odds: A study of resilience among a group of African American high school seniors. *Journal of Negro Education*, *65* (2), 181-189.

Foley, D.E. (1991). Reconsidering anthropological explanations of ethnic school failure. *Anthropology and Education Quarterly*, *22*, 60-86.

Forsbach, T., Yanowitz, K., & Fiala, T. (2002). African-American students' perceptions of school success. *Academic Exchange Quarterly*, *6*(1), 186-191.

Fordham, S., & Ogbu, J. (1986). Black students' school success: Coping with the "burden of 'acting White'." *The Urban Review, 18* (3), 176-206.

Franklin, W. (2000). Students at promise and resilient: A historical look at risk. In M.G. Sanders (Ed.), *Schooling students placed at risk: Research, policy, and practice in the education of poor and minority adolescents* (pp. 3-16). Mahway, NJ: Lawrence Erlbaum Associates, Publishers.

Fraser, M.W., & Allen- Meares, P (2004). Intervention with children and adolescents. In Allen-Meares, P. & Fraser, M. (Eds.), *Intervention with Children and Adolescents: An Interdisciplinary Perspective* (pp. 532-544). Boston: Pearson Education, Inc.

Fraser, M.W., Kirby, L.D., & Smokowski, P.R. (2004). Risk and resilience in childhood. In M.W. Fraser (Ed.), *Risk and resilience in childhood: An ecological perspective* (2nd ed., pp.13-66). Washington, DC: NASW Press.

Fraser, M.W., Randolph, K.A., & Bennett, M.D. (2000). Prevention: A risk and resilience perspective. In P. Allen-Meares & C. Garvin (Eds.), *The handbook of social work direct practice* (pp. 89-111). Thousand Oaks, CA: Sage Publications, Inc.

Furstenberg, F.F. Jr., & Hughes, M.E. (1995). Social capital and successful development among at-risk youth. *Journal of Marriage and the Family, 57*, 580-592.

Garbarino, J. (1995). *Raising children in a socially toxic environment*. San Francisco, CA: Jossey-Bass, Inc.

Garmezy, N. (1985). Stress resistant children: The search for protective factors. In J.E. Stevenson (Ed.) *Recent research in developmental psychology* (pp.213-233). Tarrytown, NY: Pergamon Press.

Garmezy, N. (1990). A closing note: Reflections on the future. In J. Rolf, A. Masten, D. Cichetti, K. Nuetchterlein, & S. Weintraub (Eds.), *Risk and protective factors in the development of psychopathology* (pp. 527-534). New York: Cambridge University Press.

Garmezy, N. (1993). Children in poverty: Resilience despite risk. *Psychiatry, 56*, 127-136.

Garmezy, N., & Masten, A. (1991). The protective role of competence indicators in children at risk. In E.M. Cummings (Ed.), *Life span developmental psychology*: *Perpectives on stress and coping* (pp. 151-176). Hillsdale, NJ: Lawrence Erlbaum.

Germain, C.B. (1979). Ecology and social work. In C.B. Germain (Ed.), *Social work practice: People and environments* (pp. 1-22). New York: Columbia University.

Germain, C.B. (2002). An ecological perspective on social work in schools. In R. Constable, S. McDonald, & J.P. Flynn (Eds.), *School social work: Practice, policy, and research perspectives* (5th ed., pp. 25-35). Chicago: Lyceum Books, Inc.

Germain, C.B., & Gitterman, A., (1995). Person-in-environment. In R.L. Edwards (Ed.), *Encyclopedia of social work* (19th ed., Vol. 2, pp. 1818-1827). Washington, D.C.: NASW Press.

Gilbert, S., Barr, L, Clark, W., Blue, M., Sunter, D. (1993). Leaving school: Results of of a national survey comparing school leavers with high school graduates 20 years of age. Ottawa, ON: Human Resource Development Canada.

Graham, S. (1992). "Most of the subjects were white and middle class." Trends in published research on African Americans in selected APA journals, 1970-1989. *American Psychologist*, *47*, 629-639.

Greif, G.L., Hrabowski, F.A., & Maton, K.I. (2000). African American mothers of academically successful sons: Familial influences and implications for social work, *Children & Schools*, *22*(4), 232-245.

