

A STUDY OF THE RELATIONSHIP OF MINORITY ADOLESCENTS' CAREER
MATURITY TO LOCUS OF CONTROL AND SELECTED CORRELATES

by

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(ABSTRACT)

The present study was concerned with career maturity among black high school seniors. The purpose of the study was to determine the relationship of career maturity to locus of control, academic achievement, socioeconomic status and sex.

The population from which the sample was taken consisted of black high school seniors in one high school in Central Virginia. Data were gathered during the Winter, 1983 using a personal data questionnaire, Crites' Attitude Scale and Rotter's I-E Scale. Students responded to the three instruments in one sitting. The significance of the relationships was determined by correlation coefficients and multiple regression analysis.

The analysis of the data revealed that: (1) Academic achievement was the most highly significant predictor of career maturity for the 302 subjects in this investigation; (2) Socioeconomic status was a significant factor in the career maturity of participants in this study; (3) The participants differed by sex in their levels of career maturity, and sex was a significant predictor of their career maturity; (4) Locus of control was not a significant predictor of their career maturity.

The findings of the study and related literature suggest that there is a need for more study with black adolescents from a variety of

settings involving several age, grade and socioeconomic levels, and there is a need for longitudinal studies involving only black adolescents to affirm their career development process.

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CHAPTER I

INTRODUCTION

A review of the past reveals successive generations of American youth with increasing opportunities for development through education and/or training, increased technology and changing life styles. A highly complex world of work has continued to evolve as our nation has shifted from an agrarian society to an industrialized one, and on to a post industrial era. Accompanying these shifts are ever-increasing career and educational opportunities. Meanwhile, there are decreasing chances for the kind of first-hand role-defining work experiences to which youth of yesteryear had exposure (Pleasants, 1977; Coleman, 1972). These changes along with the economic, social and political factors which exist have made the developmental task of choosing a career a very complicated one indeed for all youth.

Many studies have been conducted relative to the process of career decision-making. One study, A Nationwide Study of Student Development, was reported in 1974 by Prediger, Roth and Noeth. The study involved approximately 32,000 students in grades, 8, 9, and 11 in 200 schools from 33 states. Seventy-three per cent of the eighth graders and 78 per cent of the eleventh graders said that they needed help with career plans. These researchers further found that over half of the 11th grade females indicated occupational choices in only 3 of the 25 families: clerical and secretarial, education and social services, and nursing and human care. Nearly half of the boys' choices were the technologies and trades job families. These findings indicate the possibility that

career choices may have been influenced by the students' lack of knowledge or exposure to the world of work.

In recent years there has been a growing interest in the career development process of black individuals. Up to the present the majority of the research which has been conducted compared black and white youth (Smith, 1975). Typical studies of career development among blacks include research like those conducted by Witty, Garfield and Brink (1941), and Maynard and Hansen (1970). Maynard and Hansen found that of 450 black and white eighth graders, the black youth in the study were lowest in vocational maturity while white lower socioeconomic inner-city suburban youth indicated the highest level of vocational maturity. They therefore concluded that black youth appeared to be less aware than whites of vocational knowledge at the eighth grade level. Earlier research on vocational interests of black and white youth was conducted as a comparison study by Witty, Garfield and Brink in 1941. They concluded that vocational interests of the two racial groups appeared to be at extremes. White youth appeared to be interested in things while blacks appeared interested in people oriented vocations.

In some of his extensive research, Crites (1971) suggested that vocational maturity may be a component of general adjustment. Rotter (1966) and Lefcourt (1966) concluded that locus of control was potentially an important aspect of adjustment. The construct, locus of control, pertains to a generalized expectancy for reinforcement to be controlled externally by chance, luck or powerful others as opposed to internal control through one's own attributes (Rotter, 1966).

A study of eighth grade students completed by Minnich and Gastright (1974) found that control of one's environment was significantly correlated with responsibility for career choice. There have been few similar studies reported; all have been conducted using small and narrowly based samples. An even smaller number relating locus of control to the career choice making process of females or blacks have been reported.

A review of the research on vocational development of blacks was compiled and reported to be a "disparate body of knowledge" (Smith, 1975, p. 41). According to Smith, many gaps exist concerning the career progress of blacks and many variables need to be further investigated as they relate to career development among blacks. Many vocational theorists also agree that there is presently little generalizability of current theories to minority populations (Stefflre, 1966; Tyler, 1967, LoCasio, 1967).

