Understanding the Career Aspirations of African American Male Adolescents: An Investigation of the Achievement Motivation, Parenting and Peer Support Components

Malcolm E. Anderson
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UNDERSTANDING THE CAREER ASPIRATIONS OF AFRICAN AMERICAN MALE ADOLESCENTS: AN INVESTIGATION OF THE ACHIEVEMENT MOTIVATION, PARENTING AND PEER SUPPORT COMPONENTS

A DISSERTATION SUBMITTED TO THE FACULTY OF THE GRADUATE SCHOOL IN CANDIDACY FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

DEPARTMENT OF COUNSELING PSYCHOLOGY

BY

MALCOLM E. ANDERSON

CHICAGO, ILLINOIS

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CHAPTER I

INTRODUCTION

In an effort to understand the apparent disparities often witnessed in student academic success between racial and ethnic groups over the past forty years, researchers have focused on the factors that appear to influence the development of achievement motivation and career aspiration. Particular attention has been given to the growing numbers of minority students (persons of non-White racial status) in the United States and their progression through the educational system as they prepare to contribute to the nation’s work force.

Of the various studies that focused on the development of minority achievement, most have been reflections of the political agendas of that time. By the 1950s, politicians and other federal leaders were concerned with the preparation of the American work force, particularly given the clear divisions of labor that were established in the U.S. following the ante-bellum era. This caste-like labor system served two purposes: to divide the social and economic roles of Americans along racial lines and to reinforce these divisions by way of a segregated educational system (Ogbu, 1978). While the dynamic decade of the 1960s provided the U.S. with a ubiquitous threat of socio-political domination by other world powers, these contrasting educational opportunities served to perpetuate the realities of America’s concern for overall preparedness in the future as a
more racially diverse group of American students began entering public school. The post Vietnam War era of the mid 1970s offered the U.S. an opportunity to evaluate its potential as an economic world power through the education of its youth.

Early legislative and judicial decisions in U.S. history have facilitated social change and thus have steered the course for many researchers to begin asking the question: who are the achievers? The 1954 Supreme Court decision of \textit{Brown v. Board of Education} pressured state legislatures to integrate their public schools according to the ruling of equal education under federal law. In the following decade, the 1964 Civil Rights Act and the \textit{Green} decision of 1968 outlined specific guidelines by which desegregation was to be implemented. The result was an increase in the number of African American students attending integrated public schools, particularly in the South (Bullock, 1970; Ogbu, 1978).

Concurrent to these decisions, research that previously looked at the differences in school achievement between African Americans and Whites during the school segregation era was quickly modified to begin investigating the long-term effects of school desegregation and the resulting quality of society's economic and political future. This paradigm change committed many state boards of education to conduct research that examined the effects of grouping African Americans and Whites in the same classroom and the comparative data that marked observed differences between the academic performance of African American students and White students.
In the field of psychology, researchers began to explain the observed differences in school performance between African American students and White students. Moynihan (1965) used a “deficit-based” hypothesis, to reach conclusions about why African American families failed to achieve in the 1960s and pointed to factors relating to the African American home environment as primary predictors of poor social and economic achievement. Jensen (1969) attempted to correlate “observed genetic differences” between African Americans and Whites with observed dissimilarities in their intelligence scores.

Moynihan’s hypothesis was followed by related paradigms that used person-environment models to explain the variance in the academic achievement of minority youth in general. By correlating environmental constraints with poor academic achievement, researchers concluded that the environmentally depressed situations in which some African American youth lived contributed significantly to their academic failure (Coleman, 1966). Moynihan’s (1965) and Coleman’s (1966) “culturally deficient” hypotheses were replicated in a study by Jantz & Sciara (1975) and were assumed to be the primary reason for African American under-achievement. This form of remedial research continued to dominate the school achievement literature from the 1970s to the mid 1980s (Slaughter & Schneider, 1986).

The most important finding from this work revealed that motivational variables accounted for more variance in the academic achievement of minority youth than
socioeconomic, familial or school characteristics. Implied in these studies was the notion that African American student achievement was mediated by their perceived locus of control over a situation, a construct that was originally introduced by Rotter (1966) and later defined in terms of African American and White student achievement (Battle & Rotter, 1963). For African American youth, in particular, the most important variable in predicting achievement was their sense of control over their environment; something that researchers later agreed was never in their control as a result of the historical influences of slavery (Parham & Helms, 1985; Cheatham, 1991; Fordham & Ogbu, 1986; Ogbu, 1978).

Interest in the under-achievement of African American students continued to dominate the literature as the nation witnessed a resurgence of concern regarding its commitment to produce academically successful children. Researchers began to consider other variables that might motivate racial and ethnic minority students to achieve and aspire to careers which would positively contribute to the economic future of the country.

One variable that was analyzed closely was the social impact of the family environment on the child which was well documented by Gecas (1981). He asserted that the family context is the most influential socialization setting for forming the child’s sense of self, values and beliefs. Bronfrenbrenner (1985, 1986) contended that the family remains the most central influence on childhood achievement as it relates to social support. Socialization efforts elevate parents and families to the most powerful position
of influence from one generation to the next (Demo, Small and Savin-Williams, 1987; Gecas and Schwalbe, 1986; Spencer, 1983).

Early person-environment research found that a dual parenting structure regardless of parenting style was important in predicting the achievement of minority youth (Jantz & Sciara, 1975; Sciara, 1975;). Miller-Jones (1988) contended that single-parent family structures, usually fatherless, more substantially exacerbated the intellectual deficits for children in African American family households than in White. This manner of thinking was typical of many deficient paradigms such as the “confluence model of intelligence” introduced by Fowler and Richards (1978) that outlined images of poor African American families who lacked the values and skills useful to their school-age children.

These perspectives would later be challenged for their simplistic nature and general disregard for the existence of extended family members and peers who characteristically have played important roles in raising African American youth (Boyd-Franklin, 1989; McAdoo, 1988; Wilson, 1986). Spencer (1990), for example, argued that until the latter part of the 1970s few researchers studied the developmental processes and strategies employed by African American parents in rearing competent children. Although the literature until that time categorized African American family behavior as deficient, it illuminated the role that certain parenting styles and family environments

Later studies on the socialization of achievement in the family that account for differences in the parental practices have used hypothesized parental styles as a source for comparison across racial and ethnic groups (Baumrind, 1972, 1989; Maccoby & Martin, 1983). The results tended to depict relationships between family environment and school success with observed racial and ethnic differences. Baumrind demonstrated that most students benefited academically from an authoritative parenting structure where parental warmth and acceptance, behavioral supervision and strictness, and psychological autonomy and democracy were found to be principle components (Steinberg, 1990). Steinberg, Mounts, Lamborn and Dornbusch (1991) furthered this research and found that the effect of authoritative parenting on achievement was greater among White adolescents than African American adolescents.

While staying cognizant of the external influences upon African American youth that may affect achievement development, researchers in the mid 1980s started to look closely at peer contacts that encourage or subvert parental influences of achievement. Fordham and Ogbu (1986) argued that African American youth experienced different socialized messages about achievement from their peers. Furthermore, their findings demonstrated that while parents may provide a supportive academic environment at home, African American students may have more difficulty finding a peer group of
African American students who will support their achievement interests. Though some later studies have noted the presence of a supportive peer group for African American achievement (e.g., Jones-Thomas, 1995; McCurtis, unpublished), the literature remains rather speculative regarding its impact on motivating achievement among African American students (Kunjufu, 1988). Nonetheless, Steinberg, Dornbusch and Brown (1993) provided research that supported the importance of peer group messages on the socialization of African American youth. Steinberg et al. (1993) presented an overview of how peer contact mediates the achievement motivation of African American students. Specifically, they pointed to evidence that showed how the absence of peer support for academic achievement undermined the positive influences of authoritative parenting.

There is a conflict between academic achievement and peer popularity in African American youth brought into focus by the impact of peer socialization and parental style on achievement motivation and developing career aspiration (Bowman & Howard, 1985; Kunjufu, 1988; Steinberg, Dornbusch and Brown, 1993). Kunjufu (1988), among others, pointed out that sometimes the choice to be popular or to be smart is more difficult for African American students than others depending on their developmental stage and ego maturity (Fordham & Ogbu, 1986; Spencer & Dornbusch, 1990). In fact, Kunjufu (1988) has argued that many African American students equate “smartness” with being or acting “White” such that being African American and smart would present a confusing message to their peer group and possibly effect the student’s self development.
In an attempt to address this apparent conflict, Kunjufu (1988) argued that the internalized conflict which exists prevalently in the minds of African American children is one of the principal reasons for their under-achievement. Steinberg, Dornbusch and Brown (1993) agreed that many African American youth experience a mental dilemma likened to cognitive dissonance regarding peer popularity and academic achievement. Furthermore, Kunjufu's argument serves as a historical reminder of how African Americans have struggled to fit in with dominant mainstream society; an argument similarly contended by Du Bois (1969):

This double-consciousness, this sense of always looking at one's self through the eyes of others, of measuring one's soul by the tape of a world that looks on in amused contempt and pity. One ever feels his twoness,--an American, a Negro: two souls, two thoughts, two unreconciled strivings, two warring ideas in one dark body, whose dogged strength alone keeps it from being torn asunder (p. 45).

Given its early context, the question remains, how do African American students receive their socialized messages to achieve?

Poussaint (1974) argued that children are extremely sensitive to the messages that they receive from the people around them and that they can feel rejection and negative attitudes that affect their self concepts and motivation. By contrast, Bandura (1981, 1986) argued that a child's motivation is based primarily on proximal self motivators and that a child's ability to achieve is weighed by an internal comparison process which helps the child to self evaluate and achieve self efficacy. These two contrasting views highlight
the conflict many researchers have experienced when investigating factors involved in motivating African American youth to achieve.

Similar interactions between internal and external components of motivation were found by Holland (1973) as he investigated the motivations behind how people aspire to career choices. Holland proposed seven basic assumptions about career aspiration and development. At the crux of his theory is the interaction between one’s internal motivation to achieve and environmental factors that may contribute to or hinder that motivation. Holland proposed that when one’s internal motivation is congruent with one’s external environment, predictable career aspirations can be observed to be pursued by that individual.

The social cognitive model, formally introduced by Bandura (1986), also supports the causal relationship between external factors (i.e., socioeconomic conditions and peer/parental reinforcement) and internal motivation factors as internalized beliefs and experiences that serve to motivate the individual toward a career choice. The relationship between intrapersonal and interpersonal factors in affecting one’s beliefs on achievement and career aspiration was presented most recently by Lent, Brown and Hackett (1994). Lent et al. (1994) pointed to important considerations regarding the achievement development of African American males who, as it has been argued earlier, experience dissonant messages regarding personal achievement and acceptance by their own peer group.
The general concern for more information regarding the achievement motivation and career interests of African American males stems from a long-standing concern for the well-being of African American males in the U.S. Often regarded as a "conspiracy" by some, statistics have been widely publicized regarding the "endangerment of Black men" (Allen-Meares & Burman, 1995; Gary & Leashore, 1982; Kunjufu, 1982; Parham & McDavis, 1987; Staples, 1987). Gender research detailing the achievement levels of African American boys and girls continues to reveal achievement differences as early as the fourth grade, showing proportionately more girls reaching higher achievement levels in grades five through high school (Kunjufu, 1984; Fordham & Ogbu, 1986). These same researchers believe that the split in achievement scores between boys and girls in the fourth grade is related to the higher incidents of African American male high school dropouts and involvement in criminal activities among African American men. A 1985 report by the Bureau of Justice Statistics revealed that African American males have an unusually high likelihood of being murdered and are five times as likely to be the victims of homicide as are their White counterparts (Hawkins, 1986). Gibbs (1988) reported that homicide was the leading cause of death for African American males between the ages of 15 and 24, and that since 1960 the suicide rate among this same age group of African American males has nearly tripled. The 1990 Bureau of Justice Statistics reported that 84 percent of the violent crimes perpetrated against African Americans were by other African Americans.
A few relevant themes have emerged regarding the research on the achievement motivation of African American adolescent males. Important aspects of this line of research which must be considered are: the historical presence of dissonant messages toward achievement, the interaction between internal and external influences, the mediating conditions that some external messages have on the internal need to achieve and the drastic circumstances that have been historically cited to propose the failure of numbers of African American males in the U.S.

While most studies on achievement motivation have analyzed the internal factors of achievement, very few have contributed research that looks at the external factors that influence achievement motivation toward career interests in African American males. To date, there are few literary contributions that address the concern of African American male adolescent achievement motivation as it predicts career aspirations. As mentioned earlier, a majority of the research also discusses the under-achievement of African Americans in terms of cultural deficiency and fails to recognize the historical aspects that contribute to the internal needs to achieve and the external messages African American males receive from parents and peers. The influence of peer groups on African American male adolescents remains inconclusive. Although findings range from being very supportive to negative and at times isolating, the information regarding the influence of peers on the career aspirations of African American males is incomplete. The literature also fails to consider the inherent multidimensional nature of achievement motivation as
it relates to both the specific parenting styles and particular peer groups that help to predict African American male adolescents career aspirations. Finally, while the current statistics regarding the circumstances of many African American male adolescents in the U.S. depict a negative future, the initiation of more research focusing on the constructs that foster achievement motivation is a necessary step in reversing the trends that are contributing to African American male failure in society.

In this study, external factors related to parenting styles and peer group messages will be investigated as they interact with internal African American male adolescent achievement beliefs to predict career aspirations. Specifically, this research will consider, (a) how peer support and parenting styles serve to affect the achievement beliefs of African American male adolescents, (b) how peer support facilitates career aspiration, (c) what parenting styles foster career aspiration, and (d) how peer support interacts with parenting styles to foster career aspirations.

This research will provide greater understanding of the multidimensional factors that often contribute to the achievement motivation of African American male adolescents. Lastly, the study will attempt to explain how interactions between peers and parents facilitate internal needs to achieve that are linked to career aspirations of the adolescent years of the African American male.
CHAPTER II

LITERATURE REVIEW

The review of the literature will be separated into five sections. The constructs considered will be defined as they relate to the career aspiration development of African American male adolescents. Career aspiration is defined as the interests that adolescents obtain in careers that result from their internal beliefs to achieve. Achievement motivation is described as an internal construct that applies to the beliefs and drives of the adolescent to achieve. Parenting style is defined as the way in which parents systematically rear their children to achieve. Lastly, peer support is expressed as the messages and group dynamics that an adolescent experiences from friends regarding achievement and career aspirations. The review will use past research and theory to provide a deeper understanding of how these constructs have been defined and how they are proposed to relate to predict career aspirations.

Achievement Motivation

McClelland (1961) initiated the research on achievement motivation. Together with Atkinson & Raynor (1974), McClelland defined achievement motivation as a learned motive, unconscious in nature, resulting from rewards and punishments of specific behavior. Castenell (1983) argued that achievement motivation is a drive that is
formed in early childhood and is nurtured or inhibited through "training" by parents, peers and other external forces that relate to the child. Castenell further stated that the perceived need to achieve is a single unitary construct possessed by some adolescents and not others. These early definitions suggested two things about achievement motivation: (a) it is learned through external experiences and (b) some individuals have a need to achieve while others do not.

Locus of control. The framework of achievement motivation is composed of four attributes: ability, effort, task difficulty and luck. These attributes can be classified into two categories: externally controlled and internally controlled. Ability and effort are considered internally controlled dimensions, while task difficulty and luck are externally controlled dimensions. The construct of locus of control, as it relates to achievement motivation, has been demonstrated to be fairly stable as a disposition characteristic and modifiable in certain situations. It was widely assumed that "internals" were more likely to achieve a task before "externals" who tend to view their world as beyond their control (Battle & Rotter, 1963; Zytkoskee & Strickland, 1971). Early cross-cultural literature regarding achievement motivation suggested that African Americans, in general, had a lower need to achieve than Whites (Adkins, Payne, & Ballif, 1972; McClelland, 1961; Ramirez & Price-Williams, 1976). Based largely upon the assumptions of Coleman (1966), researchers used this information about locus of control to conclude that given their historical worldview of oppression in the U.S., African Americans, in particular, were more likely to (a) view their environment as beyond their control, (b) learn to
accommodate themselves to a disadvantaged status, and (c) socialize their children to adopt this as their worldview (Grier & Cobb, 1968; Kramer, Rosen, & Willis, 1973; Turner & Turner, 1975).

Taylor (1982) emphasized that internally controlled individuals may take an active role in the direction of their future careers and thus put forth effort in researching their career plans in order to increase their opportunities to achieve their aspired career goals. On the other hand, externally controlled individuals may believe that their career opportunities are greatly influenced by chance or luck and, therefore, not invest the time and effort in gathering the information necessary to influence their future vocational outlook.

In a meta-analysis, Findley and Cooper (1983) quantitatively reviewed the relationship between locus of control and academic achievement to obtain an estimate of strength, as well as the direction of the relationship. They reviewed 98 studies and coded the 275 tests of hypotheses into three categories (a) greater internality was associated with greater achievement, (b) greater externality was associated with greater achievement, and (c) no evidence was found to support a relationship between locus of control and achievement. Noted for comparison were the outcomes of the study and the characteristics of the subjects, including age, gender, race and socioeconomic status. The investigators concluded that there was a significant positive relationship between locus of control and academic achievement. The relationship also tended to be more substantial among adolescent males. Findley and Cooper found little evidence to support race as a
mediator of achievement and locus of control, as there were only three studies that
actually indicated the races of their participants.

that researchers who work with multidimensional constructs pay more attention to
“process-by-context” interactions, specifically the ways in which developmental
processes vary as a function of the broader context in which they occur. This applies
directly to contextual differences in the worldviews of African American youth and the
processes involved in their socialized development.