Gonzales, N.A., Cauce, A.M., Friedman, R.J., & Mason, C.A. (1996). Family, peer, and neighborhood influences on academic achievement among African-American adolescents: One year prospective effects, *American Journal of Community Psychology*, *24* (3), 365- 388.

Gutman, L.M., & McLoyd, V.C. (2000). Parents' management of their children's education within the home, at school, and in the community: An examination of African-American families living in poverty. *The Urban Review*, *32*(1), 1- 24.

Gutman, L.M., Sameroff, A.J., & Eccles, J.S. (2002). Academic achievement of African American students during early adolescence: An examination of multiple risks, promotive, and protective factors. *American Journal of Community Psychology*, *30*(3), 367-399.

Haertel, E. (1999). Validity arguments for high-stakes testing: in search of the evidence. *Educational Measurement: Issues and Practice, 18*(4), 5-9.

Haladyna, T. M., Nolen, S.B., & Haas, N.S. (1991). Raising standardized achievement test scores and the origin of test score pollution. *Educational Research*, *20* (5), 2-7.

Hale, J.E. (2001). *Learning while Black: Creating educational excellence for African American children*. Baltimore, MD: John Hopkins University Press.

Hernstein, R. & Murray, C. (1994). *The Bell Curve: Intelligence and class structure in American life*. New York: The Free Press.

Hill, R. (1999). *The strengths of African American families: Twenty-five years later*. Lanham, MD: University Press of America, Inc.

Honora, D.T. (2002). The relationship between gender and achievement to future outlook among African American adolescents. *Adolescence*, *37* (146), 301-316.

House, J. (1981). *Work stress and social support*. Reading, MA: Addison-Wesley. *Introduction to the court opinion on the Plessy vs. Ferguson case*. Retrieved on April 7, 2003, from http://usinfo.state.gov/usa/infousa/facts/democrac/33.htm

Hrabowski, F.A., Maton, K.I., Greene, M.L., & Greif, G.L. (2002). *Overcoming the odds: Raising academically successful African American young women*. New York: Oxford University Press.

Huberman, A.M. & Miles, M.B. (1998). Data management and analysis methods. In N.K. Denzin & Y.S. Lincoln (Eds.), *Collecting and interpreting qualitative materials* (pp. 179-210). Thousand Oaks, CA: Sage Publications.

Hutchison, E.D. (2003). *Dimensions of human behavior: The changing life course*. Thousand Oaks, CA: Sage Publications.

Irvine, J. (1990). *Black students and school failure*. New York: Praeger.

Keith, T.Z., & Benson, M.J. (1992). Effects of manipulable influences on high school grades across five ethnic groups. *Journal of Educational Research*, *86* (2), 85-93.

Kirby, L. D., & Fraser, M.W. (1997). Risk and resilience in childhood. In M.W. Fraser (Ed.), *Risk and resilience in childhood: An ecological perspective* (pp. 10-33). Washington: NASW Press.

Kuppermintz, H. (1996). The Bell Curve: Corrected for skew. *Educational Policy Analysis*, *4* (20), 1-13.

Lamb, V. L., Land, K.C., Meadows, S.O., & Traylor, F. (2005). Trends in African American child well-being, 1985-2001. In V.C. McLoyd, N. E. Hill & K. A. Dodge (Eds.), *African American family life* (pp. 45- 77). Guilford Press: New York.

Lagana, M. T. (2004). Protective factors for inner-city adolescents at risk of school dropout: Family factors and social support. *Children & Schools*, *26* (4), 211-220.

Lee, J., Grigg, W. S., & Dion, G.S. (2007). *The nation's report card: Reading 2007 executive summary*. Retrieved February 5, 2008 from http://nces.ed.gov/nationsreportcard/pubs/main2007/2007494.asp

Lee, J., Grigg, W.S., & Donohue, P.L. (2007). *The nation's report card: Mathematics 2007 executive summary*. Retrieved February 5, 2008 from http://nces.ed.gov/nationsreportcard/pubs/main2007/2007494.asp

Lerner, R.M. (1995). *America's youth in crisis: Challenges and options for programs and policies*. Thousand Oaks, CA: Sage Publications.