Statement of the Problem

Theories of career development previously advanced were based on research which included black youth only to a minimal degree, if at all (Osipow, 1973; Herr, 1979). Generally, a relatively small sample of inner-city white males was included in these studies. A survey of related literature reveals that there exists little systematic information pertinent to the career development of minority group members (Herr, 1979). Styles (1969) had previously acknowledged this fact. Since studies which focus directly on career development among black youth are sparse, it appears appropriate to conduct an

investigation which may reveal evidence about factors which impact on career maturity using blacks as an internal frame of reference. This study was specifically designed to investigate the relationship of locus of control, socioeconomic status, academic achievement and sex to the career maturity of black high school seniors. These factors have been considered as prominent in studies of career maturity by several previous researchers (Picou and Curry, 1973; Dawkins, 1981).

Need for the Study

Research shows that black youth choose from a limited number of occupational options (Gottfredson, 1978; Sue, 1975). Investigations previously conducted reveal that blacks continue to enter traditional areas of study such as teaching, social work, business administration and humanities as opposed to engineering, dentistry and medicine and the natural sciences (Williams, 1972). It appears that the minority student may be less knowledgeable about the variety of occupations available (Smith, 1973, 1975). According to the literature on career choice, investigating the relationship between related factors and career choice may add to our body of knowledge about the career decision-making process of black youth.

The lack of systematic research dealing specifically with career development of minority persons leaves questions about this segment of the population unanswered (Smith, 1975; Jackson, 1981). Further, the most highly recognized career development theorists have alluded in some way to minority group status in the formulation of their existing theories (Osipow, 1973, 1982). Roe (1956) wrote about minority group

membership as a social problem. Super (1957) discussed the status of minority group membership as a social handicap or disability. Holland (1973) stated that the effects of sex, race or religion impact on the development of types (realistic, investigative, artistic, social, enterprising, conventional) just as any other social, physical or environmental factor does. These statements can be considered as an indication of the need for research in the field of career development with minorities as subjects.

A need exists to add to the knowledge of the majority culture more research findings of the career decision-making needs and process of minorities (Jackson, 1981). These findings can be applied to the development of strategies to enhance the process of career decision making over the life span among minorities, a sizeable segment of the population. The total society should benefit from increased utilization of the talents and strengths of more segments of its citizenry.

There is considerable evidence that locus of control is a correlate of measures of career maturity such as career choice making skills (Gardner, 1981). LoKan, Boss and Patsula (1982) and Thomas and Carpenter (1976) envisioned a relationship between one's perceived source of influence and the growth of mature career attitudes necessary for career decision-making skill building. The link between the concept of locus of control and career decision making appears to have been recognized by only a few investigators and little has been done to elaborate on it in detail (Lokan, Boss and Patsula, 1982).

A need exists to learn more about selected factors which influence career maturity of blacks in order to determine more ways to assist this

segment of the population in their career development. This study was undertaken to examine some aspects of career development in adolescent blacks. More specifically, the study was designed to investigate adolescent blacks' career maturity in relationship to locus of control, socioeconomic status, sex, and academic achievement.

Research Hypotheses

The following research hypotheses were developed to guide this study:

- H₁ - There is no relationship between locus of control and career maturity among minority adolescents.
- H₂ - There is no relationship between socioeconomic status and career maturity among minority adolescents.
- H₃ - There is no relationship between academic achievement and career maturity among minority adolescents.
- H₄ - There is no relationship between career maturity among minority adolescents and their sex.

Definition of Terms

Minority - The classification of participants comprising the sample, 100 per cent of whom are black.

Adolescents - Participants in the study who are within the 16 - 19 age range, and are seniors in high school.

Locus of control - An attribute of personality in which individuals are classified as internals or externals. Internals believe that events occur in their lives as a result of their own behavior.

Externals see events determined by outside forces such as luck, fate, chance or powerful others. Internals usually function in a more positive, effective and adaptive manner than do externals (Rotter, 1966).

Socioeconomic status - A relative term used as an indicator of family income and a reflection of life style. Socioeconomic status was determined by using parents' occupation, and educational level attained. Hollingshead's Two-Factor Index of Social Position (1957) was utilized.

Limitations of the Study

The study was conducted in one high school in Richmond. The generalizability of the study will therefore be limited to groups with similar characteristics.