Castenell (1983) addressed the broader context by focusing on how students’
achievement motivation varied as a function of area specific socialization as well as their
internal drives to achieve. He compared an external measure of achievement motivation
composed of three subscales (peer, home and school) with an internal measure of
achievement motivation (self-esteem, independence, sense of control and individualism)
using a racially diverse group of male and female 12 and 13 year olds. Differences were
observed across race and gender. African American students scored significantly higher
than their White counterparts on all subscales of the external measure of achievement.
Whites, however, scored higher than African Americans on the internal measure of
achievement motivation. Statistically significant main effects were also found across
gender, as males also scored higher on the peer scale of the external measure. The
research produced no significant two-way interactions.
By using race as a mediating variable in his study, Castenell was able to show how external variables serve to motivate African Americans more so than Whites. Furthermore, the research indicates that peer contacts significantly influenced the achievement motivation beliefs of adolescent males more so than females. Thus while it appears that African Americans' motivation to achieve can be greatly influenced by peer, school and home interactions, no interpretation can be made regarding African American male and female interactions across the subscales of the external measure.

Socializing effects. Steinberg, Dornbusch, and Brown (1992) investigated ethnic differences in adolescent achievement across external multicultural settings (i.e., peer support, parenting practices, school influence). Using a multi-racial and ethnic sample, the researchers administered a two part, 30 page questionnaire to approximately 15,000 adolescents attending nine high schools in differing regions of the U.S. The researchers tested two basic questions: (a) to what extent did student beliefs in school success predict their beliefs in career achievement, and (b) to what extent did student beliefs in school failure predict their beliefs in career achievement. Significant differences across race were observed. The researchers reported that nearly all of the students in their sample, regardless of race, agreed that getting a good education would enhance their labor market success. African American students were observed to be more optimistic regarding career achievement, despite reported academic failure in high school. Given this perceived optimism, the authors speculated that African American adolescents who
believed that they could succeed without doing well in school would devote less time and energy to academic pursuits.

Steinberg et al. (1992) also suggested that the perceived occupational circumstances of the African American students in their study greatly influenced the amount of effort they put forth in school. In other words, African American students who became pessimistic about their chances to achieve in the occupational world did not do as well academically due to an existential belief that, despite their effort, their career aspirations would not be fulfilled in the long run.

Steinberg et al. (1992) further postulated that the African American adolescents in the study defended their pessimistic beliefs about career achievement with inflated optimism in the belief that they could achieve despite their perceptions of the external circumstances. These findings provide insight to the patterns of thinking of many African American adolescents regarding their projected beliefs of achievement. The results also highlight the importance of external factors, such as career expectancies, that may shape African American high school students’ internal drives to achieve.

**Summary**

The research presented suggests that externally socialized messages are important in predicting achievement motivation in African American adolescents. It also implies that perceived control over their environment may affect the way African American adolescents approach achievement oriented tasks and, in turn, affect the careers to which they aspire. Past research (Castenell, 1983) reported that males are more influenced to
achieve by peers than are females. More recent findings (Steinberg et al., 1992) have produced evidence to suggest that African American adolescents are more optimistic than White adolescents about career achievement despite academic failure. Still little is known about how African American male adolescent achievement beliefs are influenced by the socialized career expectations and other external factors. While investigating the aspects that relate to the achievement motivation of African American males, it is apparent that as a group they are uniquely affected by perceived external forces. Research that looked at the occupational outcomes available to African American adolescents found that they had a low sense of control over their future occupational pursuits, despite the academic efforts and expected rewards of success for academic progress (Steinberg, Dornbusch and Brown, 1993).

Career Aspiration

Gottfredson (1981) described career aspiration as a developmental process of circumscription, which she further defined as a method of examining and eliminating vocational alternatives. As one gains greater awareness of the career alternatives based upon prestige, gender tradition and general field of interest, they are able to eliminate alternatives for which they perceive themselves to be unsuited. Gottfredson asserted that the developmental nature of the process of circumscription is a gradual narrowing of acceptable alternatives over time.

When categorized, career aspirations are believed by some to be predictive of an individual’s actual chosen career path (Dolliver, 1969; Gottfredson and Holland, 1975;
Holland, 1962; Holland, Gottfredson and Baker, 1990; McLaughlin and Tiedman, 1974). Others contended that expressed aspirations were not predictive of future job entry due to their uncategorized nature (Crites, 1969; Flanagan and Cooley, 1966; Super and Crites, 1962). Later research by Holland and Gottfredson (1975) provided evidence of how vocational aspirations can be as predictive of a person’s future vocational category or actual career as inventoried interests when using Holland typology.

Gottfredson’s theory has had mixed support with some researchers who observed a broadening of career alternatives over time (Leung and Harmon, 1990). Still others contend that career aspiration is achieved differently based upon the gender of the individual (Eccles, 1987; Harmon, 1989; Kerr, 1983; Luzzo, 1995), race (Cheatham, 1990; Doughtie, Chang, Alston, Wakefield and Yom, 1976; Hager and Elton, 1971; Pelham and Fretz, 1982) and family functioning (Penick and Jepson, 1992; Schulenberg, Vondracek and Crouter, 1984; Vondracek, Lerner and Schulenberg, 1986). Cheatham (1990) specifically addressed the need for career theories to emphasize the unique experiences of African Americans. He stated that “theoretical models of career development do not recognize the cultural distinctiveness of African Americans, perforce assume, inevitably, that the emulation of Whites’ attitudes, values and behaviors is the will of African Americans in developing and exercising their life options” (p. 338). Cheatham’s heuristic model of African American students’ career development proposed that major experiential factors unique to African Americans such as the history of slavery, disenfranchisement, economic deprivation and structural discrimination should be
included as mediators to the career development process. This difference highlights the impact of external forces on the career aspirations of African Americans (Cheatham, 1990).

Despite these observed differences, primary investigative studies researching the constructs of career aspiration and career interest failed to include African Americans in their samples (Gottfredson and Becker, 1981; Holland and Gottfredson, 1975). This omission led many to question the validity and reliability of these vocational assessment instruments as they pertained to non-White samples (Carter and Swanson, 1990; Hansen, 1992; Smith, 1983). More importantly, due to the lack of racial and ethnic diversity in the development of career aspiration instruments, research regarding the career aspirations of African Americans has been more directed toward the influence of internal motivators such as self-concept and racial identity and away from the impact of external motivators that predict career aspirations (Super et al. 1963; Holland, 1973; Gottfredson, 1981). Consequently, there are mixed findings regarding the predictors of African American career aspiration.

Categorized career types. Holland (1962, 1975, 1985) provided a popular theory for categorizing the careers that people aspire to by observing the cultural and socializing forces that help to shape peoples preferred vocational interests and activities into six specific groups (viz., Realistic, Investigative, Artistic, Social, Enterprising, and Conventional). These groups were proposed by Holland to reflect the personality types of people in specific work activities as well as their aspirations toward these vocational
categories. Holland assumed that these categories were related in a specific way to suggest a hexagonal shape where adjacent types are more related and consistent in their interests than opposites. Realistic types are found to have mechanical abilities but lack in social skills and aspire to careers such as automobile mechanic, surveyor, farmer, electrician and aircraft controller. Investigative types are described as having mathematical and scientific ability but lacking leadership ability and aspire to be biologists, chemists, anthropologists, and technicians. Artistic people have abilities in writing, music or other artistic areas but lack clerical skills and like jobs such as composer, musician, stage director, writer, and interior decorator. Social types have skills in the social communication areas of work but lack mechanical and scientific ability and aspire to be teachers, counselors, psychologists, religious workers and speech therapists. Enterprising types have leadership abilities but lack in scientific ability and aspire to careers in sales, managing, business executive, television producer, and sports promoter. Conventional people are described to have clerical and arithmetic ability but lack artistic qualities and aspire to be bookkeepers, stenographers, financial analysts, bankers and tax experts.

Holland suggested that people will actively search for environments that will allow them to exercise their career aspirations and enhance their career interests. This may include placing themselves in settings with people of like aspirations and interests either through friendships and other social seeking behaviors. Holland recognized that some persons or environments are more defined than others.
Racial and ethnic and gender observations. The cross-racial and ethnic research to date provides somewhat consistent results regarding the types of careers to which African Americans aspire. Early research in this area provided data to suggest consistently higher interests among African Americans in Social occupations (Doughtie, Chang, Alston, Wakefield, & Yom, 1976; Hager & Elton, 1971; Kimball, Sedlacek, & Brooks, 1973; Nafziger, Holland, Helms, & McPartland, 1974). Gottfredson (1978, 1979) and Gottfredson, Holland, and Gottfredson (1975) suggested that there are fields of work that men aspire to and later obtain because they believe them to be characterized as "men's work." These include Realistic, Investigative and Enterprising occupations.

Turner and Turner (1975) hypothesized that African American children were taught to aspire to careers that are acceptable given the discriminatory environment of the job market at the time. Fernandez (1977) and Griffith (1980) found a correlation between attitudes about racial group membership and the types of careers to which African Americans aspire. However, Grace (1984) and, later, Evans and Herr (1994), failed to show a relationship between racial identity and career aspiration.

Gottfredson (1978) observed that despite having vocational aspirations at least as high as White males, African Americans and women, in particular, aspire most frequently to high level Social careers and moderate-level Conventional jobs with especially poor representation in Enterprising work (Cosby, 1971; Kuvlesky, Wright, & Juarez, 1971). Hines (1983) examined racial and ethnic and gender differences on the Strong Campbell Interest Inventory and found that African American females had significantly higher
Conventional scores, and significantly lower Realistic, Investigative, and Artistic scores than women in general. Hines also observed African American males to have significantly higher Social, Enterprising and Conventional scores and significantly lower Investigative scores than men in general. Furthermore, Pelham and Fretz (1982) found that African Americans, as compared to Whites, were more likely to display undifferentiated codes indicating unstructured aspirations.

Carter and Swanson (1990) suggested in their review of the literature that African Americans' career interest patterns, when compared to Whites', revealed differences in the formation and interpretation of career expectations which, therefore, affected the occupations to which these groups aspired. Furthermore, they suggested that socialization differences within the African American population may explain why males and females indicate distinct vocational interests. This evidence led Carter and Swanson and others to conclude that based on the relatively few number of studies within the last fifteen years that look at cross-cultural vocational interest, there remains little published evidence to support the psychometric validity of the Strong Campbell Interest Inventory or the Strong Vocational Interest Blank for African Americans or other visible racial and ethnic groups (Cheatham, 1990; Hansen, 1992).

Summary

Gottfredson’s (1981) theory of career aspiration, while based on White male participant responses, provided greater understanding for the factors that contribute to an individual’s career aspiration and future vocational interests. The most recent research by
Holland, Gottfredson, and Baker (1990) replicated earlier results by Holland and
Gottfredson (1975) that revealed the predictive validity of categorized self-expressed
vocational aspirations to future aspirations and actual career choices. However, due to
the relative lack of African American participants, this information remains untested
empirically, leaving valid conclusions about this group not reached. Research by Turner
and Turner (1975), Fernandez (1977), and Griffith (1980) provided information to
suggest that socialization differences can be correlated to career aspirations. Gottfredson
(1978) found that African Americans aspired to Social and Conventional work more often
and were underrepresented as a whole in the Enterprising and Investigative jobs, despite
having overall aspirations as high as their White counterparts. Hines (1983) found
slightly different results when African American participants were compared on their
vocational aspirations across gender. Hines determined that African American females
were found to have significantly higher Conventional scores than the general population,
African American males were found to have significantly higher Social, Enterprising and
Conventional scores. These results support the findings that African American males
aspire to more Social and Conventional jobs but fail to support their representation in
Enterprising careers.

A critique of the literature involving career aspiration revealed a strong
representation for White male participants and relatively few studies within the last
fifteen years that provide cross-racial and ethnic comparisons using African American
participants. This observation has led others (Carter and Swanson, 1990; Cheatham,
1990; and Hansen, 1992) to question the predictive validity of vocational aspiration measures across racial and ethnic cultures.

Parenting

Many theorists contend that adolescents display variability in their range of coping with identity and socialization issues that is directly related to the differences in the parenting styles and patterns of interacting in the family environment (Harter, 1990; Spencer, 1983, 1990; Martin et al., 1991). In other words, adolescents come to relate to their many environments based upon their childhood experiences and socialized ways of knowing which are formed in the family context. Parents prepare their children for the perceived antagonisms of society; they provide specific messages based upon their own experiences growing up in order to arm their children with a coping strategy and a socialized way to relate to the world. These messages may differ along racial lines and may be in response to perceived environmental influences that are unique to particular minority group families.

Spencer and Dornbusch (1990) provide a nice overview of the differences between some minority group families and their majority group counterparts. They point out that minority group families often differ in size, structure and composition, their reliance on kinship networks, levels of income and parental education. It is argued that these variables affect the parenting behaviors (McLanahan, 1983; Portes et al., 1986), children's socio-emotional functioning (McLoyd, 1992) and perceptions of school performance (Clark, 1983; Dornbusch et al., 1987).
Proposed parental styles and patterns of relating have been shown to affect children's psycho-social development. An early depiction of differing parenting styles was described by Schaefer (1965) who often referred to parenting styles as the way that parents attempt to integrate their children into society. Baumrind (1967, 1971, 1973, 1978) took Schaefer's original model of parenting styles and derived concise dimensions of parenting referred to formally as authoritative, authoritarian, and permissive. Later reviews of this literature have contributed to defining the parameters of these dimensions. Authoritative parenting is characterized by high levels of responsiveness and high levels of demandingness, while permissive parenting is described as high responsiveness but low demandingness, and authoritarian parenting is described as high demandingness but low responsiveness (Baumrind, 1978). Maccoby and Martin (1983) further defined these dimensions to form four distinct parenting styles: authoritative (high in both demandingness and responsiveness), authoritarian (high in demandingness but low in responsiveness), indulgent (low in demandingness but high in responsiveness), and uninvolved or neglectful (low in both demandingness and responsiveness).

Though much of the early research in this area failed to consider possible racial and ethnic differences in group parenting structures, it provided a backdrop for comparison and a tool to analyze differences across racial and ethnic groups. Highlighted is the conclusion, first reached by Baumrind (1978), that authoritative parenting is associated most frequently and consistently with developmental competence in adolescents. This finding was later supported by Maccoby and Martin (1983) and
Steinberg et al. (1993), who observed the impact of authoritative parenting on White middle-class families. Later work by Dornbusch et al. (1987), Spencer and Dornbusch (1990), and Steinberg et al. (1991) sought to use cross-racial comparisons to form conclusions about the effectiveness of different parenting styles.

**Racial and ethnic differences.** The research suggests that African American parents contribute to the socialization of their children by communicating messages to them which are often based upon their historical experiences. This information provides the basis for many of the specific parenting messages displayed by African American families in preparing their children for relating to the world (Caspi and Elder, 1988; Engfer & Schneewind, 1982; Franklin & Boyd-Franklin, 1985; Johnson, 1988; Stevenson, 1994; Ogbu, 1986).

Following this argument closely is the idea that the non-authoritative parenting style used by many African American parents may be different from that of other racially diverse populations. Research suggests that some African American parents are specifically trying prepare their children for adulthood in a society that is perceived as imposing strict consequences on them because of the color of their skin (Dornbusch et al., 1987; McGoldrick, 1982; Spencer, 1990). Dornbusch et al. (1987) investigated a racially diverse sample and found that non-White parents incorporated different parenting styles in raising their children to be socially and academically competent. Ritter & Dornbusch (1989) found that although Asian American students had the highest academic performance levels, their parents were the least authoritative. Furthermore, African
American and Hispanic parents who were considerably more authoritative than Asian American parents witnessed their children performing far worse in school on average. Dornbusch et al. (1987) provided empirical support for an authoritarian parenting style noting that for African American youth an authoritarian parenting style was more predictive of higher school performance in so much as authoritarianism was negatively predictive of grades for White and Asian American students.

Although it was widely held that an authoritarian style of parenting had negative effects on children (Maccoby and Martin, 1983), research has cited that it has benefits for African American and Asian American children who may be more likely to evolve from an environment that is hostile to their race and, in turn, require a higher degree of parental control (Baldwin & Baldwin, 1989; Baumrind, 1972).

Dornbusch et al. (1987) remains the only study, at present, to investigate the way in which race/ethnicity moderates the effects of specific parenting styles on adolescent development. Although Steinberg et al., (1993) observed the systemic effects of ethnicity on parenting practices, they used the authoritative parenting model as their source of comparison for adolescent adjustment (Spencer and Dornbusch, 1990).

It remains unclear what other variables serve to mediate the usefulness of authoritarian parenting for African American adolescents. The majority of research remains restricted to White participants and, therefore, offers little inference to the proposed socialized connection between parents and peer groups in African American youth (Durbin, et al., 1993). Fewer studies observed the effects of parenting style as it
influences African American male adolescent achievement (Ogbu, 1978; Fordham & Ogbu, 1986; Kunjufu, 1986). Wetzel (1987) pointed out that by the year 2000 one third of all adolescents in the U.S. will be from African American, Asian American, or Hispanic American families. This demographic highlights the deficit in empirical research that systematically observes the parenting styles of these groups and, more particularly, what role parenting style plays in the overall socialization of African American male achievement motivation and career aspiration.

**Summary**

The research suggests that different parenting styles affect adolescent psycho-social development in unique ways. Early research distinguishes parenting dimensions into categories based upon the quality of the interaction between the child and the parent on levels of demandingness and responsiveness (Baumrind, 1967, 1971, 1973, 1978; Maccoby and Martin, 1983; Schaefer, 1965).

Reviews have provided a detailed analysis of how authoritative parenting styles benefit adolescent development and further promote school performance (Baumrind, 1991; Dornbusch, et al., 1987; Lamborn et al., 1991; Steinberg, 1990, 1991; Steinberg et al., 1989). There remains, however, some discrepancy regarding the benefits of authoritative parenting toward achievement motivation in cross-racial populations (Steinberg, 1992). While it appears that authoritative parenting may promote achievement motivation in White adolescents, studies have revealed that African American students did not benefit as a group when receiving authoritative parenting
(Dornbusch et al., 1987; Steinberg, 1992). Further research suggests that although authoritative parents are a relatively strong influence in White and Hispanic adolescent development, authoritarian parenting styles have been found to be effective in promoting African American adolescent socialized development (Brown et al., 1990).

Given the brevity of research and the disparity in the presented findings, it remains uncertain what the impact of parenting style has on the achievement motivation and career aspirations of African American males.