Linver, M.R., Fuligni, A.S., Hernandez, M. & Brooks-Gunn, J. (2004). Poverty and child development. In P. Allen-Meares & M.W. Fraser (Eds.), *Intervention with children and adolescents: An interdisciplinary perspective* (pp. 106-129).

Livingston, A.H., & Miranda, S. (Eds.). *The condition of education, 1995*. Washington: U.S. Department of Education, National Center for Educational Statistics.

Luthar, S. (1991). Vulnerability and resilience. A study of high-risk adolescents. *Child Development*, *62*, 600-616.

Luthar, S., Cichetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development, 71*(3), 543-562.

Luthar, S., & Zigler, E. (1991). Vulnerability and competence: A review of research on resilience in childhood. *American Journal of Orthopsychiatry*, *61*, 6-22.

Maslow, A. (1954). *Motivation and personality*. New York: Harper & Row.

Masten, A. (1987). Resilience in development: Implications of the study of successful adaptation for developmental psychopathology. In D. Cicchetti (Ed.), *The emergence of a discipline: Rochester symposium on developmental psychopathology* (pp. 261-294). Hillsdale, N.J.: Lawrence Erlbaum.

Masten, A. (1994). Resilience in individual development: Successful adaptation despite risk and adversity. In M.C. Wang & E.W. Gordon (Eds.), *Educational resilience in inner-city America: Challenges and prospects* (pp.3-25). Hillsdale, N.J.: Lawrence Erlbaum Associates, Publishers.

Masten, A., Best, K., & Garmezy, N. (1990). Resilience and development: Contributions from the study of children who overcome adversity. *Development and Psychopathology*, *2*, 425-444.

Masten, A., & Braswell. L. (1991). Developmental psychopathology: An integrative framework. In P.R. Martin (Ed.), *Handbook of behavior therapy and psychological science: An integrative approach* (pp. 35-56). New York: Pergamon Press.

Masten, A., & Garmezy, N. (1985). Risk, vulnerability, and protective factors in developmental psychopathology. In B. Lahey & A. Kazdin (Eds.), *Advances in clinical child psychology* (Vol. 8, pp. 1-52). New York: Plenum Press.

Matthews, W.J. (1998). *A review of the Bell Curve: Bad science makes for bad conclusions*. Retrieved on October, 7, 2005, http://goinside.com//98/3/postmod.html

Maton, K., Hrabowski, F. & Greif, G. (1998). Preparing the way: A qualitative study of high-achieving African-American males and the role of the family. *American Journal of Community Psychology*, *26* (4), 639-669.

Maughan, B., & Rutter, M., (1986). Black pupil's progress in secondary schools II: Examination of attainments. *British Journal Developmental Psychology, 4,* 19-29.

McClendon, C., Nettles, S.M., & Wigfield, A. (2000). Fostering resilience in high school classrooms: A study of the PASS Program (Promoting Achievement in School Through Sport). In M.G. Sanders (Ed.), *Schooling students placed at risk: Research, policy, and practice in the education of poor and minority adolescents* (pp. 289-307). Mahway, NJ: Lawrence Erlbaum Associates, Publishers.

McLoyd, V.C. (1990). The impact of economic hardship on black families and children: Psychological distress, parenting and socioemotional development. *Child Development*, *61*, 335-343.

McLoyd, V.C. (1997). The impact of poverty and low socioeconomic status on the socioemotional functioning of African-American children and adolescents: Mediating effects. In R.W. Taylor & M.C. Wang, *Social and emotional adjustment and family relations in ethnic minority families* (pp. 7-34). Mahway, New Jersey: Lawrence Erlbaum Associates, Publishers.

McLoyd, V.C. (1998). Changing demographics in the American population: Implications for research on minority children and adolescents. In V.C. McLoyd, & L. Steinberg (Eds.). *Studying minority adolescents* (pp. 3-28). Mahway, NJ: Lawrence Erlbaum Associates, Publishers.

Mickelson, R.A., & Greene, A.D., (2006). Connecting pieces of the puzzle: Gender differences in Black middle school students' achievement. *Journal of Negro Education*, *75* (1), 34-48.