No effort was made to determine differences in exposure to career education activities which may very well vary among the participants. Further, no allowance was made for any previous career education experiences.

Organization of the Study

Chapter 1 includes background information identification of the problem and need for the study. A review of related literature will be presented in Chapter 2.

Research methodology including the population, instrumentation used and method of collecting and analyzing data will be detailed in Chapter 3. The analysis of the data will be given in Chapter 4. Chapter 5 will

conclude the study with a summary of the findings, and recommendations.
Implications of the findings and a discussion of potential further
research will be presented.

CHAPTER II

REVIEW OF THE LITERATURE

Theory, research and articles from professional literature related to aspects of the career development process that are pertinent to this study will be presented in this chapter. Specific topics included are: (1) career development theories, (2) career development of minorities, (3) locus of control studies involving black subjects, (4) locus of control construct and its relationship to career maturity and (5) studies related to other selected correlates of career maturity.

Theories of Career Development

One common thread prevails throughout current theories of career or vocational development. It has been agreed that vocational decision making is an ongoing process which continues over a number of years. As individuals progress through developmental life stages, they mature vocationally and at each successive stage are confronted with the need to deal with particular tasks related to career or vocational maturity.

Osipow (1973) identified four major categories of career development theories. They were trait-factor, sociological, developmental and personality theories.

Trait-factor Theory

The trait-factor approach, had its foundation in the belief that people can be matched to jobs, that knowledge of one's traits or personal characteristics and knowledge of the requirements of jobs can assure making successful career choices.

Trait-factor theory has remained a popular theory for many years in spite of its shortcomings as noted by Herr (1970). This theory, in effect, limits a person to a few particular occupational choices and does not consider social or environmental conditions or change. Major early proponents of the trait-factor theory were Parsons (1909) and Williamson (1965). It was Parsons who stated the basic doctrines of the theory which recognized people as individuals with different traits, determined that each occupation requires a specific set of characteristics, and that the aim of vocational guidance was to match people and jobs.

In their analysis of trait-factor theory, Herr (1970) and Zaccaria (1970) note that occupational choice making requires provision for individual and situational change acknowledging choice making as a developmental process.

Sociological Theory

Sociological theories have also been called reality or accident theories of vocational choice. The central idea of these theories is that external events beyond the individual's control determine one's vocational decisions. In their work Caplow (1954), Miller and Form (1951) and Hollingshead (1949) stated that a person's career decisions are determined by his social background, circumstances of his past, personality traits and ability. It is important then that individuals develop the necessary skills and techniques for coping with elements of society as they affect humans. Society is assumed to provide

opportunities related to social class membership. Chance, therefore, as a major element in career decisions is embodied in sociological theory (Osipow, 1973).

Hollingshead (1949) emphasized that adolescents' ideas about occupations are influenced by the social class of which they themselves are a part while Caplow (1954), Miller and Form (1951) added that environmental factors largely determined by the family's socioeconomic status serve as key influences on an adolescent's career choices. The exposures or lack thereof which a family can support reflect the socioeconomic status and in turn make impact on career choice making. Sociological theory, with some concern for "chance" factors, emphasizes that one's career choices are determined by the limits and opportunities which are most familiar to that individual. Lipsett (1962) and Caplow (1954) agree that social factors do have direct implication for vocational development. They name social class membership, economic and social conditions, home and community conditions, changes in society, pressure groups, role perception and education. Ginzberg, Ginsburg, Axelrad and Herma (1951) disagree with sociological theory in that the model portrays an individual as inactive in the process of vocational development and ignores the reality of some family members' success while others do not similarly achieve. They, therefore, deny that "accident" or "chance" external factors are explanations for occupational choice.

Developmental Theory

Developmental theory generally associated with the work of Ginzberg and Super and their associates is sometimes called self-concept theory.

Ginzberg (1951) was among the first to promote the idea that career choice making was a process that was developmental in nature and occurs over a period of time. Ginzberg concluded that (1) occupational choice is a developmental process which takes place over a ten year period; (2) vocational choice was irreversible, (3) was compromised between a person's wishes and possibilities, and (4) was divided into the periods - Fantasy, Tentative and Realistic (Osipow, 1973). According to Super (1951) the process of vocational choice making is actually a process during which a person chooses the occupational role which will permit implementing one's concept of self. Super's longitudinal study - initiated in 1957 and related studies conducted with several associates over a period of many years (Raylesberg, 1949; LaCasio, 1964; Bingham, 1966; Starisheosky, 1967) as reported by Zaccaria, 1970 - led to his self-concept theory. The framework upon which the theory rests consists of several developmental stages through which an individual passes. The work of Buehler (1933) Miller and Form (1951) and Ginzberg and associates (1951) served as the basis for these developmental stages.