Peer Support

In two national studies the University of Michigan and the Motivational Educational Entertainment group have provided empirical support for what many researchers assumed to be true about the changing worldviews of youth in the U.S. The research was a forty-year reflection of the most influential socializing factors on African American youth. The study revealed that in 1950 African American youth reported the home to be the most influential factor on their development, followed by school, church, peers and television. In 1992, African American youth reported that peers were most influential to their overall development, followed by rap music, television, home, school, and church.

Since Coleman's (1961) landmark study on adolescent behavior there has been growing concern for the relevance of his findings as they pertain to the influence of peer groups on the social process of adolescents. Despite the deficient approach of this study,
Peer group culture. The peer group provides a reference for the adolescent by presenting information about minimally acceptable behavior. Johnson (1987) found that peer group affiliation in junior high school was a valid predictor of students' career aspirations and future occupational inclinations. The peer group also is an audience from whom recognition is desired and provides role models for the adolescent to live up to (Kemper, 1968; Durbin et al., 1993). Racial and ethnic minority adolescents turn increasingly to peer groups as they become aware of their differing worldviews as compared to their parents and the majority culture (Spencer & Dornbusch, 1990). Furthermore, peer group membership often has been found to facilitate the acculturation of the adolescent by setting culturally specific rules around language, values and social behavior (DeVos, 1980; Fillmore & Britsch, 1988; Kunjufu, 1988).

The impact of peer group membership on the socialization of African American adolescents has been a concern for the last two decades. Specifically, researchers have investigated peer values and future self images as they pertain to positive school conduct. These inquiries have been dedicated toward efforts to debunk the opinions of early surveys and studies that report the emergence of a monolithic youth culture consisting of values which are deemed in opposition to that of adults (Brown, 1990).

The monolithic youth culture is a perspective made popular by Parsons (1942) and later substantiated by Coleman (1961) as (a) characteristically hedonistic regarding
career aspirations, (b) preoccupied with popularity, (c) devaluing academic achievement, and (d) centered in the “here and now.” Keniston (1968) supported Coleman’s findings and attempted to present the monolithic perspective as the norm for adolescent development. Later research, however, served to demonstrate a more multidimensional peer culture that appeared at times to model adult norms and career patterns. This finding asserted that students often recognized the values of the popular crowd but chose not to endorse them (Freisen, 1968). Still other research found differences in aspirations, the importance of grades, popularity, personal qualities and athletic ability along gender, grade level and extracurricular participation (Bratton, 1977; Butcher, 1986; Snyder, 1972).

Racial and ethnic differences. The significant effect of peer contacts on the psycho-social development of racial minority adolescents is an important finding in the literature. Spencer and Dornbusch (1990) pointed out that for many minority youth groups opposition to the mainstream society has historically been used as a survival strategy within the peer group. Other researchers proposed that part of the acculturation of ethnic minorities involves taking an opposing, often militant, stance against anything resembling White culture, while strongly depending on their peers for support (Boykin, 1985; Deyhle, 1986; Matute-Bianchi; 1986). For some African American adolescents, gaining membership to a peer group may mean sacrificing values, beliefs and behaviors of the majority culture, such as school success (Fordham & Ogbu, 1986; Matute-Bianchi, 1986). Steinberg et al. (1993) demonstrated that African American students appeared to
have a different situation because, although their parents may support norms of academic achievement, they found it difficult to find peer groups that endorsed their same interests.

Schwarz (1981) observed that high-achieving adolescents differed in peer interaction from low achieving adolescents in their emphasis on shared group status. While high achievers endorsed multi-group status and collective identity, low achievers supported competitive interactions with peers with divisive interactions. As cliques developed within peer groups the low achievers, with their more competitive outlook, were effectively cut off from the group and were left to find other peers for support.

Other researchers have corroborated this finding by citing that not only did their African American high-achieving subjects have limited peer support within their race for achievement motivation, they also affiliated with members of other racial and ethnic groups to reap this support (Liederman, Landsman & Clark, 1990). Some studies have replicated these findings through ethnographic research and interviews which suggested that African American teenage students were likely to be caught in a bind between performing well in school and being popular among peers (Fordham & Ogbu, 1986; Kunjufu, 1988).

The cognitive dissonance created by the dichotomy of peer acceptance and the rejection of mainstream values has implications not only on achievement motivation of African American adolescents but also on their occupational futures (Steinberg, et al., 1992; Fordham & Ogbu, 1986). Spencer and Dornbusch (1990) noted that peers tend to influence career aspirations and achievement motivation belief systems of African
American males in particular. Fordham & Ogbu (1986) recognized the mediating affects of peers on the achievement motivation of African American males and provided suggestions for interventions that involve placing African American high achievers in school environments with other high achieving African American students where achieving is the normative attitude. Given this context, it is believed that African American adolescents can be motivated to achieve without being ridiculed by peers for “acting” White (Kunjufu, 1988).

Along this line of thinking is the idea that peer influence has greater impact on African American adolescents in settings where they are doing poorly. This finding appears to be particularly true for African American males toward whom many of these academically high achieving peer schools are directed (Spencer & Dornbusch, 1990; Hare & Castenell, 1985; Whitaker, 1991).

Interactions with parenting style. Kunjufu (1988) drew attention to the growing importance of the peer group on the educational outlook of young African American males. He further asserted that not only was there a direct positive relationship between peer pressure and age among African American males but there was also an inverse relationship between age and parental influence; as age increases, parental influence declines. This finding is steadily supported by research that found no relationship between parenting practices and peer crowd membership among African American adolescents. Simply, authoritatively raised African American youth did not necessarily affiliate with peer groups that fostered achievement motivation, particularly, those
adolescents who had parents and peers who provided achievement motivation messages to perform well in school. However, those who were authoritatively reared by parents but were not reinforced by an achieving peer group, did not perform nearly as well nor were they as motivated (Durbin et al., 1991; Steinberg et al., 1992). These findings suggested the presence of a moderating effect in the relationship between parental influence and peer support where the African American male adolescent is strongly influenced by the racial socialization beliefs of the peer group. This has been witnessed especially in environments where, despite the efforts of parents, gangs and other peer groups became the dominant influence on the African American male adolescent’s worldview.

Although the observed effects of peer support on parental style are small, the data provide consistent results which may suggest the need for a larger sample size. The practical significance of research which looks at the effects of the peer group on parenting style may also be called into question as researchers try to tease out the contrasting socialization factors across varying demographic criteria (Steinberg et al., 1991).

**Summary**

A clear understanding of the effects of the peer group on the achievement motivation and career aspirations of African American males is yet to be reached. Although valuable research concerning the effects of peer group contact and parental style on achievement orientation has lead to various conclusions about the influence of peers on African American male career aspirations (Steinberg et al., 1991), academic achievement (Steinberg, 1992) and parenting messages within African American family
structures (Spencer & Dornbusch, 1990), the majority of the research involved homogeneous samples of White adolescents who had been raised in authoritative families. Thus there remains a void in the literature concerning the peer group selection of African American male adolescents who are reared in authoritarian households.

Contrary to Durbin et al. (1991), who cites that authoritarian parenting was not associated with differences in crowd affiliation for White adolescents, questions still remain as to whether African American adolescents from authoritarian parenting environments orient themselves toward high-achieving peer groups despite perceived racial differences and stigmas. Furthermore, in understanding how parental practices may influence peer group membership, past research has failed to ask how parental styles are related with the racial socialization of the African American adolescent in a multi-ethnic environment or what the comfort level is of African American adolescent males who reap social support for achievement motivation from other ethnically diverse peer groups.
Integrative Summary

Given the amount of social attention around the "risk status" of African American males, researchers have made various attempts to define the relationships between the factors that appear to contribute to their demise. Researchers have identified these factors as the lack of achievement motivation, unrealistic career aspirations, poor parenting structure and non-supportive peer contacts.

Achievement motivation has been defined as a drive that is formed in early childhood through external experiences that are later integrated into the child's belief system. It has been determined that achievement motivation is composed of four major components that reflect the external and/or internal control indicators of the individual. Task difficulty and luck are considered to be external components of achievement motivation, while ability and effort are more internal in nature. It was assumed that students who possessed higher internal components reached higher academic achievement levels. African American students were generally believed to be more externally controlled and therefore attribute their success or failure to luck and/or task difficulty.

A closer look at the racial and ethnic differences associated with achievement motivation revealed that African American students were motivated by external factors to achieve more than their White counterparts. Furthermore, among African American students, males were more externally motivated to achieve than females. Two of the external factors found to influence African American male achievement motivation were
peer contact and perceived socialized development. The absence of achievement-oriented peer contact was found to greatly influence the achievement motivation of African American male students. The research also showed that differences in African American male achievement motivation were related to differences in world view. The conventional wisdom that “hard work in school will ensure a good job in the future” was challenged by the socialized perception among many racial and ethnic minority students who believed that, despite their academic success, they would never find a good job. Additionally, African American males were found to display optimism despite academic failure as well as pessimism despite academic success regarding their projected career achievement. Researchers speculated that the expressed dissonance between perceived academic achievement and perceived career achievement was a result of the low sense of control many African American males experienced when thinking about their future. Despite these findings, however, little is known about the specific external factors that predict the achievement motivation of African American males due to the limited number of studies that incorporated multi-racial participants.

Another factor believed to be contributing to the failure of many African American males is their low career aspirations. Career aspiration has been described as the developmental process of examining vocational alternatives. These choices have been witnessed by researchers to either narrow or broaden over time and are evaluated according to the prestige, fit, and eventual interest of the individual. While some have suggested that career aspirations are reliable predictors of one’s eventual career path,
others contend that they are not representative of one’s actual career path but merely provide insight to one’s next successive vocational aspiration if properly categorized.

Holland (1973) introduced a method of categorizing career choices by observing the various cultural factors that contribute to one’s vocational aspirations and how they serve to socialize one into particular vocational personality patterns (i.e., Realistic, Investigative, Artistic, Social, Enterprising, and Conventional). Holland believed that individuals search for environments and people to exercise their career aspirations and further enhance their career interests.

Although few studies within the last fifteen years have actually looked at the racial and ethnic differences in students’ vocational aspirations, early research suggested that African Americans have vocational aspirations as high as their White counterparts but aspire to careers based upon their perceived discrimination in the field of work. African American males have traditionally aspired to careers within the Social and Conventional categories with poor representation in Enterprising careers. Researchers have argued that these findings are not valid due to their reliance on measures that fail to represent the historical foundation of the African American vocational experience (e.g., Strong Vocational Interest Blank and the Strong Campbell Interest Inventory).

Most research confirms the significant impact of parenting style on the achievement motivation and career aspirations of adolescents. The socialization patterns exhibited by certain parenting styles provide a structure for forming adolescents’ career aspirations. Parental styles may differ across racial and ethnic groups as a reflection of
differing family experiences in society. Researchers have defined parenting styles into four distinct dimensions (i.e., authoritative, authoritarian, indulgent, and uninvolved). Early studies indicated that the authoritative style of parenting (i.e., demanding high aspirations and performance from their children while displaying a high degree of response to their requests) produced more academically competent adolescents with greater psycho-social development. These findings were not clearly replicated across racial and ethnic groups, particularly for African American students.

African American parents were found to provide their children with messages that reflected a history of racial discrimination and consequently, use more authoritarian styles of parenting (i.e., demanding high aspirations and performance expectations and exhibiting a low degree of response to children’s requests), to prepare them for an unfair society. It was found that African American male adolescents respond better academically to authoritarian parenting as compared to their White counterparts.

Additional research suggests that despite their parents’ authoritarian efforts to increase achievement motivation, peer contacts tend to moderate the decisions African American males make regarding achievement and career aspiration. Furthermore, the research suggests that parent and peer messages may contradict with the African American male adolescents more likely to be influenced by peer messages than parental direction.

The peer group represents a source of reference for many African American male adolescents, providing models of social behavior, values, and language. For African
American males, peer contacts provide a model for how to fit into African American culture and what value to place on achievement and success. Studies have shown that for some African American males finding a peer group that reinforces their parents’ achievement messages may be a difficult task. Recent research indicated that for underachieving African American males peer contacts could significantly effect their overall achievement motivation as well as their career aspirations. Some have argued that African American adolescent males have difficulty finding a peer group that supports their achievement aspirations, leaving them to choose between being popular or being smart.

The importance of this study lies in the estimate that by the year 2000 approximately one-third of the working force will be from racial and ethnic minority groups who have been influenced to achieve by their parents and peers. However, due to the lack of research in the area of African American male achievement motivation and career aspiration, few conclusions can be confidently reached regarding how African American male adolescents use external experiences to motivate them toward achievement goals and eventual career aspirations.
Research Hypotheses

Specific research hypotheses to be tested in this study are as follows:

1. It is hypothesized that there will be a significant relationship between achievement motivation and career aspiration. Specifically, students' achievement motivation scores will be predictive of their level of career aspiration measured by their total socioeconomic index (TSEI). It is further hypothesized that achievement motivation will be predictive of the types of careers to which students aspire. It is believed that highly motivated students will more likely aspire to Investigative or Enterprising careers versus Social or Conventional careers.

2. It is hypothesized that there is a relationship between the parenting structures experienced by the students and their level of achievement motivation. Specifically, involvement will be more predictive of achievement motivation than strictness and autonomy respectively. Students who are reared in highly involved environments will have higher achievement motivation scores than those reared in strict environments. Students who are reared in autonomous parenting environments will have higher achievement motivation scores than those reared in strict environments. It is further proposed that there is a relationship between parenting style and achievement motivation. Specifically, students reared in authoritative homes will have higher achievement motivation that those reared in authoritarian, indulgent and permissive households respectively.
3. It is hypothesized that there will be a significant relationship between peer support and the dependent variables where greater peer support will predict higher achievement motivation scores and higher career aspirations scores measured by (TSEI).

4. It is hypothesized that there will be a significant relationship between students' parenting structures and their reported career aspirations measured by TSEI scores. Specifically, students who report high parental strictness and parental involvement at home will report higher career aspirations than those reared in less involved and less strict households.

5. It is hypothesized that the following empirical model is significant: Parenting structure (autonomy, involvement, strictness) predicts student achievement motivation while the predictability of career aspirations is affected by achievement motivation. Furthermore, the predictability of students' achievement motivation is significantly affected by peer support. Specifically, peer support increases the predictability of achievement motivation and career aspiration when added to this model.
CHAPTER III

METHODOLOGY

Participants

Five hundred fifty-one African American male students were selected at random from lists obtained from five southeastern public schools (three high schools and two middle schools) in a district that displayed a vested interest in understanding the achievement attitudes of their African American male students. The students ranged in age from 13 to 18 years. Students were mailed passive non-consent forms to their homes two weeks prior to the collection of the survey information (See Appendix A).

Students' reported socio-economic class and school were entered as blocking variables on the Analysis of Covariance (ANCOVA) procedures for a test of collinearity. School and class were not significant on the ANCOVA providing evidence that there was no collinearity between the blocking variables on achievement motivation or career aspiration.

Forty-five percent of the sample reported living in the urban communities of the school district while 37% and 18% reported living in the suburban and rural communities, respectively. Approximately 75% of the respondents reported having a middle class income while 22% and 3% reported having a lower and upper class income,
respectively. Furthermore, 58% of the students reported that at least one parent had graduated from high school and 46% reported that at least one parent had graduated from college.

Of the students sampled from the three high schools and two middle schools, 16% were eighth graders (n = 41), 20.6% were ninth graders (n = 53), 23% were tenth graders (n = 59), 19% were eleventh graders (n = 49), and 19.8% were twelfth graders (n = 51). Four students failed to identify their grade level. Most of the students were enrolled in a mainstream curriculum (81.7%) while 16.3% reported being enrolled in an honors level curriculum and 1.9% reported enrollment in a remedial or basic curriculum.

The parent or guardian compositions varied with a slight majority (47.5%, n = 122) reporting living with both mother and father. Approximately 44% (n = 113) of the students reported living with their mother only; while 3.5% (n = 9) students reported living with their father only. Five percent of the students reported living with neither mother nor father and instead stated that they lived with some other relative (i.e., aunts, uncles, and/or cousins).

The student scores obtained on the parenting structure measures were converted into labels of parenting “style” by methods outlined in Maccoby and Martin (1983). Approximately 36% of the students sampled live in permissive households (below average involvement and supervision); 26% live in authoritative home environments (above average involvement and supervision); 21% experience indulgent parenting
(above average involvement and below average supervision); and 17% experience authoritarian parenting (below average involvement and above average supervision).

Students reporting on the level of peer support for achievement indicated the particular social group they consider themselves to be a part of and how they would like to be remembered. Sixty-four percent of the sample reported that they belonged to the “jocks” group while 28.4% and 3% reported belonging to the “brains” and the “nerds,” respectively. Forty-nine percent of the sample wanted to be remembered as “a good athlete,” 30% wanted to be remembered as “a brilliant student” and 20% wanted to be remembered as “the most popular.” The students provided information on the race of their most significant friends and provided dichotomous results with 59% reporting that their best friends were African American and 41% reporting that their best friends were both African American and White.

**Description of the School District.** The school district selected for the study is located in the southeastern United States. According to a recent 1995 demographic report, the district represents a variety of racial and ethnic groups with Caucasian (72%) and African American (27%) making up the majority of the student population. The district reports a mean family income of approximately $39,500 with the reported poverty threshold for a family of three as $12,590. Approximately 24% of the students in the district live in single parent families and 22.6% are living within the poverty threshold. Furthermore, the district reported a 19% dropout rate.
Instrumentation

The first page of the survey asked for demographic information about the school the student attends, his age, grade, and the type of curriculum in which he is enrolled. Additional questions regarding his family structure, the educational level of his parent(s) or guardian(s), their socioeconomic class, as well as their geographic location in the county was also obtained (Appendix B). The remainder of the survey asked the students about their career aspirations, achievement motivation attitudes, the parenting structure they are experiencing at home, and the level of support they receive from friends to achieve.

The Self-Directed Search (SDS) (Occupational Daydreams). This 228 item self administered, self scored vocational counseling tool is designed to estimate a person’s vocational choice as determined by six independent occupational categories: Realistic, Investigative, Artistic, Social, Enterprising, and Conventional (RIASEC). The SDS is based on the theory of vocational choice (Holland, 1966, 1973, 1985) and is widely accepted as a measure that increases self understanding, the number of vocational alternatives considered, satisfaction with current vocational aspiration and knowledge of typology. Only the Occupational Daydreams section of the SDS was given in order to determine the student’s most current occupational aspirations.