Miles, M.B., & Huberman, A,. M. (1994). *Qualitative data analysis* (2nd ed.). Thousand Oaks, CA: Sage Publications.

Miller-Cribbs, J.E., Cronen, S., Davis, L., & Johnson, S.D. (2002). An

    exploratory analysis of factors that foster school engagement and

    completion among African-American students. *Children & Schools*, *24* (3),

    159-174.

Mitchell, A. (2000). African-American teachers and the roles they play. In M.G.

    Sanders (Ed.), *Schooling students placed at risk: Research, policy, and practice*

    in the education of poor and minority adolescents (pp. 163-186). Mahway, NJ:

    Lawrence Erlbaum Associates, Publishers.

Monette, D.R., Sullivan T.J., & DeJong, C. R. (2002). *Applied social research: A tool*

    for the human services (5th ed.). Australia: Wadsworth Thomson Learning.

Morgan, H. (1995). *Historical perspectives on the education of black children*. Westport,

    Conn.: Praeger Publishers.

Morris, D. (1992). African-American students and their families. In M. Procidano

    & C. Fisher (Eds.), *Contemporary families: A handbook for school professionals*

    (pp. 99-116). New York: Teachers College Press.

Morse, J.M. (1998). Designing funded qualitative research. In N.K. Denzin & Y.S.

    Lincoln (Eds.), *Strategies for qualitative inquiry* (pp. 56-85). Thousand Oaks,

    CA: Sage Publications.

Murray, C.B., & Fairchild, H.H. (1989). Models of black adolescent academic

    achievement. In R.L. Jones (Ed.), *Black adolescents* (pp. 229-245). Berkeley,

    CA: Cobb & Henry, Publishers.

Nash, J.K., & Bowen, G.L. (2002). Defining and estimating risk and protection: An illustration from the School Success Profile, *Child and Adolescent Social Work Journal*, *19*(3), 247-261.

Nurmi, J.E., (1987). Age, sex, social class, and quality of family interaction as determinants of adolescents' future orientation and planning. *Developmental Review*, *11*, 1-59.

O'Brien, B.R. (1990). The use of family members and peers as social resources during adolescence. (ERIC Document Reproduction No. ED. 327 297).

Ogbu, J., (1981). School ethnography: A multilevel approach. *Anthropology and Education Quarterly*, *12*(3), 3-20.

Ogbu, J., (1987). Variability in minority school performance: A problem in search of an explanation. *Anthropology and Education Quarterly*, *18*(4), 312-334.

Patton, M.Q. (2002). *Qualitative research & evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage Publications.

Pelligrini, D.S. (1990). Psychosocial risk and protective factors in childhood. *Developmental and Behavioral Pediatrics, 11*(4*),* 201-209.

Perry, T., (2003a). Achieving in post-civil rights America: The outline of a theory. In T. Perry, C. Steele, & A.G. Hilliard, *Young, gifted and black: Promoting high achievement among African-American students* (pp.87-108). Boston: Beacon Press.

Perry, T. (2003b). Competing theories of group achievement. In T. Perry, C. Steele, & A.G. Hilliard, *Young, gifted and black: Promoting high achievement among African-American students* (pp.52-86). Boston: Beacon Press.

Perry, T. (2003c). Up from the parched earth. In T. Perry, C. Steele, & A.G. Hilliard, *Young, gifted and black: Promoting high achievement among African-American students* (pp. 1-10). Boston: Beacon Press.

Perry, T., & Delpit, L. (1998). *The real ebonics debate: Power, language, and the education of African-American children*. Boston: Beacon.

Phillips, S. (1983). *The invisible culture: Communication in classroom and community on the Warm Springs Indian Reservation*. New York: Longmans.

Pollard, J.A., Hawkins, J.D., & Arthur, M.W. (1999). Risk and protection: Are both necessary to understand diverse behavioral outcomes in adolescence? *Social Work Research*, *23*(3), 145-158.

Rende, R., & Plomin, R. (1993). Families at risk for psychopathology: Who becomes affected and why? *Development and Psychopathology*, *5,* 529-540.