Super's self-concept theory has lent to extensive study and research. Most recently Super's investigations have led to a rejection of the concept of occupational choice to favor concepts of career development. This developmental process is more currently being related as a series of changes as the individual continues a life-long search for fulfillment through work (Super, 1963). The process is seen as a synthesis rather than the compromise suggested by Ginzberg. Although there has been extensive research involving Super's theory, the twenty-

year longitudinal Career Pattern Study providing data gathered from a group of upstate New York, middleclass ninth grade males has been the basis for his continuous unfolding of developmental theory (Zaccaria, 1970).

Personality Theory

Roe, Holland and Tiedeman are major proponents of personality theories of vocational development. Roe (1956) stated that genetic influences control interests and abilities and that early childhood experiences with adults exert influence over vocational choice. In her studies Roe concluded that personality differences resulting from varying child-rearing practices relate ultimately to the vocational choices one makes (Roe, 1956). It was Roe who advanced the notion that the family plays a determining role for the kinds of interactions and thereby the kinds of vocational choices an individual will make (Osipow, 1973).

Holland's theory is based on four working assumptions:

1. Most persons in our culture can be categorized as one of six personality types: realistic, investigative, artistic, social, enterprising or conventional. Each type is the product of cultural and personal forces which the individual has experienced. The experiences one has lead to preferences then interests and competencies to result in a particular personality.
2. There are six kinds of environments: realistic, investigative, artistic, social, enterprising and conventional; each is representative of a type of personality.

3. People search for environments which match their personality types thereby permitting the exercising of their own skills, expressing their attitudes and values and taking on problems and roles with which they can cope.
4. A person's behavior is determined by the interaction between his personality and factors in his environment.

(Holland, 1973)

Holland, like Roe, did investigate the significance of parental influence and developed an instrument to be used in the research conducted with his National Merit Scholars sample in the 1959 study. He found that in his sample the students were influenced by attitudes of the female parent (Osipow, 1973).

Tiedeman and O'Hara (1963) viewed vocational development as a process of self-development occurring over time. They further saw, as a result of their studies, that the vocational development process involved several decisions divided into two aspects: anticipation and implementation, each broken down into stages.

The stages of anticipation are:

1. Exploration - an individual considers all possible alternatives which reflect his aspirations, opportunities, interests and capabilities. Some thought prevails for the requirements to be met and societal context of the vocational alternatives being considered (Tiedeman, 1961).
2. Crystallization - characterized as a period of thought stabilization. Value of alternatives may be assessed at this stage. (Tiedeman and O'Hara, 1963).

3. Choice - achieved when commitment is made to a set goal.
4. Clarification - occurs during the waiting period. Any doubts that may exist cause clarification of individual's anticipated positions (Tiedeman and O'Hara, 1963).

The stages of implementation are:

1. Induction - involves reality testing. A stage characterized by defending self and giving up those aspects of self to group purpose within an acceptable social system. An awareness of acceptance by the group finalizes the stage (Tiedeman and O'Hara, 1963).
2. Reformation - consists of individuals' immersion into the group although a strong sense of self is maintained. Values, goals and purposes may be redefined (Tiedeman and O'Hara, 1963).
3. Integration - older group members react against new group members. Both individual and group collaborate to maintain the group and reach synthesis.

The individual, then, makes occupationally related choices at different stages in a developmental fashion. These theories have come to be known as developmental in nature because they relate occupational choice making to a series of stages occurring over a period of time (Zaccaria, 1970).

Major elements of the vocational theories discussed offer general agreement as follows:

1. Vocational development is a continuous process.

2. The process of vocational development consist of life stages each having its own characteristics.
3. Many factors interact - sociological, economic, personal and psychological to influence vocational development.

According to Super (1981) theorists and practitioners alike have come to the conclusion that career decision making consists of a series of minidecisions of varying degrees of importance and the total process is central to career development.