The occupational daydreams section is based on the theory that a person’s history of occupational preferences and their most recent preferences are good estimates of what a person will choose as their next occupation. The occupational daydreams section has
been shown to be a moderate to efficient predictor of the category of an individual’s current vocational aspirations. Students were asked to write down their most recent daydreamed occupational aspiration on the first line of the measure and then work their way backwards to their earliest daydreamed careers on the successive lines. Only the first Occupational Daydream was used and assigned a single letter Holland code for data analysis (Appendix C).

**Measure of Total Socioeconomic Index (TSEI).** The TSEI was derived from a table obtained from Stevens and Cho (1985). The index is a listing of categorized occupational titles that estimate a measurement of occupational attribution. The TSEI was chosen as a measure of occupational aspiration level because it seeks to collapse measures of social and/or economic dimensions attributed to certain occupations according to prestige (goodness, worth, status and power) and census occupational scores (average rankings of occupations arrayed by median education and income levels). The TSEI scores are the predicted prestige scores obtained in the regression of prestige on levels of income and education. Student Occupational Daydreams were converted to TSEI scores by using the index table in Stevens and Cho (1985) that lists the socioeconomic scores for the 1980 occupational codes. The student’s first occupational daydream was matched with an identical occupational code on the index list and then assigned the corresponding TSEI score.

**The Values Related to Achievement Motivation Scale (VRAMS).** This scale is composed of 21 items and was designed by Timberlake et al., (1993) to estimate values
associated with achievement motivation in school-aged children. The four scales of this measure are structured in a summated rating attitude format to estimate concerns about poor performance, values associated with internal drives to achieve, values associated with the importance of external rewards for achievement, and concerns about parental pressure. For the purposes of this study, the first three subscales will be used to estimate the achievement motivation of the sample. Estimates of internal consistency of the items yielded subscale Kuder-Richardson alpha reliability coefficients of .84, .75, .77, and .60 respectively when used with a sample of seventh grade students (Appendix D) (Timberlake, Barnett, and Plionis, 1993).

Parenting Scale. The index of parenting was based on items taken from measures of parental involvement, strictness, and psychological autonomy granting (Dornbusch et al., 1985; Steinberg, Lamborn, Dornbusch, and Darling, 1992; Steinberg, Lamborn, Darling, Mounts, and Dornbusch, 1994). This is a self report scale designed to assess a student’s perception of their parent(s) or guardian(s) child rearing structure. Students were asked to describe the parent(s) or guardian(s) with whom they live.

Steinberg et al. (1991) provided estimates of the internal consistency of the subscales. The involvement scale (15 items) estimates the degree to which the student perceives his parents as loving, responsive, and involved and yielded an alpha coefficient of .72. The strictness scale (nine items) assesses the degree of parental monitoring and limit setting and yielded an alpha coefficient of .76. The psychological autonomy scale (12 items)
estimates the extent to which parents employ non-coercive, democratic discipline and encourage the adolescent to express individuality in the family and yielded an alpha coefficient of .72. Further estimates of the dimensions intercorrelations reveal low to moderate relationships (involvement with strictness, \( r = .34 \); involvement with psychological autonomy, \( r = .25 \); strictness with psychological autonomy, \( r = -.07 \)).

The items were arranged in a summated rating attitude format ranging from strongly disagree to strongly agree. The first 18 items alternate between the involvement (odd numbered items) and psychological autonomy (even numbered items) scales. The psychological autonomy scale items are reversed scored with the exception of item number 12. The last 8 items comprise the strictness scale (Appendix E).

**Peer Support Scale.** The peer scale is an adaptation of Kunjufu’s (1988) questionnaire designed to estimate African American students peer support to achieve. The questionnaire was based on the assumption that successful students assign their achievement and failure to internal factors but are greatly influenced by external factors, particularly their peers to which loyalty is often more important than success. The items distinguish between positive and negative affirmations from peers to achieve and are designed in a summated rating attitude format ranging from strongly disagree to strongly agree. Currently, no information exists regarding the internal consistency of these items or their predictive validity to peer support (Appendix F).
Procedure

Two weeks prior to the actual data collection, each school mailed an information form and a passive non-consent form to the parent(s) or guardian(s) of 551 African American male students. The letter informed the parent(s) or guardian(s) of the nature of the study, the assurance of student's confidentiality, and the amount of time and effort required by each student (Appendix A). Parent(s) or guardian(s) were provided with an opportunity to decline their son's participation by returning the signed "declined consent form" to the district office where anonymity was maintained. Twelve parents declined participation by letter and were followed up by telephone. These students were not assembled for the data collection and assumed their normal class schedule. On the date of the survey administration each student was instructed to complete his own informed consent letter which detailed the nature of the study, the assurance of participants confidentiality, and the amount of time and extent of participation required (Appendix A). To assure respondent anonymity, no identifying information was asked for on the survey.

Students were given one class period to complete the entire survey which was estimated to take between 35-50 minutes. Most students finished early and were asked to proof their survey for completeness and sit quietly until the entire group completed the task. At the conclusion of the administration students were thanked for their cooperation and then excused to their classes. Each administration was monitored by a set of teachers and a test administration team. Surveys were sorted and assigned numbers for selection in the data analysis sample. At the conclusion of the study it was agreed that the results
would be shared with the school district so as to discuss the possible development and implementation of strategies for improving African American male student achievement motivation and career aspiration.

**Data Analysis**

Parenting styles were determined using Maccoby and Martin (1983) estimates of the involvement and strictness scales. Authoritative parenting was identified by students who scored above the median score on both the involvement and the strictness scale. Authoritarian parenting was identified by those students who scored below the median on the involvement scale and above the median on the strictness scale. Indulgent parenting was identified by students who scored above the median on the involvement scale but below the median on the strictness scale. Lastly, permissive parenting was identified by students who scored below the median on both the involvement and the strictness scale. In order to determine differential levels of achievement motivation and peer support (high, medium and low), estimates based on the standard deviations from the mean scale scores were used.

Descriptive and inferential analyses were generated using computerized statistical packages modified for the personal computer. Statistical Package for the Social Sciences for Windows (SPSS) was used to analyze the descriptive information for all data as well as establish Analysis of Covariance (ANCOVA) and Analysis of Variance (ANOVA) estimates. Statistical Analysis System (SAS) was used to generate the probabilities for
the multi-nominal logit design as well as establish the path analysis estimate. Sample size varies from analysis to analysis on all test hypotheses due to missing data.

**Hypothesis 1.** For the first part of this analysis, a frequency table was generated to describe the relationship between achievement motivation and career aspiration. For descriptive purposes the frequencies were generated across three levels of achievement motivation and compared to the six code types for career aspiration: Realistic, Investigative, Artistic, Social, Enterprising and Conventional (RIASEC).

For the second part of this hypothesis, a maximum-likelihood ANOVA was performed to estimate the significance of the chance that a student would choose one career type over the combined baseline comparison of Investigative or Enterprising. Realistic and Artistic were compared separately while Social and Conventional were combined for the purposes of the test hypothesis. The log of the ratio of the probability that one career aspiration code-type is selected over the probability that the baseline (Investigative or Enterprising) is selected was calculated for achievement motivation.

For the third part of the hypothesis, an ANCOVA was conducted followed by a multiple regression analysis to determine the relationship between achievement motivation and career aspirations measured by TSEI.

**Hypothesis 2.** An ANCOVA model was used to observe the relationship between the three measured parenting structures (autonomy, involvement, and strictness) and achievement motivation. Social class and school were entered as control variables to the regression equation to establish the presence of colinearity. A simultaneous regression
analysis was performed to determine the relationships of the covariates to achievement motivation and determine the presence of significant interactions. Correlation coefficients were calculated on the covariates as they were regressed on achievement motivation.

An ANOVA was performed on the four parenting styles (authoritative, authoritarian, indulgent, and permissive) to determine significant differences between the groups. Post hoc procedures were conducted to estimate the significance of the mean differences observed.

**Hypothesis 3.** An ANCOVA model was used to observe the relationship between achievement motivation and peer support. Social class and school were entered as control variables and age was entered as a possible covariate. A simultaneous regression analysis was performed to estimate the significance of the relationship. Correlation coefficients were calculated for estimations of unique and shared variation to achievement motivation.

**Hypothesis 4.** An ANCOVA model was established to observe the contributions of the three parenting structures (autonomy, involvement, and strictness) toward predicting career aspiration as measured by the total socioeconomic index (TSEI). Social class and school were entered as control variables. A simultaneous regression was performed to establish the relationship between the three parenting structures and career aspiration. Meaningful interactions were explored.
Hypothesis 5. A path analysis model was used to explore how parenting structure (autonomy, involvement and strictness) predicts achievement motivation and the change in the model’s predictability when peer support was added. Furthermore, path analysis was used to observe the effects of achievement motivation on the predictability of career aspiration (TSEI). Variation estimates were obtained to estimate the best fitting path for prediction. A description of the comparative change in model fit were summarized.
CHAPTER IV

RESULTS

Sample Demographic Statistics

Identified for the actual analysis were two hundred fifty-seven randomly selected student responses. This number satisfies conditions for a power estimate of greater than 0.95 at a constant effect size of .33 ($R^2 = .25$) with five predictor variables at $\alpha \leq .05$ (Cohen, 1988).

Descriptive statistics for the survey variables for $N = 252$ observations are presented in Table 1. The intercorrelations of the survey scales and dependent measures are depicted in matrix format in Table 2. Cronbach’s alpha coefficients on the independent measures yielded moderate to good estimates of test reliability and are presented on Table 3.

Hypothesis 1.

Hypothesis 1 was a test of the significance of the relationship between achievement motivation and career aspiration. It was predicted that highly motivated students would more likely aspire to Investigative or Enterprising careers as compared to Social or Conventional careers.
<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>Minimum</th>
<th>Maximum</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autonomous Subscale</td>
<td>22.30</td>
<td>4.60</td>
<td>1.00</td>
<td>33.00</td>
<td>257</td>
</tr>
<tr>
<td>Involvement Subscale</td>
<td>27.67</td>
<td>5.04</td>
<td>2.00</td>
<td>36.00</td>
<td>257</td>
</tr>
<tr>
<td>Strictness Subscale</td>
<td>17.76</td>
<td>4.90</td>
<td>6.00</td>
<td>32.00</td>
<td>253</td>
</tr>
<tr>
<td>Peer Support Scale</td>
<td>28.60</td>
<td>4.94</td>
<td>11.00</td>
<td>44.00</td>
<td>255</td>
</tr>
<tr>
<td>Achievement Motivation (internal)</td>
<td>15.23</td>
<td>2.17</td>
<td>9.00</td>
<td>20.00</td>
<td>257</td>
</tr>
<tr>
<td>Achievement Motivation (external)</td>
<td>22.67</td>
<td>3.05</td>
<td>11.00</td>
<td>28.00</td>
<td>257</td>
</tr>
<tr>
<td>Achievement Motivation (performance)</td>
<td>29.21</td>
<td>5.42</td>
<td>16.00</td>
<td>48.00</td>
<td>257</td>
</tr>
<tr>
<td>Achievement Motivation (Total Score)</td>
<td>67.11</td>
<td>7.19</td>
<td>51.00</td>
<td>90.00</td>
<td>257</td>
</tr>
<tr>
<td>Total TSEI Score</td>
<td>54.51</td>
<td>18.63</td>
<td>17.54</td>
<td>89.57</td>
<td>257</td>
</tr>
<tr>
<td>Authoritative</td>
<td>57.64</td>
<td>19.99</td>
<td>--</td>
<td>--</td>
<td>66</td>
</tr>
<tr>
<td>Authoritarian</td>
<td>58.12</td>
<td>19.13</td>
<td>--</td>
<td>--</td>
<td>43</td>
</tr>
<tr>
<td>Permissive</td>
<td>51.77</td>
<td>17.65</td>
<td>--</td>
<td>--</td>
<td>90</td>
</tr>
<tr>
<td>Indulgent</td>
<td>52.59</td>
<td>18.22</td>
<td>--</td>
<td>--</td>
<td>54</td>
</tr>
</tbody>
</table>

Note. The autonomy subscale of the parenting index was reverse scored where high scores indicate low autonomy in the family environment.
Table 2

Correlation Coefficient Matrix for Parenting Autonomy (PA), Parenting Involvement (PI), Parenting Strictness (PS), Peer Support Scale (PSS), Values Related to Achievement Motivation Scale (VRAMS) and Career Aspiration Total Socioeconomic Index (TSEI)

<table>
<thead>
<tr>
<th></th>
<th>PA</th>
<th>PI</th>
<th>PS</th>
<th>PSS</th>
<th>VRAMS</th>
<th>TSEI</th>
</tr>
</thead>
<tbody>
<tr>
<td>PA</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PI</td>
<td>-.18*</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PS</td>
<td>-.11</td>
<td>.26*</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSS</td>
<td>-.10</td>
<td>.31*</td>
<td>.19*</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VRAMS</td>
<td>-.21*</td>
<td>.28*</td>
<td>.16*</td>
<td>.41*</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>TSEI</td>
<td>.05</td>
<td>.14*</td>
<td>.16</td>
<td>-.01</td>
<td>-.02</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Note. Two-tailed. * p < .05.
Table 3

Cronbach's Alpha of Internal Consistency Reliability Coefficients

<table>
<thead>
<tr>
<th>Scale Variable</th>
<th>Number of Items</th>
<th>Alpha Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autonomy (subscale)</td>
<td>9</td>
<td>.60</td>
</tr>
<tr>
<td>Involvement (subscale)</td>
<td>9</td>
<td>.76</td>
</tr>
<tr>
<td>Strictness (subscale)</td>
<td>8</td>
<td>.74</td>
</tr>
<tr>
<td>Peer Support (total score)</td>
<td>14</td>
<td>.55</td>
</tr>
<tr>
<td>Achievement Motivation (total score)</td>
<td>24</td>
<td>.70</td>
</tr>
</tbody>
</table>
The first part of this hypothesis was descriptive. A frequency analysis was established to describe the relationship of achievement motivation to career aspirations measured by the six career code-types (Realistic, Investigative, Artistic, Social, Enterprising, and Conventional (RIASEC)) depicted in Figure 1. Students were assigned to three levels of achievement motivation (high, average and low) using the mean and standard deviation of the achievement motivation total score. The three levels of achievement motivation were then compared across six career aspiration code-types (RIASEC) (Table 4). The presumptions of this hypothesis were not descriptively supported as 47.6% of the highly motivated students in the sample reported Social career aspirations over Enterprising (7.1%) or Investigative (19%) careers. The majority of the sample fell into the average motivation range and consistently reported aspiring to Social careers (47.3%) over Enterprising (12.4%) and Investigative (18.9%) careers. A maximum-likelihood Analysis of Variance (ANOVA) was conducted between students’ achievement motivation and the probability of aspiring to Investigative or Enterprising careers. The results failed to support the hypothesis that there was a relationship between a student’s achievement motivation score and the likelihood of his aspiring to an Investigative or Enterprising career over a Social or Conventional career $\chi^2 (3, 717) = 3.56, p < .05$ (Table 5).

Lastly, the results of a simultaneous multiple regression analysis indicated that there was not a significant amount of variance accounted for in the career aspiration TSEI scores by achievement motivation $F(1, 247) = .587, p < .05$ (Table 6).
Figure 1.

Holland’s Hexagonal Model and Relational Interpretations of Congruence.