Richman, J.M., & Bowen, G.L. (1997). School failure: An ecological-interactional-developmental perspective. In M. W. Fraser (Ed.), *Risk and resilience in childhood: An ecological perspective* (pp. 95-116). Washington: NASW Press.

Richman, J.M., Bowen, G.L., & Woolley M.E. (2004). School failure: An eco-interactional developmental perspective. In M. W. Fraser (Ed.), *Risk and resilience in childhood: An ecological perspective* (2nd ed., pp. 133-160). Washington: NASW Press.

Richman, J.M., Rosenfield, L.B., & Bowen, G.L. (1998). Social support for adolescents at risk of school failure. *Social Work, 43*, 309-323.

Rosenfield, L.B., Richman, J.M., & Bowen, G.L. (2000). Social support networks and school outcomes: The centrality of the teacher. *Child and Adolescent Social Work, 17*, 205-226.

Rosenfield, L.B. & Richman, J.M. (2003). Social support and educational outcomes for students in out-of-home care. *Children & Schools, 25*(2), 69-86.

Rouk, U. (1999). *A review of research using the School Success Profile*. Washington, DC: Policy Studies Associates, Inc.

Rubin, A. & Babbie, E. (2001). *Research methods in social work* (4th ed.). Australia: Wadsworth Thomson Learning.

Rudestam, K.E. & Newton, R.R. (2001). *Surviving your dissertation: A comprehensive guide to content and process* (2nd ed.). Thousand Oaks, CA: Sage Publications, Inc.

Rumberger, R.W. (1987). High school dropouts: A review of the issues and evidence. *Review of Educational Research, 57(2),* 101-121.

Rumberger, R.W. (2004). What can be done to prevent and assist school dropouts? In P. Allen-Meares & M.W. Fraser, (Eds.), *Intervention with children and adolescents: An interdisciplinary perspective* (pp. 311-334). Boston, MA: Pearson Education, Inc.

Rutter, M. (1979). Protective factors in children's response to stress and disadvantage. In

    J.S. Bruner & A. Garten (Eds.), *Primary prevention of psychopathology* (Vol. 3,

    pp.49-74). Hanover, NH: University Press of New England.

Rutter, M. et al., 1979. *15000 Hours: Secondary schools and their effects on children.*

    Harvard University Press, Cambridge, Massachusetts.

Rutter, M. (1987). Psychosocial resilience and protective mechanisms. *American Journal*

    o*f Orthopsychiatry*, *57*(3*),* 316-331.

Rutter, M. (1989). Pathways from childhood to adult life. *Journal of Child Psychology*

    and Psychiatry, 30(1*),* 23-51.

Ryan, R.M., Stiller, J.D., & Lynch, J.H. (1994). Representations of relationships to

    teachers, parents, and friends as predictors of academic motivation and self-

    esteem. *Journal of Early Adolescence*, *14* (2), 226-249.

Sameroff, A.J., & Gutman, L.M. (2004). Contributions of risk research to the design of

    successful interventions. In Allen-Meares, P. & Fraser, M. (Eds.), *Intervention*

    with Children and Adolescents: An Interdisciplinary Perspective (pp. 9-26).

    Boston: Pearson Education, Inc.

Sanders, M.G. (1998). The effects of school, family and community support on the

    academic achievement of African American adolescents. *Urban Education*,

    33(3), 385-409.

Sanders, M. G., & Herting, J.R. (2000). Gender and the effects of school, family, and church support on the academic achievement of African-American urban adolescents. In M.G. Sanders (Ed.), *Schooling students placed at risk: Research, policy, and practice in the education of poor and minority adolescents* (pp. 141-161). Mahway, NJ: Lawrence Erlbaum Associates, Publishers.

Sanders, M.G., & Jordan, W.J. (2000). Student-teacher relations and academic achievement in high school. In M.G. Sanders (Ed.), *Schooling students placed at risk: Research, policy, and practice in the education of poor and minority adolescents* (pp. 65-82). Mahway, NJ: Lawrence Erlbaum Associates, Publishers.

Sarason, I.G., Levine, H.M., Basham, R.B., & Sarason, B. (1983). Assessing social support: The social support questionnaire. *Journal of Personality and Social Psychology*, *44*, 127-139.