Summary

Theories of occupational choice present the idea that there are many factors which operate within and upon an individual so that the individual is able, at some point of convergence of these factors, to make a choice of an occupation. In the view of major vocational development theories individuals proceed through various stages.

The Career Development Process in Black Youth

A search of related literature reveals that black youth have been only minimally included, if at all, in studies of career development. Smith (1975) undertook a comprehensive review of studies which have investigated career aspirations, interests, choices, values and attitudes of blacks. This investigation revealed what she has called "a disparate body of knowledge" (p. 41). The black person has most often been shown to have a negative self-image, to lack positive work role models, and to be alienated from work. The black has been seen as one with high aspirations, but low expectations of achieving them, and

therefore chooses primarily those careers that have been traditionally open to blacks.

Smith (1975) reviewed studies which reported trends in career choices of black students so limited that often there has been no attempt to identify the factors which might have influence over the career decision making process among blacks. Gould (1976) reported similar findings.

Smith (1975) added that to present a more complete profile of career progress of blacks, the variables of race, socioeconomic status and family background need to be looked at both separately and conjointly. Smith (1975) criticized the generalizability of many of the studies included in her review. She particularly emphasized that the influence of family role models and family stability among minorities (meaning blacks) on the individual's career development needs to be questioned. It has been found that the lack of male role models has not been proved to be the hindrance as had been previously theorized. Since much of the research of career development of blacks has involved mainly the lower socioeconomic black and not middle class blacks there is the possibility that conflicting results may have been reported. Smith (1981) deplored the fact that young black females have been overlooked in career development studies.

Holloway and Berreman (1959) found that black male elementary school students aspired to lower occupational levels than white low and middle class students but aspired to similar levels of education. Rosen (1959) discovered that the blacks in his sample ranked as high as the

whites when measured for achievement motivation. He also found that blacks were satisfied to select occupations of lower status than other populations in his sample.

Stephenson (1957) involved one thousand ninth graders in his study of educational and occupational aspirations of adolescents. He concluded that there was no significant difference between blacks and whites as related to aspiration levels. He did find however that career planning among blacks was dependent upon economic and social factors present in their environment.

Gist and Bennett (1963) predicted that black adolescents would reveal that mothers were more influential on occupational and educational aspirations than fathers and that blacks would demonstrate higher aspirations than a similar sample of white adolescents. More than eight hundred students participated in the survey conducted in Missouri. The results were: there was no significant difference between the occupational and educational aspirations of black and white adolescents. The influence of mothers was not reported to be as strong among whites as blacks, and blacks reported mothers as having more influence than fathers.

In his study of the vocational choices of black college students Brazziel (1961) surveyed students at Virginia State College (now University). He found that a majority chose teaching as a career. A majority of these students did state, however, that teaching was actually a second choice, and many indicated that their plan was to use teaching as a beginning step for other careers.

Maynard and Hansen's study (1970) compared vocational development of inner city black and white adolescents with white suburban male adolescents. Blacks measured lowest in career maturity and whites in both groups scored higher. There was no significant difference among the sample when academic ability was considered.

The Pallone, Rickard and Hurley (1970) study of key influences on occupational preference involved black and white high school adolescents in grades eleven and twelve. The primary influence on vocational choice for black females was the mother, and a person holding the job was the second most influential person. All males and white females indicated that their major influence was a person actually working at the job of their choice.

In a similar study of key influencers conducted in 1973, Pallone, Rickard and Hurley involved Puerto Rican, black and white high school girls. A rank-order coefficient was derived for the self-reported key figures indicated by the 11th and 12th grade girls in the study. They found no significant difference between black and Puerto Rican subjects and black and white subjects in citing key influencers on occupational preference.

Millard (1975) examined the relationship between vocational maturity and self-concept of suburban and urban middle and urban lower-class 6th grade black males. Major findings revealed that a slight to low positive correlation existed between self-concept and vocational maturity for all groups. The relationship was slightly higher for the suburban middle-class group. Vocational maturity as

measured by Crites' Attitude Scale was highly correlated with socioeconomic status. Socioeconomic status seemed to have a greater influence on vocational maturity than did self-concept.

In a study (Brown, 1976) to determine whether or not there were significant differences in the expressed and inventoried interests of black and white inner city junior high school students, there was a notable difference in black males' inventoried vocational interest.