Note. R-person in an R-environment is the most congruent match = 4; in a C or an I-environment = 3; in an E or an A-environment = 2; and in an S-environment = 1 (Holland, 1985).
Table 4

Frequency Analysis of Achievement Motivation Levels and Career Aspiration by Holland Code

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>5</td>
<td>8</td>
<td>4</td>
<td>20</td>
<td>3</td>
<td>2</td>
<td>42</td>
<td></td>
</tr>
<tr>
<td>Row Pct.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>“High”</td>
<td>11.9%</td>
<td>19.0%</td>
<td>9.5%</td>
<td>47.6%</td>
<td>7.1%</td>
<td>4.8%</td>
<td>(16.3%)</td>
<td></td>
</tr>
<tr>
<td>Column Pct.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>“Average”</td>
<td>11.8%</td>
<td>18.9%</td>
<td>8.3%</td>
<td>47.3%</td>
<td>12.4%</td>
<td>1.2%</td>
<td>(65.8%)</td>
<td></td>
</tr>
<tr>
<td>“Low”</td>
<td>13.0%</td>
<td>21.7%</td>
<td>15.2%</td>
<td>41.3%</td>
<td>8.7%</td>
<td></td>
<td>(17.9%)</td>
<td></td>
</tr>
<tr>
<td>Column Tot.</td>
<td>31</td>
<td>50</td>
<td>25</td>
<td>119</td>
<td>28</td>
<td>4</td>
<td>257</td>
<td></td>
</tr>
<tr>
<td>Column Pct.</td>
<td>(12.1%)</td>
<td>(19.5%)</td>
<td>(9.7%)</td>
<td>(46.3%)</td>
<td>(10.9%)</td>
<td>(1.6%)</td>
<td>(100.0%)</td>
<td></td>
</tr>
</tbody>
</table>

Note. Total column and row percentages are in parentheses. N = 257; M = 67.11; SD = 7.19; “high” achievement motivation > 74; “average” achievement motivation = 60-74; “low achievement motivation < 60.
Table 5

Maximum-Likelihood Analysis of Variance of Peer Support, Autonomy, Involvement, Strictness, Achievement Motivation, and School on Career Aspiration as Measured by Holland Code

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>chi-square</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>3</td>
<td>47.82</td>
<td>.00 *</td>
</tr>
<tr>
<td>School</td>
<td>12</td>
<td>16.19</td>
<td>.18</td>
</tr>
<tr>
<td>Peer Support (A)</td>
<td>3</td>
<td>9.86</td>
<td>.01 *</td>
</tr>
<tr>
<td>Autonomy (B)</td>
<td>3</td>
<td>2.59</td>
<td>.45</td>
</tr>
<tr>
<td>Involvement (C)</td>
<td>3</td>
<td>0.40</td>
<td>.93</td>
</tr>
<tr>
<td>Strictness (D)</td>
<td>3</td>
<td>4.55</td>
<td>.20</td>
</tr>
<tr>
<td>Achievement (E)</td>
<td>3</td>
<td>3.56</td>
<td>.31</td>
</tr>
<tr>
<td>A x B</td>
<td>3</td>
<td>2.41</td>
<td>.49</td>
</tr>
<tr>
<td>A x C</td>
<td>3</td>
<td>2.42</td>
<td>.48</td>
</tr>
<tr>
<td>A x D</td>
<td>3</td>
<td>3.48</td>
<td>.32</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>717</td>
<td>561.34</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Note. *p s < .05.
Table 6

Summary of Simultaneous Regression Analysis for Variables Predicting Career Aspiration Measured By Total Socioeconomic Index Value (TSEI)

<table>
<thead>
<tr>
<th>Covariate</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer Support</td>
<td>-.57</td>
<td>.27</td>
<td>-.15</td>
<td>.04 *</td>
</tr>
<tr>
<td>Autonomy</td>
<td>.41</td>
<td>.28</td>
<td>.09</td>
<td>.14</td>
</tr>
<tr>
<td>Involvement</td>
<td>.33</td>
<td>.29</td>
<td>.08</td>
<td>.25</td>
</tr>
<tr>
<td>Strictness</td>
<td>.52</td>
<td>.28</td>
<td>.13</td>
<td>.06</td>
</tr>
<tr>
<td>Achievement Motivation</td>
<td>-.10</td>
<td>.19</td>
<td>-.04</td>
<td>.58</td>
</tr>
<tr>
<td>Peer x Autonomy</td>
<td>.05</td>
<td>.05</td>
<td>.07</td>
<td>.31</td>
</tr>
<tr>
<td>Peer x Involvement</td>
<td>-.05</td>
<td>.05</td>
<td>-.07</td>
<td>.28</td>
</tr>
<tr>
<td>Peer x Strictness</td>
<td>-.10</td>
<td>.05</td>
<td>-.15</td>
<td>.04 *</td>
</tr>
<tr>
<td>Achievement Motivation x Autonomy</td>
<td>-.00</td>
<td>.00</td>
<td>-.13</td>
<td>.11</td>
</tr>
<tr>
<td>Achievement Motivation x Involvement</td>
<td>.00</td>
<td>.03</td>
<td>.00</td>
<td>.94</td>
</tr>
<tr>
<td>Achievement Motivation x Strictness</td>
<td>.04</td>
<td>.03</td>
<td>.10</td>
<td>.19</td>
</tr>
<tr>
<td>Age</td>
<td>-1.13</td>
<td>1.20</td>
<td>-.08</td>
<td>.27</td>
</tr>
</tbody>
</table>

Note. $R^2 = .124$. * $p < .05$. 
Hypothesis 2.

Hypothesis 2 was formulated to determine the relationship between the measured parenting structures (autonomy, involvement, and strictness) and students’ achievement motivation. Specifically, involvement was expected to be more predictive of achievement motivation than strictness and autonomy, respectively. Furthermore, it was proposed that students who were reared in highly involved environments would have higher achievement motivation scores than those reared in strict environments and that students who were reared in autonomous parenting environments would have higher achievement motivation scores than those reared in strict environments. Lastly, it was proposed that there would be a relationship between parenting “style” and achievement motivation such that students who were reared authoritatively would have higher achievement motivation than those reared in authoritarian, indulgent and permissive households, respectively.

ANCOVA procedures revealed a significant relationship between parenting structure and achievement motivation with peer support and age entered as covariates into the model (Table 7) $F(8, 247) = 7.07, p < .05$. The multiple regression procedure revealed a significant positive relationship between students’ reported parental involvement and achievement motivation ($r = .21$) and a significant negative relationship with students’ reported parental autonomy ($r = -.18$) (Table 8). The relationship of these variables to achievement motivation are found on Table 9. It is important to mention
Table 7

Analysis of Covariance for Achievement Motivation

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>MS</th>
<th>F</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>8</td>
<td>272.57</td>
<td>7.07</td>
<td>.000 *</td>
</tr>
<tr>
<td>Class</td>
<td>2</td>
<td>33.95</td>
<td>.88</td>
<td>.416</td>
</tr>
<tr>
<td>School</td>
<td>4</td>
<td>44.43</td>
<td>1.15</td>
<td>.333</td>
</tr>
<tr>
<td>Model</td>
<td>14</td>
<td>217.07</td>
<td>5.63</td>
<td>.000 *</td>
</tr>
<tr>
<td>Within and Residual error</td>
<td>233</td>
<td>38.55</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>247</td>
<td>48.67</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Regression = peer support, parenting structure and age where peer support and age were entered as covariates. All non-significant interactions were omitted. * p ≤ .05.
Table 8

Summary of Simultaneous Regression Analysis for Variables Predicting Achievement

Motivation

<table>
<thead>
<tr>
<th>Covariate</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>t Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer Support (A)</td>
<td>.38</td>
<td>.09</td>
<td>.26</td>
<td>.00 *</td>
</tr>
<tr>
<td>Autonomy (B)</td>
<td>-.29</td>
<td>.09</td>
<td>-.18</td>
<td>.00 *</td>
</tr>
<tr>
<td>Involvement (C)</td>
<td>.30</td>
<td>.09</td>
<td>.21</td>
<td>.00 *</td>
</tr>
<tr>
<td>Strictness (D)</td>
<td>.02</td>
<td>.09</td>
<td>.01</td>
<td>.76</td>
</tr>
<tr>
<td>A x B</td>
<td>-.01</td>
<td>.01</td>
<td>-.04</td>
<td>.47</td>
</tr>
<tr>
<td>A x C</td>
<td>.01</td>
<td>.01</td>
<td>.06</td>
<td>.28</td>
</tr>
<tr>
<td>A x D</td>
<td>-.00</td>
<td>.01</td>
<td>-.02</td>
<td>.63</td>
</tr>
<tr>
<td>Age</td>
<td>.23</td>
<td>.34</td>
<td>.04</td>
<td>.50</td>
</tr>
</tbody>
</table>

Note. R² = .253. * p s < .05.
### Table 9

**Correlation Between Covariates and Achievement Motivation**

<table>
<thead>
<tr>
<th>Covariate</th>
<th>Correlation to Achievement Motivation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer Support</td>
<td>.77</td>
</tr>
<tr>
<td>Autonomy</td>
<td>-.41</td>
</tr>
<tr>
<td>Involvement</td>
<td>.56</td>
</tr>
<tr>
<td>Strictness</td>
<td>.24</td>
</tr>
<tr>
<td>Peer x Autonomy</td>
<td>-.14</td>
</tr>
<tr>
<td>Peer x Involvement</td>
<td>.10</td>
</tr>
<tr>
<td>Peer x Strictness</td>
<td>-.25</td>
</tr>
<tr>
<td>Age</td>
<td>.07</td>
</tr>
</tbody>
</table>
here that the autonomy scale was reverse scored so that high scores would indicate a low
level of reported autonomy in the parenting structure and low scores would indicate a
high level of reported autonomy. There were no significant two-way interactions
between achievement motivation and parenting structure, which suggested that
achievement motivation was not a mediator of career aspiration (Table 8).

For the second part of this question, parenting “styles” were determined by using
the means and the standard deviations scores of the three parenting structures.
Authoritative parenting was identified for students who scored above the median score on
both the involvement and the strictness scale. Authoritarian parenting styles were
identified for those students who scored below the median on the involvement scale and
above the median on the strictness scale. Indulgent parenting was identified for students
who scored above the median on the involvement scale but below the median on the
strictness scale.

Lastly, permissive parenting styles were identified for those students who scored
below the median on both the involvement and the strictness scale (See Table 1 for a
complete list of means and standard deviations for these groups). ANOVA procedures
identified significant between group differences with regard to how these variables were
related to achievement motivation (Table 10) \( F(3, 252) = 5.70, p < .05 \). A post hoc
analysis conducted with Tukey’s honestly significant difference estimated the mean
differences between the parenting styles and indicated that authoritative parenting was the
most predictive of achievement motivation in the sample, followed by indulgent,
Table 10

Analysis of Variance of Achievement Motivation with Parenting Style as the Independent Measure

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>MS</th>
<th>F</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>3</td>
<td>279.29</td>
<td>5.70</td>
<td>.0009 *</td>
</tr>
<tr>
<td>Within Groups</td>
<td>249</td>
<td>48.92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>252</td>
<td>58.21</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. * p < .05.
Table 11

Multiple Range Test for Difference Between Groups Means on Achievement Motivation

<table>
<thead>
<tr>
<th>Parents</th>
<th>Group 3</th>
<th>Group 2</th>
<th>Group 4</th>
<th>Group 1</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>64.98</td>
</tr>
<tr>
<td>Group 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>66.76</td>
</tr>
<tr>
<td>Group 4</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
<td>68.51</td>
</tr>
<tr>
<td>Group 1</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
<td>69.31</td>
</tr>
</tbody>
</table>

authoritarian, and permissive (Table 11).

Hypothesis 3.

Hypothesis 3 was a test of the relationship between peer support and achievement motivation and between peer support and career aspiration. It was predicted that greater peer support would be related to higher achievement motivation and higher career aspirations measured by TSEI.

Support for the first part of this hypothesis was provided in the regression analysis that revealed a significant relationship between peer support and achievement motivation (Table 8). A significant proportion of the variance was accounted for by peer support in the regression equation ($r = .38$) and suggested that it was an important predictor of achievement motivation (Table 9).

Descriptive statistics for the second part of Hypothesis 3 are provided on a frequency table comparing the level of peer support to the type of career aspiration measured by code-type (Table 12). The results of the maximum-likelihood ANOVA depicted a significant likelihood among African American male adolescents of aspiring to an Artistic career as peer support increases $\chi^2 (3, 717) = 9.24, p < .05$: This information was not consistent with the predicted hypothesis and, therefore, did not support it (Table 5, Table 13).

An ANCOVA was established to observe the relationship between the independent variables and the TSEI score (Table 14). A simultaneous multiple regression revealed a significant negative relationship between peer support and TSEI ($r = -.15$) and
Table 12

Frequency Analysis of Peer Support Levels and Career Aspiration by Holland Code

| Holland Code | Count | R | I | A | S | E | C | Row Tot.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Row Pct.</td>
<td>14.3%</td>
<td>7.1%</td>
<td>25.0%</td>
<td>39.3%</td>
<td>10.7%</td>
<td>3.6%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Col. Pct.</td>
<td>12.9%</td>
<td>4.0%</td>
<td>28.0%</td>
<td>9.4%</td>
<td>10.7%</td>
<td>25.0%</td>
</tr>
<tr>
<td>&quot;High&quot;</td>
<td>4</td>
<td>2</td>
<td>7</td>
<td>11</td>
<td>3</td>
<td>1</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>&quot;Average&quot;</td>
<td>22</td>
<td>42</td>
<td>18</td>
<td>96</td>
<td>21</td>
<td>3</td>
<td>202</td>
<td></td>
</tr>
<tr>
<td>&quot;Low&quot;</td>
<td>5</td>
<td>6</td>
<td>10</td>
<td>4</td>
<td>25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Col. Tot.</td>
<td>31</td>
<td>50</td>
<td>25</td>
<td>117</td>
<td>28</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Col. Pct.</td>
<td>(12.2%)</td>
<td>(19.6%)</td>
<td>(9.8%)</td>
<td>(45.9%)</td>
<td>(11.0%)</td>
<td>(1.6%)</td>
</tr>
</tbody>
</table>

Note. Total column and row percentages are in parentheses. N = 255; M = 28.60; SD = 4.94. "High" Peer Support > 33.5, "Average" Peer Support = 23.5-33.5, "Low Peer Support < 23.5.
Table 13

Analysis of Maximum-Likelihood Estimates of Career Aspiration

<table>
<thead>
<tr>
<th>Effect</th>
<th>Parameter</th>
<th>Estimate</th>
<th>SE</th>
<th>chi-square</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>A</td>
<td>-1.21</td>
<td>.36</td>
<td>10.98</td>
<td>.000 *</td>
</tr>
<tr>
<td></td>
<td>S/C</td>
<td>.58</td>
<td>.20</td>
<td>8.24</td>
<td>.004 *</td>
</tr>
<tr>
<td></td>
<td>R</td>
<td>-1.26</td>
<td>.37</td>
<td>11.43</td>
<td>.007 *</td>
</tr>
</tbody>
</table>

| Peer Support | A   | .20  | .06 | 9.24 | .002 * |
|              | S/C | .05  | .03 | 2.08 | .149   |
|              | R   | .01  | .05 | 0.04 | .834   |

Note. A = Artistic, S/C = Social or Conventional, R = Realistic. The probability of choosing an Enterprising or Investigative type was used as the baseline comparison for all log estimates. All non-significant slopes were omitted. * p s < .05.
Table 14

Analysis of Covariance for Independent Variables Predicting Career Aspiration

Measured By Total Socioeconomic Index Value (TSEI)

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>MS</th>
<th>F</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>12</td>
<td>621.80</td>
<td>1.89</td>
<td>.037 *</td>
</tr>
<tr>
<td>Class</td>
<td>2</td>
<td>227.07</td>
<td>.69</td>
<td>.50</td>
</tr>
<tr>
<td>School</td>
<td>4</td>
<td>476.34</td>
<td>1.44</td>
<td>.22</td>
</tr>
<tr>
<td>Model</td>
<td>18</td>
<td>592.74</td>
<td>1.80</td>
<td>.02</td>
</tr>
<tr>
<td>Within and Residual error</td>
<td>229</td>
<td>329.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>247</td>
<td>348.99</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. $R^2 = .124$. *p < .05.
indicated that as peer support decreases career aspiration increases. A significant disordinal two-way interaction between peer support and strictness was also revealed in the multiple regression analysis (Table 6). The nature of this interaction is further interpreted to understand the conditions upon which the relationship between peer support, parental strictness and career aspiration exist by using the slopes of the regression equations (Aiken and West, 1991).

Given the significant interaction between peer support and parental strictness the interpretation is determined by estimating the slopes of the regression lines on career aspiration. The negative slope of the regression is indicated by the negative beta value which is used to estimate the slope of the interaction. Cohen and Cohen (1983) have suggested using deviation values from the mean of one of the interaction terms to determine the values of the second interaction term on the dependent variable at varying levels. The equation $Y = (b_1 + b_3Z)X + (b_2Z + b_0)$ is algebraically expressed as the equation of the slope given the interaction. The $Z$ term represents three levels of strictness assigned as the mean for strictness and one standard deviation above and below the mean for strictness (see Table 1 for means and standard deviations); the term $b_1$ represents the beta value for strictness; $b_2Z$ represents the beta value for peer support multiplied by the three assigned levels of strictness; $b_3Z$ is the beta value for the interaction between peer support and strictness multiplied by the three levels of strictness; and $b_0$ represents the beta value of the intercept (not calculated for the purposes of this
interpretation). When high, average and low values of parental strictness (Z) are computed the resulting slopes are:

\[ Y = -3.11X + 12.19 \] when strictness is high;

\[ Y = -2.56X + 9.54 \] when strictness is average;

\[ Y = -2.01X + 6.89 \] when strictness is low.

The slopes of the lines suggested that the effect of peer support on career aspiration measured by TSEI was different depending on the level of strictness in the home. When strictness was low, the relationship between peer support and career aspiration was negative. Therefore, the relationship between peer support and career aspiration was conditional upon the level of strictness in the home. The higher the level of strictness students reported in the home, the lower the level of careers to which students aspired, as peer support increased. A graphic depiction of this disordinal interaction is provided in Figure 2. Correlation estimates of the variables to the TSEI score are presented (Table 15).

Hypothesis 4.

Hypothesis 4 predicted that there would be a significant relationship between students’ parenting structure (autonomous, involved or strict) and their career aspirations, measured by the student’s TSEI score. A descriptive analysis of this prediction compared the career aspirations for the student sample (RIASEC) to parenting style (authoritative,
Figure 2.

Disordinal Interaction Between Peer Support and Parental Strictness on Career Aspiration for Differing Levels of Parental Strictness.