Saunders, J., Davis, L., Williams, T., & Williams, J.H. (2004). Gender differences in self-perceptions and academic outcomes: A study of African American high school students. *Journal of Youth and Adolescence*, *33* (1), 81-90.

Seidman, E., Allen, L., Aber, J.L., Mitchell, C., & Feinman, J. (1994). The impact of school transitions in early adolescence on the self-system and perceived social context of poor urban youth. *Child Development*, *65*, 507-522.

Seifer, R., Sameroff, A.J., Baldwin, C.P., & Baldwin, A. (1992). Child and family factors that ameliorate risk between 4 and 13 years of age. *Journal of American Academy of Child and Adolescent Psychiatry, 31*, 893-903.

Shearin, S.A. (2002). Parent-adolescent interaction: Influence on the academic achievement of African American adolescent males. In S.D. Miller (Ed.), Disability and the black community. (pp.). New York: Haworth Press.

Smith, M.L., & Fey, P. (2000). Validity and accountability in high-stakes testing. Journal of Teacher Education, 51(5), 334-344.

Solorzano, D.G. (1992). An exploratory analysis of the effects of race, class, and gender on student and parent mobility aspirations. Journal of Negro Education, 61(1), 30-43.

Spencer, M.B. (2001). Identity, achievement orientation, and race: "Lessons learned" about the normative developmental experiences of African American males. In W. Watkins, J.H. Lewis & V. Chou, *Race and education: The roles of history and society in educating African American students* (pp. 100-127). Boston: Allyn and Bacon.

Stanton-Salazar, R. D. (1997). A social capital framework for understanding the socialization of racial minority children and youth. *Harvard Educational Review*, *67*, 1-40.

Stanton-Salazar, R.D., Vasquez, O.A., & Mehan, H. (2000). Engineering academic success through institutional support. In S. T. Gregory (Ed.), *The Academic achievement of minority students* (pp. 213-247). New York: University Press of America.

Steinberg, L. (1990). The logic of adolescence. In P. Edelman & J. Ladner (Eds.),

    Adolescence and poverty: Challenges for the 1990s (pp.19-36). Washington,

    D.C.: Center for National Policy.

Steinberg, L., Dornbusch, S., Brown, B. (1992). Ethnic differences in adolescent

    achievement: An ecological perspective. *American Psychologist, 47* (6),

    723-729.

Sterling, S., Cowen E.L., Weissburg, R.P., Lotyczewski, B.S., & Boike, M. (1985).

    Recent stressful life events and young children's school adjustment. *American

    Journal of Community Psychology, 13*(1), 87-98.

Swanson, D., & Spencer, M. (1997). Developmental considerations of gender-linked

    attributes during adolescence. In R.W. Taylor & M.C. Wang, *Social and

    emotional adjustment and family relations in ethnic minority families* (pp. 181-

    198). Mahway, New Jersey: Lawrence Erlbaum Associates, Publishers.

Taylor, R.D. (1994). Risk and resilience: Contextual influences on the development

    of African American adolescents. In M.C. Wang & E.W. Gordon (Eds.),

    Educational resilience in inner-city America: Challenges and prospects (pp. 119-

    130). Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.

Taylor R.D. (1997). The effects of economic and social stressors on parenting and

    adolescent adjustment in African-American families. In R.W. Taylor &

    M.C.Wang, *Social and emotional adjustment and family relations in ethnic

    minority families* (pp. 35-52). Mahway, New Jersey: Lawrence Erlbaum

    Associates, Publishers.

The state of America's children: A report from the Children's Defense Fund (2000).

Boston: Beacon Press.

U.S. Census Bureau, (June 2004). *Educational attainment in the United States: 2003*

population statistics. Washington, D.C.: U.S. Department of Commerce.

Voydanoff, P., & Donnelly, B.W., (1999). Risk and protective factors for psychological

adjustment and grades among adolescents. *Journal of Family Issues*, *20* (3), 328-

349.

Wang, M.C., & Gordon, E.W. (1994). *Educational resilience in inner-city America*.

Mahway, NJ: Lawrence Erlbaum.