In what has been cited as a landmark study Hauser (1971) reported that black youth failed to fully pursue exploration of self or identification with vocations. In comparison white youth proceeded to reinforce a positive image of self in a continuing development of their vocational identity.

Pleasants (1977) examined the black seniors in an urban high school to determine the relationship, if any, between awareness of discrimination and career decision making in black youth. She found that the youth in her study were aware of discrimination but denied its influence over their career decision making. The career decision making behavior of the respondents revealed, however, covert influences of the awareness of discrimination.

In one of the most recent studies involving blacks Yankowitz (1982) concluded that there are sex-related differences in career maturity of black high school seniors especially those whose parents are employed. He found that both males and females are indecisive as to occupational choice making with females more resigned to traditional choices and males more concerned with work as a source of self actualization.

Kelsey (1983) sought to determine the effect of locus of control orientation on decision making styles among black rural and urban juniors and seniors. She found that in the sample studied the career decision styles adopted were influenced by several major factors or conditions of one's personal development. Birth order, level of aspiration and sense of control were listed among the major factors. There was no significant interaction, however, for locus of control and socioeconomic status, or sex, or level of aspiration or birth order.

It is evident that the research related to career development among minority adolescents has been scant. It is also evident that when compared with a similar majority group conflicting findings have been presented.

Locus of Control Studies Involving Blacks

A review of social science dissertation literature as reported in Dissertation Abstracts International for the year beginning 1927 reveals few locus of control studies involving blacks as subjects. Of the studies included in Dissertation Abstracts there is considerable variability in content. The studies discussed in the following pages are a complete inclusion of this variability. Most of this research studied the black child in comparison to the white child or one ethnic group with another.

The earliest related study reported, (Titus, 1966), was concerned with the relationship of need for achievement, dependency and locus of control in boys of middle and low socioeconomic status. The results of this study of 120 boys (60 white and 60 black) in fifth and sixth grades

indicated that middle class white boys who have high need to achieve are also internally controlled; dependence proneness in lower class black boys is positively related to internal locus of control; an increase in internal locus of control is accompanied by an increase in proneness for dependency.

A study reported by Carpenter (1967) was designed to find if achievement motivation and expectancy for internal - external control of reinforcement, was a predictor of achievement behavior, or if knowledge of motives of the culturally disadvantaged must be attained to predict the behaviors. The findings in the study compared 220 disadvantaged 5th, 6th, and 7th grade black boys and girls with middle class whites from previous studies. The results showed that internal - external control related to academic skill for girls only, and hope of success, fear of failure, and internal-external control were not significantly related to risk taking behavior. The hypothesis that related internal control positively to achievement and hope of success motivation and inversely to fear of failure motivation was not supported by the data.

The Monaster study (1967) involved a sample of 20 pregnant unmarried girls enrolled in a continuing education program for girls who were compared with a group of 20 not admitted to the program. Pretests and posttests were administered to both groups to determine the internality or externality of the subjects. The control group showed significant increase in internality while self-concept improvement was not significant.

The study reported by Fine (1963) was conducted with a sample of 109 black children (55 girls, 54 boys) in 3rd grade from the Harlem area of New York City. The Intellectual Achievement Responsibility Questionnaire was administered to measure locus of control. Rate of reinforcement as an influence on expectancy for success, task performance and self-evaluation provided the additional variable. The examination of correlations by sex revealed significant relationship between locus of control and achievement for girls. Girls who were more internal had higher performance scores than externals in the 75 per cent reinforcement group. There was no significant difference between internals and externals in the 25 per cent reinforcement group.

In her study "Relationship of Life Changes and Locus of Control Attributions to Cognitive Aspects of Black Mother-Child Relationships" Wyatt (1973) found that the forty black low income mothers of 4 and 5 year olds who were more external were more concerned with their children's ability to control their environment. Internal mothers tended to give more approval to the children and were more concerned with the child's mastery of a toy. The findings appear to be an indication that the direction of the mothers' reinforcement was significantly related to the appropriateness of children's behavior.

Ninth through twelfth grade black, white and Spanish surnamed males were included in a study reported by Sachs (1973) of racial identification, locus of control, self-attitudes and academic performance. A draw-a-man test, Rotter's I-E scale, a self-attitudes inventory and grade point averages were used to answer questions

pertinent to the study to assess the generality of difference for blacks. Significant relationships were found between locus of control and self-attitudes but varied from grade to grade. Reading level and grades were generally positively related but for black 10th graders the correlation was negative.