Note: Solid line = high strictness, dashed line = average strictness, dotted line = low strictness.
Table 15

**Correlation Between Covariates and TSEI**

<table>
<thead>
<tr>
<th>Covariate</th>
<th>$R^2$ Correlation to TSEI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer Support</td>
<td>-.08</td>
</tr>
<tr>
<td>Autonomy</td>
<td>.22</td>
</tr>
<tr>
<td>Involvement</td>
<td>.40</td>
</tr>
<tr>
<td>Strictness</td>
<td>.49</td>
</tr>
<tr>
<td>Achievement Motivation</td>
<td>-.09</td>
</tr>
<tr>
<td>Achievement Motivation x Involvement</td>
<td>-.20</td>
</tr>
<tr>
<td>Achievement Motivation x Autonomy</td>
<td>-.10</td>
</tr>
<tr>
<td>Achievement Motivation x Strictness</td>
<td>.00</td>
</tr>
<tr>
<td>Peer x Autonomy</td>
<td>.15</td>
</tr>
<tr>
<td>Peer x Involvement</td>
<td>-.35</td>
</tr>
<tr>
<td>Peer x Strictness</td>
<td>-.30</td>
</tr>
<tr>
<td>Age</td>
<td>-.24</td>
</tr>
</tbody>
</table>
Table 16

Frequency Analysis of Parenting and Career Aspiration by Holland Code

<table>
<thead>
<tr>
<th>Count</th>
<th>R</th>
<th>I</th>
<th>A</th>
<th>S</th>
<th>E</th>
<th>C</th>
<th>Row Tot.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>7</td>
<td>14</td>
<td>4</td>
<td>29</td>
<td>7</td>
<td>33</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td>10.6%</td>
<td>21.2%</td>
<td>6.1%</td>
<td>43.9%</td>
<td>13.6%</td>
<td>4.5%</td>
<td>(26.1%)</td>
</tr>
<tr>
<td></td>
<td>22.6%</td>
<td>28.0%</td>
<td>16.7%</td>
<td>24.8%</td>
<td>33.3%</td>
<td>75.0%</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>2</td>
<td>13</td>
<td>5</td>
<td>19</td>
<td>4</td>
<td></td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>4.7%</td>
<td>30.2%</td>
<td>11.6%</td>
<td>44.2%</td>
<td>9.3%</td>
<td></td>
<td>(17.0%)</td>
</tr>
<tr>
<td></td>
<td>6.5%</td>
<td>26.0%</td>
<td>20.8%</td>
<td>16.2%</td>
<td>14.8%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>13</td>
<td>14</td>
<td>10</td>
<td>43</td>
<td>10</td>
<td></td>
<td>90</td>
</tr>
<tr>
<td></td>
<td>14.4%</td>
<td>15.6%</td>
<td>11.1%</td>
<td>47.8%</td>
<td>11.1%</td>
<td></td>
<td>(35.6%)</td>
</tr>
<tr>
<td></td>
<td>41.9%</td>
<td>28.0%</td>
<td>41.7%</td>
<td>36.8%</td>
<td>37.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>9</td>
<td>9</td>
<td>5</td>
<td>26</td>
<td>4</td>
<td>1</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>16.7%</td>
<td>16.7%</td>
<td>9.3%</td>
<td>48.1%</td>
<td>7.4%</td>
<td>1.9%</td>
<td>(21.3%)</td>
</tr>
<tr>
<td></td>
<td>29.0%</td>
<td>18.0%</td>
<td>20.8%</td>
<td>22.2%</td>
<td>14.8%</td>
<td>25.0%</td>
<td></td>
</tr>
<tr>
<td>Col. Tot.</td>
<td>31</td>
<td>50</td>
<td>24</td>
<td>117</td>
<td>27</td>
<td>4</td>
<td>253</td>
</tr>
<tr>
<td>Col. Pct.</td>
<td>(12.3%)</td>
<td>(19.8%)</td>
<td>(9.5%)</td>
<td>(46.2%)</td>
<td>(10.7%)</td>
<td>(1.6%)</td>
<td>(100.0%)</td>
</tr>
</tbody>
</table>

Note. A = Authoritative, B = Authoritarian, C = Permissive, D = Indulgent. Total column and row percentages are in parentheses. N = 253; M = 54.56; SD = 18.77.
authoritarian, indulgent, and permissive) (Table 16). Similar to Hypothesis 1, a majority of the students (46.2%, n = 117) across parenting style aspired to Social career types. Based upon the results of the multiple regression analysis it did not appear that autonomy, involvement or strictness alone accounted for a significant amount of variation in predicting career aspiration. However, consistent with Hypothesis 3, there was a significant interaction between peer support and strictness. As interpreted earlier, the interaction appeared to suggest that the stricter the parenting situation was at home the more negative was the relationship between peer support and career aspiration.

Hypothesis 5.

Hypothesis 5 was a test of the proposed experimental model that parenting structure (autonomy, involvement, strictness) predicted student achievement motivation and that the predictability of career aspirations was affected by achievement motivation. Furthermore, the model sought to establish the predictability of students’ achievement motivation as it was significantly affected by peer support. Specifically, it was proposed that peer support increased the predictability of achievement motivation and career aspiration when added to this model.

The analyses summarized in Figures 3, 4, and 5 help to identify some of the major predictors of achievement motivation and career aspiration. Between 15% and 24% of the variance in achievement motivation was accounted for in the models and approximately 6% of the variance was accounted for in career aspiration. A description of the predictor variables used in Models 3, 4 and 5 is provided (Tables 17, 18, and 19).
A tabular presentation of the variance accounted for by each analytic path for each model is also provided (Tables 20, 21, and 22).
Figure 3.

Path-Analytic Model 1

Note. Shown in diagram are both non-significant (dashed lines) and significant (bold lines) standardized coefficients. Also show in each box are the calculated $R^2$ for each predicted variable in the equation. * $p < .05$. 
Figure 4

Path-Analytic Model 2

Autonomy V1

\[ \text{Involvement V2} \quad \text{Achievement Motivation V5} \quad \text{Career Aspiration V6} \]

\[ R^2 = .24 \quad R^2 = .001 \]

Note. Shown in diagram are both non-significant (dashed lines) and significant (bold lines) standardized coefficients. Also shown in each box are the calculated $R^2$ for each predicted variable in the equation. * $p < .05$. 
Figure 5

Path Analytic Model 3

Note. Shown in diagram are both non-significant (dashed lines) and significant (bold lines) standardized coefficients. Also shown in each box are the calculated $R^2$ for each predicted variable in the equation. * $p < .05$. 
Table 17

Descriptive Table for Path-Analytic Model 1: Influence of Autonomy, Involvement, Strictness, and Achievement Motivation on Career Aspiration

<table>
<thead>
<tr>
<th>Variable</th>
<th>Parameter</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autonomy</td>
<td>(V1)</td>
<td>.06</td>
<td>4.42</td>
</tr>
<tr>
<td>Involvement</td>
<td>(V2)</td>
<td>.08</td>
<td>4.81</td>
</tr>
<tr>
<td>Strictness</td>
<td>(V3)</td>
<td>.00</td>
<td>4.89</td>
</tr>
<tr>
<td>Achievement Motivation</td>
<td>(V5)</td>
<td>.06</td>
<td>7.18</td>
</tr>
<tr>
<td>Career Aspiration (TSEI)</td>
<td>(V6)</td>
<td>54.58</td>
<td>18.76</td>
</tr>
</tbody>
</table>

Note. V1 = autonomy, V2 = involvement, V3 = strictness, V4 = peer support, V5 = achievement motivation, V6 = career aspiration (TSEI). V1-V3 are exogenous to V5 while V5 is exogenous to V6.
Table 18

Descriptive Table for Path-Analytic Model 2: Influence of Autonomy, Involvement, Strictness, Peer Support and Achievement Motivation on Career Aspiration

<table>
<thead>
<tr>
<th>Variable</th>
<th>Parameter</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autonomy</td>
<td>(V1)</td>
<td>.05</td>
<td>4.42</td>
</tr>
<tr>
<td>Involvement</td>
<td>(V2)</td>
<td>.01</td>
<td>4.79</td>
</tr>
<tr>
<td>Strictness</td>
<td>(V3)</td>
<td>.04</td>
<td>4.85</td>
</tr>
<tr>
<td>Peer Support</td>
<td>(V4)</td>
<td>-.01</td>
<td>4.94</td>
</tr>
<tr>
<td>Achievement Motivation</td>
<td>(V5)</td>
<td>.072</td>
<td>7.20</td>
</tr>
<tr>
<td>Career Aspiration (TSEI)</td>
<td>(V6)</td>
<td>54.60</td>
<td>18.8</td>
</tr>
</tbody>
</table>

Note. V1 = autonomy, V2 = involvement, V3 = strictness, V4 = peer support, V5 = achievement motivation, V6 = career aspiration (TSEI). V1-V4 are exogenous to V5 while V5 is exogenous to V6.
Table 19

Descriptive Table for Path-Analytic Model 3: Influence of Autonomy, Involvement, Strictness, and Achievement Motivation on Career Aspiration

<table>
<thead>
<tr>
<th>Variable</th>
<th>Parameter</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autonomy (V1)</td>
<td>(V1)</td>
<td>.05</td>
<td>4.42</td>
</tr>
<tr>
<td>Involvement (V2)</td>
<td>(V2)</td>
<td>.11</td>
<td>4.79</td>
</tr>
<tr>
<td>Strictness (V3)</td>
<td>(V3)</td>
<td>.04</td>
<td>4.85</td>
</tr>
<tr>
<td>Peer Support (V4)</td>
<td>(V4)</td>
<td>-.01</td>
<td>4.94</td>
</tr>
<tr>
<td>Achievement Motivation (V5)</td>
<td>(V5)</td>
<td>.07</td>
<td>7.20</td>
</tr>
<tr>
<td>Career Aspiration (TSEI)</td>
<td>(V6)</td>
<td>54.60</td>
<td>18.80</td>
</tr>
</tbody>
</table>

Note. V1 = autonomy, V2 = involvement, V3 = strictness, V4 = peer support, V5 = achievement motivation, V6 = career aspiration (TSEI). V1-V4 are exogenous to V5 while V1-V5 are exogenous to V6.
Table 20

Unstandardized and Standardized Variation for Path-Analytic Model 1: Influence of Autonomy, Involvement, Strictness and Achievement Motivation on Career Aspiration

<table>
<thead>
<tr>
<th>Variable</th>
<th>Parameter</th>
<th>Variation</th>
<th>SE</th>
<th>$t$ Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autonomy (V1)</td>
<td>PV1V5</td>
<td>-.41(-.25)</td>
<td>.09</td>
<td>-4.32</td>
</tr>
<tr>
<td>Involvement (V2)</td>
<td>PV2V5</td>
<td>.44(.29)</td>
<td>.09</td>
<td>4.90</td>
</tr>
<tr>
<td>Strictness (V3)</td>
<td>PV3V5</td>
<td>.09(.06)</td>
<td>.08</td>
<td>1.01</td>
</tr>
<tr>
<td>Achievement Motivation (V5)</td>
<td>PV5V6</td>
<td>-.08(.03)</td>
<td>.16</td>
<td>-.50</td>
</tr>
</tbody>
</table>

Table 21

Unstandardized and Standardized Variation for Path-Analytic Model 2: Influence of Autonomy, Involvement, Strictness, Peer Support and Achievement Motivation on Career Aspiration

<table>
<thead>
<tr>
<th>Variable</th>
<th>Parameter</th>
<th>Variation</th>
<th>SE</th>
<th>t Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autonomy (V1)</td>
<td>PV1V5</td>
<td>-.35 (.21)</td>
<td>.09</td>
<td>-3.84</td>
</tr>
<tr>
<td>Involvement (V2)</td>
<td>PV2V5</td>
<td>.30 (.20)</td>
<td>.09</td>
<td>3.39</td>
</tr>
<tr>
<td>Strictness (V3)</td>
<td>PV3V5</td>
<td>.04 (.03)</td>
<td>.08</td>
<td>.56</td>
</tr>
<tr>
<td>Peer Support (V4)</td>
<td>PV4V5</td>
<td>.45 (.31)</td>
<td>.08</td>
<td>5.33</td>
</tr>
<tr>
<td>Achievement Motivation</td>
<td>PV5V6</td>
<td>-.08 (.03)</td>
<td>.16</td>
<td>-.510</td>
</tr>
<tr>
<td>(V5)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 22

**Unstandardized and Standardized Variation for Path-Analytic Model 3: Influence of Autonomy, Involvement, Strictness and Achievement Motivation on Career Aspiration**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Parameter</th>
<th>Variation</th>
<th>SE</th>
<th>t Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autonomy</td>
<td>PV1V5</td>
<td>-.36 (-.22)</td>
<td>.09</td>
<td>-3.94</td>
</tr>
<tr>
<td>Involvement</td>
<td>PV2V5</td>
<td>.32 (.22)</td>
<td>.09</td>
<td>3.63</td>
</tr>
<tr>
<td>Strictness</td>
<td>PV3V5</td>
<td>.05 (.03)</td>
<td>.08</td>
<td>.64</td>
</tr>
<tr>
<td>Peer Support</td>
<td>PV4V5</td>
<td>.39 (.27)</td>
<td>.08</td>
<td>4.79</td>
</tr>
<tr>
<td>Achievement</td>
<td>PV5V6</td>
<td>-.31 (-.11)</td>
<td>.17</td>
<td>-1.73</td>
</tr>
</tbody>
</table>

**Motivation**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Parameter</th>
<th>Variation</th>
<th>SE</th>
<th>t Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autonomy</td>
<td>PV1V6</td>
<td>.18 (.04)</td>
<td>.27</td>
<td>.67</td>
</tr>
<tr>
<td>Involvement</td>
<td>PV2V6</td>
<td>.43 (.10)</td>
<td>.26</td>
<td>1.62</td>
</tr>
<tr>
<td>Strictness</td>
<td>PV3V6</td>
<td>.55 (.14)</td>
<td>.25</td>
<td>2.18</td>
</tr>
<tr>
<td>Peer Support</td>
<td>PV4V6</td>
<td>.39 (.10)</td>
<td>.08</td>
<td>4.79</td>
</tr>
</tbody>
</table>

**Note.** V1 = autonomy, V2 = involvement, V3 = strictness, V4 = peer support, V5 = achievement motivation, V6 = career aspiration (TSEI). Values enclosed in parentheses represent standardized path coefficients of variation. \( R^2 V5 = .222; R^2 V6 = .057. \) Bentler’s Comparative Fit Index (CFI) = .956. Bentler & Bonett’s (1980) Normed Fit Index (NFI) = .954. * \( \chi^2 (1, N = 252) = 6.45, p < .05. \)
Partial support for Hypothesis 5 was observed as peer support accounted for a significant portion of the variation in achievement motivation. The most consistent path of prediction for achievement motivation was on Model 2 in the following sequence: parental involvement → peer support → achievement motivation (Figure 4). The most predictive path for career aspiration was on Model 3 in the following sequence: parental involvement → parental strictness → peer support → career aspiration (Figure 5).

Comparative and normative fit indices for each model are reported as well as the overall change in the model’s fit to the predictor (Table 23).
Table 23

Summary of Sequential Comparative Fit Indices for Analytical Paths 1, 2 and 3

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>$R^2$ V5</th>
<th>$R^2$ V6</th>
<th>CFI</th>
<th>NFI</th>
<th>$\chi^2$ diff.</th>
<th>$\Delta$ in NFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>12.63 *</td>
<td>.154</td>
<td>.001</td>
<td>.86</td>
<td>.84</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>2</td>
<td>13.42 *</td>
<td>.240</td>
<td>.001</td>
<td>.92</td>
<td>.90</td>
<td>.79</td>
<td>.06</td>
</tr>
<tr>
<td>3</td>
<td>6.45 *</td>
<td>.222</td>
<td>.057</td>
<td>.95</td>
<td>.95</td>
<td>6.97</td>
<td>.04</td>
</tr>
</tbody>
</table>

Note. CFI = Bentler’s comparative fit index; NFI = Normed Fit Index. * p < .05.
CHAPTER V

DISCUSSION

The results of the study are an extension of the research in the field regarding the external factors that are related to African American male adolescent achievement motivation and career aspiration. The findings are presented to provide a clearer understanding of the relationship between these external variables and their specific properties of interaction as they predict achievement motivation and career aspiration. This chapter will focus on the synthesis of the findings reported and provide insight to its generalizability. There will also be attention directed to unanalyzed effects as well as the possible implications for the study as far as it applies to the general population. Suggestions for alternative approaches will look at considerations for future research. A critique of the shortcomings of the study will concentrate on the possible external and internal validity concerns of the methodology, including the instrumentation, testing procedures, and the possible presence of sampling errors. A conclusion will consider the outcomes of the findings and their general relevance.

Achievement motivation and career aspirations.

The significance of the relationship between achievement motivation and career aspiration in African American male adolescents was unproved. Simply, African American male adolescents' achievement motivation scores were not predictive of the
career paths to which they aspired. The first proposed model predicted a relationship between students who were highly motivated to achieve and the likelihood that they would aspire to a high total socio-economic index (TSEI). The second half of the prediction involved an analysis of whether highly motivated students would aspire to Enterprising and Investigative careers over Social and Conventional careers.

The results of this analysis failed to support the relationship between achievement motivation and career aspiration. Evidence provided on the correlation between the achievement motivation measure and the career aspiration measure suggested that, for the African American male adolescents sampled, their level of achievement motivation had very little to do with their expressed level of career aspiration. The path analysis of the best fitting model (Figure 5) was consistent with these findings and also failed to support the relationship by suggesting that achievement motivation did not account for a significant portion of the variation in career aspiration.

A relationship between African American male adolescents’ achievement motivation scores and the types of careers to which they aspired was predicted. The results of the maximum-likelihood Analysis of Variance (ANOVA) revealed similar findings to that of the path analysis and the ANCOVA, and suggested that there was no relationship between a student’s achievement motivation and their career aspiration. In other words, the likelihood of a student who scored high on achievement motivation aspiring to an Investigative or Enterprising career over a Social or Conventional career was less than that of chance.
A frequency table comparing the career aspirations of the students across levels of achievement motivation provided information regarding the relationship of the two variables. It appeared that a majority of the students reported aspiring to Social careers (46%). Approximately 26% of the high achievement motivated African American male students reported aspirations toward Investigative or Enterprising careers. These findings were consistent with previous research that stated that African American males frequently aspired to higher level Social careers and significantly lower level Investigative careers than men in general (See Cheatham, 1990, Hines, 1983, Gottfredson 1978).

Speculation regarding the reasons for the somewhat inconclusive findings may center around the questionable variability of the sample and the way in which career aspirations were obtained. A majority of the students reported aspirations in the Social occupational category. A closer analysis of the sample data revealed a majority of the African American male adolescents reported aspiring to careers in professional athletics. Although these students aspired to Social careers, their particular interests in professional football, and basketball may suggest that, among African American male students, the interest to be a professional athlete may have been due to the opportunity to earn a large income. Stated another way, African American male students who were likely to aspire to be professional athletes may have been more interested in the perceived high income level of the career rather than whether football or basketball was an appropriate career match for their scholastic achievement.
Although it can be argued that earning money is a viable career aspiration, these findings also indicated that the African American male adolescents sampled were more interested in earning money in a career that may not accurately reward their achievement motivation but instead reward them for their particular talents as an athlete.

Another reason for the poor relationship between achievement motivation and career aspiration may be due to the disparity between the mid-range position of "professional athlete" on the 1985 TSEI, and other reported Social TSEI careers. If earning potential and prestige were the sole criteria for the TSEI, then it is believed that the relationship between professional athletes (48.90) and psychologists (87.14), for instance, would be closer to each other on the index. Since, however, the TSEI is derived from a combination of these criteria, including the estimated median educational level, the separation between professional athlete and psychologist is greater. Given this information, the 1985 TSEI estimate of professional athletes may not be at all comparable to the current earning potential of professional athletes. Furthermore, if the students sampled based their level of career aspiration on income alone, the TSEI provided a less than accurate estimate of student's perceived aspiration level. Although it is assumed that the earning power of an African American professional athlete today would surpass the predicted earning power of the same athlete when the TSEI was established in 1985, the disparity in the projected earning of professional athletes compared to other occupational codes may not be accurate on the TSEI even today. It is, therefore, possible that the TSEI
may have underestimated the career aspiration levels of the African American male adolescents in the sample.