Wang, M.C., Haertel, G.D., & Walberg, H.J. (1994). Educational resilience in inner

cities. In M.C. Wang & E.W. Gordon (Eds.), *Educational resilience in*

inner-city America: Challenges and prospects (pp. 45-72). Hillsdale, NJ:

Lawrence Erlbaum.

Wang, M.C., Haertel, G.D., & Walberg, H.J. (1998). *Building educational resilience*.

Bloomington, IN: Phi Delta Kappa Educational Foundation.

Wang, M.C., Haertel, G.D., & Walberg, H.J. (1999). Psychological and educational

resilience. In A.J. Reynolds, H.J. Walberg, & R.P. Weissberg (Eds.),

Promoting positive outcomes (pp. 329-365). Washington, DC: CWLA Press.

Watkins, W.H. (1996). Reclaiming historical visions of quality schooling: The legacy of

early 20th century black intellectuals. In M.J. Shujaa, (Ed.), *Beyond*

desegregation: The politics of quality in African American schooling (pp.5-28).

Thousand Oaks, CA: Corwin Press, Inc.

Watkins, W.H. (2001a). Blacks and the curriculum: From accommodation to contestation and beyond. In W.H. Watkins, J.H. Lewis & V. Chou, *Race and education: The roles of history and society in educating African American students* (pp. 40-65). Boston: Allyn and Bacon.

Watkins, W.H. (2001b). *The white architects of black education: Ideology and power in America, 1865-1954*. New York: Teacher College Press.

Wehlage, G.G., & Rutter, R.A. (1986). Dropping out: How much do schools contribute to the problem? *Teachers College Record, 87*, 374-391.

Werner, E.E. (1990). Protective factors and individual resilience. In S.J. Meisels & J. Shonkoff (Eds.), *Handbook of early childhood intervention* (pp. 97-116). New York: Cambridge University Press.

Werner, E.E. (1993). Risk, resilience, and recovery: Perspectives from the Kauai longitudinal study. *Development and Psychopathology*, *5*, 503-515.

Werner, E. & Smith, R. (1977). *Kauai's children come of age*. Honolulu: University of Hawaii Press.

Werner, E. & Smith, R. (1982). *Vulnerable but invincible: A study of resilient children*. New York: McGraw-Hill.

Werner, E., & Smith R. (1992). *Overcoming the odds: High risk children from birth to adulthood*. Ithaca, NY: Cornell University Press.

Wilson, M. N., Cooke, D.Y., & Arrington, E.G. (1997). African-American adolescents
and academic achievement: Family and peer influences. In R.W. Taylor &
M.C.Wang, *Social and emotional adjustment and family relations in ethnic
minority families* (pp. 145-155). Mahway, New Jersey: Lawrence Erlbaum
Associates, Publishers.

Wolin, S., & Wolin, S., (1995). Resilience among youth growing up in substance abusing
families. *Pediatrics Clinics of North America, 42*, 415-429.

Woolley, M.E., & Bowen, G.L. (2007). In the context of risk: Supportive adults and the
school engagement of middle school students. *Family Relations*, *56*, 92-104.

APPENDICES

Appendix A through I are not available in the electronic version of this document. They are available, and can be accessed, in the print version only.

Page numbering has been adjusted to allow for insertion into the print version.

VITA

M. Annette Clayton was born on February 18, 1956, in Newport News, Virginia, and is a U.S. citizen. Her undergraduate years were spent at Howard University in Washington D.C. where she earned a Bachelor of Science degree in Psychology in 1978. Annette furthered her education at the University of Texas at Austin where she earned the Master of Science in Social Work degree in 1981. During her years at the University of Texas, Annette was awarded the National Institute of Mental Health, Minority Fellowship (1979-1980) and the Health Education and Welfare, Child Welfare Fellowship (1980-1981). Annette was also recognized in 2002 by Who's Who Among America's Teachers.

While completing her doctoral studies at Virginia Commonwealth University, Annette presented at one state and three national conferences on topics relevant to school social work practice. She was also an adjunct faculty member.

Annette has been employed with Newport News Public Schools in Virginia since 1981. She resumed the position of Lead School Social Worker in that school division in January, 2007.