In a study conducted by Ward (1973) it was hypothesized that locus of control interacts with social reinforcement in predicting task performance. One hundred twenty black and Spanish surnamed inner city 4th grade boys and girls comprised the sample. The results of the study showed no interaction between locus of control and social reinforcement in predicting task performance. The children who showed more externality were more responsive to correctness than to praise reinforcement.

In a study of field articulation and locus of control Wagner (1973) reported that ethnic origin of 9- and 10-year olds is not a determinant of locus of control. He also stated that the children from middle class socioeconomic backgrounds were more internal than children from lower class home backgrounds regardless of sex, school performance or ethnicity. Field independence was positively correlated with internality, analytical ability and verbal fluency.

Davidson (1974) studied personality characteristics of black adolescents in one of the few studies reported involving high school students. Selected psychological constructs were investigated to identify the variables which differentiate black and white students. Middle and low socioeconomic status male and female students comprised

the sample. The findings suggested that differences were often influenced by sex and/or socioeconomic status. Black females showed more likelihood toward passivity, being judgmental and distrustful. All blacks scored significantly differently from whites on overall effects on Rotter's I-E Scale, Tennessee Self Concept Scale and the California Psychological Inventory.

Four- and eight-year-old males, half black and half white were the subjects of a study by Tapp (1975). The purpose of the study was to determine if any interaction existed between social class and racial group membership. Both groups ascribed negatives to working class.

The purpose of a study by Alexander (1976) was to investigate the extent to which locus of control and sex role expectations influence academic achievement in black and white children of low socioeconomic status. White preadolescent children showed more internality. Blacks showed that they believe others have more control than they over their lives suggesting that they evaluate their position as disadvantaged. Whites valued or expected sex role equality more than blacks regardless of their sex. Among blacks and among whites there was no significant correlation between locus of control and sex role expectation.

Adolescent black male psychiatric patients were the subjects in a study to explore the relationship between locus of control and dropout rate, with respect to depression, locus of control and dropout rate. The study showed a significant positive relationship between level of depression and externality. Externals and extreme internals stayed in therapy significantly less than internals (Francois, 1977).

An investigation of achievement and perceptions of school performance as related to locus of control and perceptual level was conducted involving 76 black youth in grades 4, 5, 9 and 12. The investigator (Goodwin, 1977) reported that internality score increases by grade level were not significant. High internal students and high conceptual level attained ratings largely superior to those of low internality and low conceptuality.

Hendrix (1977) studied the effects of internal versus external control and group identification influences upon self-esteem. High school seniors in public schools in New Orleans were surveyed. The investigator was interested in examining the attitude of blacks toward themselves. Socioeconomic status and degree of closeness to family were also reviewed in this investigation. It was the conclusion that internal versus external control and group identification are more important factors for self esteem among minorities than among majority group members.

Approximately 47 per cent of a sample of single women were black in a study to investigate relationships between contraceptive behavior and problem solving ability, locus of control and attitudes toward contraception (Steinlauf, 1977). The study revealed that the number of unplanned pregnancies was significantly related to problem-solving skills and to measures of internal-external control.

Morales (1975) examined minority children's perception concerning whether their intellectual achievement is internal or externally

controlled. The conclusions were: children of low SES, or different ethnicity, or sex did not differ significantly as to internality or externality. Boys did not show higher internality than girls. Internality or externality was not related to one or two family home status.

Studies more closely related to the focus of this current study were sparse. In a study by Thomas (1974) it was hypothesized that high internal control low socioeconomic status black and white male high school students would be more vocationally mature. The results of the study confirmed that locus of control accounted for significant variance in vocational maturity. Subjects who demonstrated a greater sense of control over their environment scored higher in vocational maturity. In addition, both blacks and whites aspired to occupations at similar social levels. There was no significant relationship between locus of control and realism of vocational choice.

The Locus of Control Construct

Locus of control, a construct introduced by Rotter in 1954, evolved from social learning theory, and has received considerable attention in research of a wide variety (MacDonald and Throop, 1971). Between 1966 and 1971 the number of articles in accumulated literature had more than doubled that which had previously been reported. The construct as Rotter defines it is:

". . . a generalized attitude, belief or expectancy regarding the nature of the causal relationship between one's own behavior and its consequences might

affect a variety of behavioral choices in a broad band of life situations."