The high recognition of African American athletes may also have contributed to "professional athletics" being the most aspired career among the students sampled. For many, the popularity of African American athletes makes professional athletics a very tempting career aspiration for even the high achievement motivated African American male adolescent. Because professional athletics may represent one of the few highly visible examples of African American males' competitive earning power in American society, it appears to be serving as an apex of achievement for African American male adolescents (Parmer, 1993).

Another possible reason for the poor relationship between achievement motivation and career aspiration leads to speculation about the absence of an additional variable from the prediction equation. Student self efficacy may effect the way students perceive their career aspirations given their level of achievement motivation. For many White students, self efficacy has been highly predictive of future success; however, for African American students, self efficacy may be more synonymous with socialization factors related to discrimination.

Ogbu's (1985) theory of the "glass ceiling effect," stated that, as "minorities," African American male adolescents perceive that they will face a job ceiling that will prohibit them from "receiving occupational rewards commensurate with their educational credentials" (Mickelson, 1990, p. 45). Although this proposal has been criticized for its
failure to withstand empirical scrutiny, others further contend that, for African American males, the belief that academic success will lead to better future career opportunities is unwarranted. Earlier, research indicated that for African American students, the relationship between education and life success was found to influence their academic performance and relative engagement in school (Steinberg et al., 1992). Lastly, as Steinberg et al., (1992) pointed out, this was not to suggest that the students in the sample were not motivated to achieve, but instead, that they may place different values on achievement and career opportunities compared to their White counterparts. The implications of the “glass ceiling effect” and the perception of unequal payoffs for school success may be two additional reasons for the overall weakness of the relationship between achievement motivation and career aspirations in the sample. Specifically, if the students perceived that no matter what their academic efforts were they were not guaranteed a satisfactory job, then it would follow, according to Ogbu (1985), and Steinberg et al. (1992), that these students would aspire toward careers that had nothing to do with their achievement efforts but were valued for their potential income.

Parenting and achievement motivation.

The second research question concerned the relationship between parenting structures and the level of achievement motivation. It predicted that students who were reared in highly involved parenting structures would report more achievement motivation than those reared in strict or autonomous parenting structures. This hypothesis was partially supported in that both involvement and autonomy were significantly related to
achievement motivation, each accounting for approximately 30% of the variation in the model. Though involvement was not observed to contribute significantly more to achievement motivation it was more predictive than strictness. The significant inverse relationship between autonomy and achievement motivation indicated that the lower the autonomy score, the higher the student's reported achievement motivation. This finding was accurate given the reverse scoring procedure used on the autonomy scale. In other words, the lower a student scored on autonomy, the more autonomy he actually reported experiencing in the parenting structure. This finding also supported the notion that the more democratic the family structure was at home, the higher the expressed level of achievement motivation by the African American male adolescent. It did not appear that strictness alone was related significantly to achievement motivation. The results suggested, however, that the more responsive and accepting parents were of their African American male adolescent sons, the higher they were motivated to achieve in school.

When the parenting structures were converted into parenting "styles," authoritatively reared (above average involvement, above average strictness), African American male adolescents had higher achievement motivation. This finding indicated that when African American male adolescents were reared authoritatively \((N = 66)\), they were more likely to be motivated to achieve than when reared indulgently \((N = 54)\), authoritarianly \((N = 43)\), or permissively \((N = 90)\), respectively (Table 11). Furthermore, it appeared that indulgent parenting was more predictive of achievement motivation than authoritarian parenting. These findings suggested that for African American male
adolescents involvement, characterized by high levels of responsiveness and warmth, was a more important parenting structure than strictness, characterized by high levels of demandingness and supervision. Lastly, this finding replicated the results presented by Baumrind (1978), Spencer and Dornbusch (1990), and Steinberg et al. (1991) who found that the importance of authoritative parenting in predicting high student achievement was common across racial and ethnic groups. Although the results did not indicate whether the African American males in the sample were benefiting grade-wise from their authoritative rearing, the results suggest that when African American males received authoritative parenting at home they were more motivated to achieve.

It is speculated that the change the departure from previous literature regarding the positive effects of authoritarian parenting can be explained developmentally. As early research (viz. Coleman, 1966) pushed for African American parents to be firmer with their sons to improve their overall achievement, the effects of these parents strict parenting had an impact on the students who received this authoritarian style. It is believed that these students are now a “new” generation of parents that perhaps are indoctrinating a different style of interaction with their son’s, based upon recent literature, so as to foster achievement benefits. These “new” parents, like their parents, appear to be responsive to the social context and in turn incorporating more authoritative styles of interaction with their sons.
Peer support and achievement motivation.

The hypothesized relationship between peer support and achievement motivation was proposed earlier by Steinberg and Brown (1989) who found that across all racial and ethnic groups, adolescent peer crowd membership played an important role in academic performance and was, at times, a better predictor of achievement than parenting styles. Durbin et al. (1991) found that this was true, especially for White adolescents whose authoritative upbringing was not only conducive for achievement but predictive of peer group affiliation. Steinberg et al. (1993) found no relationship between parenting style and the peers students sought support from and proposed that authoritatively reared minority students would not necessarily choose peer groups that encourage academic success. Steinberg et al. (1993) further speculated that, for authoritatively reared minority youth who were not part of an achievement supportive peer group, the influence of peers could offset the influence of their parents authoritative style.

The hypothesized relationship between peer support and achievement was upheld by the results of the study and suggested that there was a large proportion of variance accounted for in achievement motivation scores by peer support. African American male adolescents reported higher achievement motivation when they were supported by their peers to achieve. The results also suggested that peer support was a better predictor of achievement motivation when compared to parenting structure. Moreover, peer support appeared to mediate the relationship between parenting and achievement motivation. When parents modeled autonomous and involved environments at home their son’s
appeared to selected achievement oriented peer groups which increased their overall reported achievement motivation. This was observed in path-analytic Model 1 where the variance accounted for in achievement motivation was mostly due to the significant contribution of autonomy and involvement before peer support was added to the prediction model. When peer support was added as a predictor, the relationship between the parenting predictors and achievement motivation decreased but the variance accounted for in achievement motivation increased from $R^2 = .15$ to $R^2 = .24$ (Figures 3 and 4). This finding demonstrated the peer group enhances good parenting in the model and is very predictive of the overall achievement motivation expressed by the African American male adolescent. Perhaps more important, however, the results indicated that African American male adolescents who were receiving other than authoritative parenting may have been more influenced by their peer groups to achieve than by their parenting. This effect was also consistent with previous research that pointed to the racial and ethnic differences regarding the relative influence of peers on student achievement (Steinberg, 1992). While for most White and Latino students, parents remained the most important predictors of student achievement; for African American and Asian American students, peer support appeared to be more predictive of student achievement (Brown, Steinberg, Mounts, and Philipp, 1990).

**Peer support and career aspiration.**

The relationship between peer support and career aspiration presented evidence of an interaction with parental strictness. It appeared that when strictness in the home was
high the inverse relationship between peer support and career aspiration increased (i.e., more negative). Specifically, as parents became more demanding and placed more supervision on their sons (i.e., curfews and other restrictions) students became more likely to seek peer support and not aspire to a high level careers. A simple interpretation of this interaction may have had more to do with the African American male adolescents’ natural rebellion toward parental supervision and their consequent need for acceptance from an involved peer group. Given the relationship described in this interaction it seemed that students who reported a high level of parental strictness sought more peer support for their achievement interests and, yet, aspired to lower level careers compared to students who reported less strictness overall. The inverse relationship of peer support with career aspiration and its interactive effects with strictness provided further validity to the research conducted by Spencer and Dornbusch (1990) Steinberg et al. (1992) who determined that peer group membership accounted for a significant proportion of the variation in African American students perception of future success and influence the career aspirations and achievement motivation beliefs of African American males.

Neither parental autonomy nor parental involvement were significantly predictive of career aspirations. These findings held true in both the multiple regression analysis and the path analysis. Parental strictness alone became a stronger predictor of career aspiration in Model 3 with peer support accounting for approximately 33% of the variation in career aspiration scores on the TSEI (Figure 5). These findings point to the
importance of strictness and peer support in predicting career aspiration for African American male adolescents.

The importance of peer support in this model cannot be underestimated. As well as accounting for a significant amount of variability in the tested path model, its inverse relationship to career aspiration and strong positive relationship to achievement motivation make it one of the more important predictors in the overall study. While the hypothesized moderating effects of peer support could not be upheld due to its high correlation with achievement motivation ($r = .77$), the mediating effect of peer support in raising the predictability of achievement motivation was observed in the path model. Furthermore the strong relationship between peer support and career aspiration is important to note as the level of strictness in the home increased the level of career aspiration decreased as the peer support increased.

The importance of peer group membership demonstrated in these results was similar to the effects observed by earlier researchers (Fordham, 1988; Kunjufu, 1988; Spencer & Dornbusch, 1990; Steinberg, Dornbusch, and Bradford, 1992). Student dissonance was observed by Steinberg et al. (1992), particularly when students were torn between individual achievement interests and peer popularity. Fordham (1988) argued that for high achieving African American students, doing well in school was equated with “selling out” or becoming “non-Black.” Kunjufu (1988) also observed African American males to be torn between being popular and being smart among their African American peers. The inverse relationship between peer support and career aspiration may have
been due to differences in the perceived values placed on the career aspirations expressed by the African American male student and his peer group.

Implications

The results demonstrate an interesting, yet complex, set of conditions for improving the achievement motivation and career aspirations of African American male adolescents. The research supports the use of authoritative parenting over indulgent, authoritarian and permissive styles, respectively, as effective in promoting the achievement motivation of African American males. Furthermore, the results provide evidence that the use of peer support in conjunction with authoritative parenting will improve the achievement motivation of African American male adolescents more than the use of authoritative parenting alone. Specifically, parents who are warm, responsive and firm are more likely to raise students who are more motivated to achieve than parents who are firm, unresponsive and relatively unyielding to their son’s autonomous concerns.

The results also indicate that peer support mediates the influence of parenting in motivating an African American male adolescent to achieve. Strong peer support to achieve may also make-up for the negative effects of permissive parenting. Equally, low peer support for achievement may consequently have a negative influence on the benefits of authoritative parenting toward achievement. Because peer support is such a strong determinant of achievement motivation, it is proposed that the composition of the peer group may be more important than the parenting style practiced at home. This is not to imply that parenting style is not an important influence on African American male
adolescent achievement motivation. The results of the study, however, consistently indicate that the peer support a student receives to achieve enhances of how motivated he is to achieve when combined with high levels of warmth, strictness and responsiveness in the home.

The study also implies important information for schools and other developmental institutions who have a vested interest in the achievement motivation of African American male adolescents. Given the strong influence of the peer group on the achievement motivation of African American male adolescents, it would appear that students could be more motivated to achieve if their immediate peer group reinforced this interest. Interventions by teachers, school counselors, and parents could provide the environments necessary for peer groups to value achievement and support each other. The results support the use of academic achievement groups and cooperative learning circles for students in school so as to bolster the value of achievement within the peer group and thus increase their overall level of achievement motivation.

Particularly important is the recognition, among school counselors and teachers, of student’s aspired careers and their level of self efficacy to attain these aspirations. Although it may be important to know that a student aspires to be a professional basketball player, it is also important to stay cognizant of the realism behind that aspiration. By using the initial aspiration as a focus point, the school counselor may find other options for attaining the student’s true aspiration toward being successful and affluent.
For clinicians, the results support the use of a consultant systems approach for interacting with low achieving African American male adolescents. The peer group provides another resource for clinicians to intervene with African American male adolescents who are not achieving in school. The use of the peer group to improve achievement motivation is particularly important if the parenting style at home is permissive and not involved with the student’s achievement. By using the student’s peer group as consultants in therapy, the clinician may have more leverage in motivating the student to achieve than by using the student’s parents alone in a family systems approach. Furthermore, by using peer support as the agent for change in the African American male student’s system, the clinician provides a model that identifies positive peer support groups for motivating achievement throughout life. This model can become particularly useful developmentally when the student is no longer under the immediate influence of his parents, such as in the case of college and future career endeavors.

Suggestions for Future Research

Given the inconclusive findings in predicting the career aspirations of African American male adolescents, some suggestions for future research are presented. This information is offered to facilitate the interest in developing predictive models for achievement motivation and career aspiration as well as overall African American male adolescent development.

The interaction between peer support and parental strictness helped to describe the effects of authoritarian parenting styles on some African American male adolescents.
The research provided evidence of how increasing parental demandingness may lead many African American male adolescents toward lower career aspirations. If this information is generalizable, then there may be a need to take a closer look at the effects of so-called “militaristic parenting” and educational styles that are being implemented for African American male adolescent development today (Whitaker, 1991). Though popular literature in the field has highlighted these and other forms of authoritarian rearing as beneficial for African American males to overcome the inequalities of society and avoid incarceration, the results suggest that lower career expectations may be a consequence of such rearing. Lastly, additional research needs to be conducted to examine the effects of strict parenting on African American male adolescents and the particular peer groups they seek support from in order to understand how this relationship affects the overall career aspiration levels of African American males adolescents.

Although the relationship between achievement motivation and career aspiration was unfounded in this study, further investigations need to look at the possible presence of a third predictor variable between achievement motivation and career aspiration. It is conceivable that there is a relationship between achievement motivation, self efficacy, and career aspiration, where self efficacy is defined as an element of racial socialization for African American males. Investigations into the specific cultural messages that African American parents offer their sons may provide information regarding the level of racial socialization in the home and indicate whether the African American male adolescent was reinforced to believe he could reach an aspired career goal given his level
of achievement motivation. It is also possible that this effect is best observed in a developmental model that looks at the longitudinal changes of African American student achievement motivation and career development from eighth grade through college. Understanding this relationship will provide more information toward developing a heuristic model of African American male career development (Cheatham, 1990).

The relationship between peer group membership and achievement motivation needs to be further explored in order to determine the optimal combination of peer group membership and parental support for African American achievement. At this point, knowing that peer support effects the relationship between parental style and achievement motivation is helpful, but offers little toward optimizing the match between peer support and non-authoritative parenting style to increase the predictability of achievement motivation. Specifically, a study investigating what peer groups are amenable to an permissive, indulgent and authoritarian parenting styles could provide valuable information regarding African American achievement motivation.

Lastly, it remains unclear why high peer support increased the likelihood of African American male adolescents aspiring to Artistic careers more significantly than any other career type. The strength of the relationship, however, is deserving of further investigation for determining its validity and meaningfulness to the larger population.

Critique

A review of the power needed to reject a null hypothesis reveals that adequate power was obtained using at least 200 subjects to elicit a power estimate of 0.95 with an
effect size of .33 on $\alpha = .05$ on a path analysis model rendering at least five subjects per parameter (Cohen, 1988). Although it is assumed that enough power was obtained to detect true differences within the sample, an analysis of the external and internal validity is presented to offer possible reasons for non-significant results.

**External Validity**

As discussed earlier, the importance of the peer group to the overall sample was very significant. Given the strong influence of peers on the samples response to achievement motivation, questions were raised regarding the reliability of the overall sample response. Because the students were administered the survey in group settings where verbal exchange between peers, though kept to a minimum, may have affected their responses, the validity of the responses is now examined. The students in the sample were not assigned seats and were not separated from their peers. It is, therefore, assumed that student proximity to other friends in the room may have created a response set that was influenced by their peers perceived impressions of them. While acknowledging this, it is important to note that all efforts were made to maintain an in vivo experience for the sampled students.

Other considerations of bias point to the use of survey and self-report data. Some concerns regarding the collection of the data point to the relative importance that each guidance office placed on the dissemination of information about the survey prior to administration. Some students were apparently briefed by guidance counselors or teachers about the nature of the survey beyond the scope of the informed passive non-
consent letter sent home to their parents. If the students had prior information about the study's purpose, their responses may be biased, and produce results that would be skewed toward the higher end of the scale range on some if not all of the measures.

School proctors were also seen, by the research team, looking over student's shoulders as they were completing their surveys which may have affected their responses to some questions or generated a less-than-accurate depiction of their true experiences. The research team also detected a few students who had difficulty understanding some of the questions being asked as well as having difficulty reading the survey in general. Although it was assumed that the survey was written to accommodate an eighth grade student's reading level, this may have been overestimated in some circumstances.

Internal Validity

Regarding the instrumentation used, it appeared that the 1980 census of the TSEI was a rather out-dated and less-than-sensitive measure of career aspiration. Its relatively low predictability suggested that the predictors were either unable to account for a significant proportion of the variability on the measure or the measure was not an accurate depiction of the criterion of career aspiration. The low level of estimated variance accounted for by achievement motivation may have been another indicator that the TSEI measure was not a very useful estimate of career aspiration in this study. Reasons for this may be that the 1985 TSEI did not reflect the current career aspirations of the students with regard to the relative merits and rankings assigned to such aspirations in 1996. Past revisions of the census occupational classificatory scheme were primarily
implemented to reflect greater accuracy relative to comparative changes in the scheme from 1970 to 1980 and not the socioeconomic scores (Stevens and Cho, 1985). Despite this information it appeared that some of the scores, particularly those of the professional athlete, might have changed significantly enough between 1980 and 1996 to no longer be valid indicators of socioeconomic level. This is mentioned to suggest that the reported scores on the TSEI may be an underestimation of actual career aspirations for the African American male adolescents in the sample.

Methodologically, it is not yet determined that the way in which occupational daydreams was utilized in the design, provided a valid indicator of career aspiration. Further analysis suggests the first career daydream may not be indicative of a true aspiration but simply a current thought that has no real structural bounds or determinants. This poor assumption may explain the poor relationship between achievement motivation and career aspiration as measured by the Holland codes and the TSEI.

The way in which information was obtained regarding the parenting structure of the home may have been misleading to the student. As is often the case in two parent families, there exists two distinct parenting styles. Although the student’s perception of the most influential parenting style is important, the research fails to indicate the presence of two parenting styles and which one the student adheres to most.

Lastly, the solicitation of parent or guardian participation for information on their current occupation and level of socialization could have been useful as an additional check for the socio-economic level of the family unit. Although it was determined
through analysis of colinearity that neither school nor student’s reported socio-economic class were significantly related to the outcome measures, this information could have been helpful to determine the level of parental socialization influencing the students’ career aspirations and levels of achievement motivation.

**Conclusion**

While it appeared that there was no relationship between career aspiration and achievement motivation, the results revealed that the achievement motivation measure used may not have been sufficient enough to account for a significant amount of variability in career aspiration. Earlier research depicted the presence of a relationship between achievement motivation and career aspiration with differentiation across ethnic/racial groups (Steinberg et al., 1992). Missing from this analysis, however, is an estimate of self efficacy that might explain the relationship between achievement motivation and career aspiration more clearly. Specifically, if more was known about the self efficacy of the African American males in the study, information about their career aspirations may have been more predictable using achievement motivation. In other words, for African American males, a student’s motivation to achieve may only tell part of the story regarding his career aspirations. The expressed racial socialization beliefs determined by the parent-child relationship might have led to more reliable results regarding the relationship between achievement motivation and career aspiration for African American male adolescents. It is possible that, as a measure of self efficacy,
information about the racial socialization of African American male adolescents is important to accurately predict career aspiration from achievement motivation.

Nonetheless, the significant interaction between peer support and parental strictness provided evidence that there was a relationship between how African American parents raised their sons, the peer support their sons sought, and the careers to which they aspired. Moreover, parental involvement and parental strictness combined with peer support to provide some information about the level of career aspiration sought by African American male adolescents.

The relationship between peer support and achievement motivation was more conclusive and suggested that peer support effected the relationship between involved parenting and autonomous parenting by lowering their predictive power on achievement motivation. When peer support was not present, the level of parental involvement became the best predictor of achievement motivation for African American male adolescents. Consistent with previous research, it appeared that, for African American male adolescents, authoritative parenting was the most effective parenting style for achievement motivation followed by indulgent, authoritarian and permissive styles. These results supported findings from past studies that described authoritative parenting as the most effective style for producing high achievement scores among adolescents across racial and ethnic groups (Baumrind, 1991, Lamborn et al., 1991; Steinberg, 1990, 1991; Steinberg et al., 1989).
Although it was implied in past research, (Dornbusch, 1987), that, for African American males, authoritarian styles of parenting were most common and effective for producing high achievement, the present study does not support this notion. Furthermore, where it was often assumed that authoritarian parenting alone was helpful in rearing African American males in American society (Baldwin and Baldwin, 1989), the present study implied that this was not always the case. The strong relationship between the African American male adolescents who reported high achievement motivation and authoritative parenting in the home suggested that the combination of supervision, responsiveness and warmth epitomized by authoritative parenting styles may produce similar achievement benefits.

These results provided information leading to alternative styles of parenting African American male adolescents and contradicted some earlier common claims that authoritarian or militaristic styles of parenting and school supervision is necessary for raising African American males in a society that is viewed as “hostile” or “uninviting” (Spencer, 1990; Daly, 1995). The findings conclude that for most African American male adolescents high levels of supervision may be necessary but not sufficient for ensuring high levels of achievement motivation.

The peer group continues to be an interesting influence in the development of African American male adolescents. While the study pointed to the relative contributions of parenting style to the achievement motivation of African American males, it is remarkable to note that in the absence of a supportive peer group, parental influence
appeared to also be necessary but not sufficient in improving achievement motivation. African American male adolescents relied on peers for a considerable level of achievement support despite having a warm and responsive parenting structure at home. As peer support became more important to the African American male adolescent, there appeared to be a point where peer support might discourage them from high career expectations and thus become less than helpful to their overall career development. This phenomenon was depicted particularly when there were high levels of parental strictness the household. These results supported earlier researchers' claims that there was a threshold where being popular or being smart created a significant degree of cognitive dissonance for the African American male adolescent rendering them vulnerable, at times, to the interests of the peer group (Fordham & Ogbu, 1986; Kunjufu, 1988; Steinberg, 1993). Furthermore, the relationship between high parental strictness and low career aspiration may provide support for allegations that some African American males sought acceptance from peers when their parental experiences involved high demandingness and low responsiveness, as typified by authoritarian parenting. This belief is popular among researchers who have sought explanations for the interest among some African American males to join gangs and other non-achieving peer groups despite having a highly supervised parenting structure.

Given the uncertainty among some researchers, educators and politicians regarding the direction and “plight” of African American males in the United States, the research suggested that there were patterns of parenting and peer support which
facilitated African American male adolescent achievement motivation and career aspirations. As this information is presented it seeks to extend the interests of other researchers who are interested in improving the achievement motivation and career aspirations of African American males. It is believed that this research may help others to understand the declining achievement rates, college entry numbers, and low career aspirations of so many African American male adolescents today.

Although this study raises some important questions, it is offered to support present research in the area of African American male adolescent achievement motivation and career aspiration. Furthermore, it is provided to stimulate future research toward a clearer picture of how external variables such as parenting style and peer support can facilitate African American male adolescent achievement and career success. As this study marks an effort to more clearly depict some of the variables that contribute to the development of African American male youth, there still is much left to be studied regarding how these variables and others, not presented here, effect the psycho-social development of African American male adolescents. Clearly, this study offers the opportunity for other researchers to attend to this growing social concern in a more empirical way so as to find more solutions to the many questions that remain unanswered regarding African American male adolescent development.
REFERENCES


Slaughter, D. T., & Schneider, B. L. (1986). *Newcomers: Blacks in private schools*. (Eric Document Reproduction Service No. ED 274 768 and ED 274 769)


APPENDIX A

INFORMED NON-PASSIVE CONSENT FORM
Dear Parent or guardian

My name is Malcolm E. Anderson. I am an African-American doctoral candidate from Loyola University Chicago and have been living in South Carolina for the past three years. I am conducting a study that will look at those factors which effect African American males' achievement and career interests.

I will be visiting your son's school in November and will be handing out a questionnaire asking the African American male students to provide information about the various achievement attitudes, career goals, parental influences, and friendship groups that have influenced their school achievement. From this information I hope to draw some conclusions about how African American male students achieve and then to develop a future school intervention.

The purpose of this letter is to ask your permission to allow your son to fill out the thirty minute questionnaire. His participation is solely voluntary and in no way will affect his class standing. The questionnaire is designed to keep his identity confidential since it does not ask for his name or any other identifying information. He has the option to withdraw from the study at any time if he wishes by simply not filling out the questionnaire. This study involves no physical risk to your son.

In order for your son to participate in the study he will need your permission as a parent or a legal guardian. Please use the attached form to do this. If you do not wish your son to participate in this study please sign and return the bottom portion of the attached form to the name and address below. If you wish your son to participate no action is necessary. By not returning the form you will automatically grant permission for your son to participate.

(Contact name and address)
Thank you for your time.

Malcolm Anderson, MS
(Professional Affiliation) University of South Carolina.

If you have any questions about the study, please contact my research supervisor, Dr. Suzette Speight at
(847) 853-3348 or me at the University of South Carolina Counseling and Human Development Center
(803) 777-5223
NON-CONSENT TO PARTICIPATE IN THE AFRICAN AMERICAN MALE STUDENT ACHIEVEMENT SURVEY

Date ____________________

I, __________________________, the parent or guardian of
        (Print name of parent or guardian)

______________________, a minor born _____/____/____, hereby
        (Print name of child) (month)(day)(year)

DO NOT CONSENT

to his participation in a research project conducted by Malcolm Anderson, a doctoral candidate at Loyola University of Chicago who is currently at the University of South Carolina. I understand that my son’s participation is solely voluntary; that he may withdraw at any time without prejudice; that any and all questions regarding the procedures of the research will be answered and that the project involves no physical risk of injury to my son.

If I have any further questions I may contact Malcolm Anderson at the address provide to me below.

University of South Carolina
Counseling and Human Development Center
900 Assembly Street Room 212
Columbia, South Carolina 29208
(803) 777-5223

(Signature of Parent or guardian) (date)
CONSENT TO VOLUNTARILY PARTICIPATE IN THE AFRICAN AMERICAN MALE STUDENT ACHIEVEMENT SURVEY

Date

I _____________________________, agree to participate in the following study being conducted by Malcolm Anderson, a student researcher from Loyola University, Chicago. I understand that the survey involved in this research presents no physical risk or discomfort to me. I also understand that my participation in this study is solely voluntary and that I may, at any time, withdraw from participating without penalty or prejudice.

If I have any further questions I may contact Malcolm Anderson at the address provide to me below.

University of South Carolina
Counseling and Human Development Center
900 Assembly Street Room 212
Columbia, South Carolina 29208
(803) 777-5223

(Student’s Signature) (date)
APPENDIX B

GENERAL INFORMATION FORM
General Information Sheet

Please take some time to complete the following questions.

G1. What is the name of your school?

________________________________________________________

G2. How old are you? _____ Grade? _______

G3. What curriculum are you in?

Honors ___ Regular ___ Remedial/Developmental ___

G4. Who takes care of you at home, who do you consider to be your parents/guardians?
(circle all that apply.)

<table>
<thead>
<tr>
<th>Mother</th>
<th>Father</th>
<th>Grandmother</th>
<th>Grandfather</th>
<th>Stepfather</th>
<th>Stepmother</th>
<th>Aunt</th>
<th>Uncle</th>
<th>Brother</th>
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</table>

G5. How far did your parents or guardians get in school?

High school but not graduated ___ High school graduated ___

College not graduated ___ College graduated ___

G6. What working class would you consider your family to be in?

Upper ___ Middle ___ Lower ___

G7. What jobs do your parents/guardians currently have?

________________________________________________________

G8. Where do you live?

In town/city ___ Suburban neighborhood ___ Rural ___
APPENDIX C

CAREER ASPIRATION SCALE
Please list below the careers that you have daydreamed about doing in the future. Write down your most recent career dreams on Line 1 and work your way backwards to the earlier jobs you have considered.

HC __________

TSEI __________

1.________________________________________

2.________________________________________

3.________________________________________

4.________________________________________

5.________________________________________

6.________________________________________

7.________________________________________

8.________________________________________

9.________________________________________

10.________________________________________

APPENDIX D

VALUES RELATED TO ACHIEVEMENT MOTIVATION SCALE
Please answer the following questions using choices below. Please circle the response that best reflects your opinion.

SA = Strongly Agree  A = Agree  D = Disagree  SD = Strongly Disagree

<table>
<thead>
<tr>
<th>Question</th>
<th>SA</th>
<th>A</th>
<th>D</th>
<th>SD</th>
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</thead>
<tbody>
<tr>
<td>A1. I like learning new things.</td>
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<td>A2. I enjoy trying to improve things.</td>
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<td>A3. If I don’t understand something, I work hard until I do.</td>
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<td>A4. I prefer work that is considered hard.</td>
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<td>A5. I read a variety of books and magazines.</td>
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<td>A6. If I’m told that I am not good in a subject, I work harder at it.</td>
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<td>A7. I am pleased and excited when I get good grades.</td>
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<tr>
<td>A8. If I’m told that I am not good at an activity, I work to do better.</td>
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<td>A9. I am unhappy when I hand in school work that isn’t good.</td>
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<td>A10. I work best in school when my teacher pushes me.</td>
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<tr>
<td>A11. I work best in school when my parents push me.</td>
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</tbody>
</table>
SA = Strongly Agree  A = Agree  D = Disagree  SD = Strongly Disagree

A12. If I get good grades, everybody expects more the next time.  SA  A  D  SD

A13. Losing bothers me even if I have done my best.  SA  A  D  SD

A14. I worry about being too successful.  SA  A  D  SD

A15. I give up if I can’t learn something easily.  SA  A  D  SD

A16. I am afraid of failure.  SA  A  D  SD

A17. I am disappointed if I don’t get a high test score.  SA  A  D  SD

A18. I worry if I don’t understand something.  SA  A  D  SD

A19. I get annoyed if I don’t do things perfectly.  SA  A  D  SD

A20. I don’t enjoy competition much unless I am winning.  SA  A  D  SD

A21. When something turns out badly, I don’t want to try again.  SA  A  D  SD

A22. I don’t speak up in class if I think I might be wrong.  SA  A  D  SD

A23. If I’m told I’m not good at an activity, I try to avoid it.  SA  A  D  SD
continued

SA = Strongly Agree  A = Agree  D = Disagree  SD = Strongly Disagree

A24. When working out a problem or puzzle,

I don’t mind stopping before I have

finished figuring it out.  SA  A  D  SD
APPENDIX E

PARENTING SCALE
Please answer the next set of questions about the parents (or guardians) you live with. If you spend time in more than one home, answer the questions about the parents (or guardians) who have the most say over your daily life.

SA = Strongly Agree  A = Agree  D = Disagree  SD = Strongly Disagree

P1. I can count on my parents to help me out
   if I have some kind of problem.  SA  A  D  SD

P2. My parents say that you shouldn’t argue
   with adults.  SA  A  D  SD

P3. My parents keep pushing me to do my best in
   whatever I do.  SA  A  D  SD

P4. My parents say that you should give on
   arguments rather than make people angry.  SA  A  D  SD

P5. My parents keep pushing me to think
   independently.  SA  A  D  SD

P6. When I get a poor grade in school, my
   parents make my life miserable.  SA  A  D  SD

P7. My parents help me with my schoolwork
   if there is something I don’t understand.  SA  A  D  SD

P8. My parents tell me that their ideas are
   correct and that I should not question them.  SA  A  D  SD

P9. When my parents want me to do something,
   they explain why.  SA  A  D  SD
SA = Strongly Agree  A = Agree  D = Disagree  SD = Strongly Disagree

P10. Whenever I argue with my parents, they

say things like, “You’ll know better when

you grow up.”

P11. When I get a poor grade in school,

my parents encourage me to try harder.

P12. My parents let me make my own plans for

things I want to do.

P13. My parents know who my friends are.

P14. My parents act cold and unfriendly if I do

something they don’t like.

P15. My parents spend time just talking with me.

P16. When I get a poor grade in school my

parents make me feel guilty.

P17. My family does fun things together.

P18. My parents won’t let me do things with

them when I do something they don’t like.
Please answer the following questions about YOUR FREE TIME by checking the appropriate response.

P19. In a typical week, what is the latest you can stay out on SCHOOL NIGHTS (Monday-Thursday nights).

I am not allowed out

before 8:00 p.m.

8:00 - 8:59 p.m.

9:00 - 9:59 p.m.

10:00 - 10:59 p.m.

11:00 or later

as late as I want

P20. In a typical week, what is the latest you can stay out on WEEKEND NIGHTS (Friday or Saturday nights).

I am not allowed out

before 8:00 p.m.

8:00 - 8:59 p.m.

9:00 - 9:59 p.m.

10:00 - 10:59 p.m.

11:00 or later

as late as I want
continued

How much do your parents **TRY** to know . . .

<table>
<thead>
<tr>
<th>Question</th>
<th>Don’t try</th>
<th>Try a little</th>
<th>Try a lot</th>
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<tbody>
<tr>
<td>P21. Where you go at night?</td>
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<tr>
<td>P22. What you do with your free time?</td>
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<tr>
<td>P23. Where you are most afternoons after school?</td>
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</table>

How much do your parents **REALLY** know . . .

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<tr>
<th>Question</th>
<th>Don’t know</th>
<th>Know a little</th>
<th>Know a lot</th>
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<tr>
<td>P24. Where you go at night?</td>
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<tr>
<td>P25. What you do with your free time?</td>
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<tr>
<td>P26. Where you are most afternoons after school?</td>
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APPENDIX F

PEER SUPPORT SCALE
Please answer the next set of questions about the people you consider to be your best friends: the people you consider to be important to you.” Circle the correct response.

SA = Strongly Agree   A = Agree   D = Disagree   SD = Strongly Disagree

F1. Most of my friends are good students.  

SA   A   D   SD

F2. It is more important to be popular than smart.  

SA   A   D   SD

F3. My best friends do not encourage my academic 

pursuits.  

SA   A   D   SD

F4. My best friends encourage me to study in 

my free time.  

SA   A   D   SD

F5. My best friends would describe me as a good 

student.  

SA   A   D   SD

F6. My best friends encourage me to achieve in any 

subject that I choose.  

SA   A   D   SD

F7. I can talk to my best friends about my academic 

interests.  

SA   A   D   SD

F8. My best friends would say that I am “acting 

White” for wanting to do well in school.  

SA   A   D   SD

F9. I can study with my best friends most of the 

time.  

SA   A   D   SD

F10. It's “cool” to join a subject/social club like 

(Math Club or Chess Club).  

SA   A   D   SD
continued

F11. Among my best friends grades are very
important.

F12. What social group would you say you
belong to? (Circle one)

F13. How would you like to be remembered?
(Circle one)

F14. My best friends are . . .
(Circle one)

<table>
<thead>
<tr>
<th>SA</th>
<th>A</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jocks</td>
<td>Nerds</td>
<td>Brains</td>
<td></td>
</tr>
<tr>
<td>A Good Athlete</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>A Brilliant Student</td>
<td></td>
<td></td>
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<tr>
<td>The Most Popular</td>
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<td></td>
<td></td>
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<tr>
<td>African-American</td>
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<td></td>
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<tr>
<td>White</td>
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<td></td>
</tr>
<tr>
<td>Both</td>
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</tbody>
</table>
VITA

The author, Malcolm E. Anderson, was born in Queens, New York.

In September, 1983, Mr. Anderson entered Hobart College, receiving the degree of Bachelor of Science in psychology in June, 1987. Upon graduation, Mr. Anderson received the distinguished Martin Luther King Jr. Leadership Award for promoting and maintaining multiracial harmony and advancing multiethnic concerns. Beginning in July, 1988, Mr. Anderson was employed in the field of college admissions at Syracuse University. This appointment enabled him to complete the Master of Science in Counselor Education, specializing in multicultural issues in 1991.
The dissertation submitted by Malcolm E. Anderson has been read and approved by the following committee:

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The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the Committee with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, Counseling Psychology.

March 24, 1997
Date

[Signature]
Director's Signature