(Rotter, 1966, p. 2)

The basis of social learning theory is that persons make choices from a variety of behaviors available to them. Rotter's hypothesis was that internal-external control was an expectancy which is distributed over a normal curve. He explained the occurrence of the construct as:

. . . a reinforcement perceived by the subject as following some action of his own but not being entirely contingent upon his action . . . typically perceived as the result of luck, chance, fate, as under the control of powerful others, or as unpredictable because of the great complexity of the forces surrounding him. When the event is interpreted in this way by an individual, we have labeled this a belief in external control. If the person perceives that the event is contingent upon his own behavior or his own relatively permanent characteristics, we have termed this a belief in internal control (1966, p. 1).

Four categories of variables are cited by Rotter (1966) as inclusive of this construct: behavior potential, reinforcement value, expectancy and the psychological situation. Reinforcement increases expectancy of behavior and the individual's perception of that reinforcement is what is termed locus of control. Those persons who believe that the events in their lives that are the result of their own behavior are identified as internal while externals believe that their life events occur as a

result of luck, chance or fate - outside forces (Lokan, Boss and Patsula, 1982). It is a reasonable conclusion that locus of control as a construct has applicability to many life situations and concerns.

Rotter (1966, 1975) cautions that relationships based on locus of control must consider that no assumption of good or bad conceptualizations should be made. Roark (1978) states that locus of control should be viewed as a personality variable representative as one of many which predicts behavior.

The variety of research utilizing locus of control as a variable is evidenced by the prolific reviews compiled in the past few years. (MacDonald and Throop, 1971, Lefcourt, 1976, Lefcourt, 1981). Some citations to indicate something of the variety and/or those related to this current study are included here.

Among the early research to test manipulating expectancy of control Phares (1957) found that perception of control was not significant as related to success and failure. James and Rotter (1958) reported similar findings in their experiment to examine effects of perceived control.

Lefcourt and Ladwig (1965) conducted a study of black and white inmates to determine their perception of helplessness. The blacks in the study acknowledged more external than internal control. Kiehlbauch (1968) found no differences between black and white inmates in the reformatory setting of his subjects. Strodtbeck (1958) found that Jewish middle and upper class respondents revealed a greater internality than lower class Italian subjects.

From the research related to how individuals perceive tasks requiring skill or chance there is one frequently named study conducted by Davis and Phares (1967). Subjects were told that their task would be to influence attitudes of others. Those who measured as internal sought more information to a higher degree than did the external subjects. As for their use of available factual information, there was no significant difference. When skill nor chance were involved, there was no significant difference between externals and internals.

Phares (1968) further found that internals used available information more effectively than did externals when required to learn information about fictitious characters. There was no significant difference between internals and externals in the amount of information recalled, but a difference in utilization of the information.

Franklin (1963) found a significant relationship between higher social class and internality. Several researchers have found blacks to be more external or possessing feelings of fatalism than whites (Owens, 1969; Shaw and Uhl, 1969; Zytoskee, Strickland and Watson, 1971). Gore and Rotter (1963) did not find social differences among the Southern black college subjects of his study.

In an extensive field study conducted by Jessor, Graves, Hanson and Jessor (1968) the relationship between economic and social factors contributing to the development of deviant behavior was the focus of the investigation. Access to opportunity was explored for groups of subjects from a southwestern United States community. Anglos were found to be the most internal group when compared to the Spanish and

Indian groups. Spanish subjects were more external than either of the other groups of subjects. Objective access to opportunity and internality correlated strongly.

In 1959 Odell conducted research which linked locus of control to influence resistance. He found that externals showed greater tendency to conform. Croccone and Liverant (1963) conducted a similar investigation and also found that externals were more likely to conform than internals. This study gave indication that when the stakes of success are of value to the individual, internals trust their own judgment to a greater degree than externals. Gore (1962) found in her investigations, however, that internals do tend to resist certain kinds of influence techniques. Ritchie and Phares (1969) also did not find internals as consistent resisters to influence, but externals were found to be always likely to be highly influenced. Internals were interpreted as more discriminating.

Much of the research relating locus of control to achievement reveals that the construct plays a mediating role in determining whether subjects become actively involved in achievement gains. The Coleman report (Coleman, Campbell, Hobson, McPartland, Mood, Weinfeld and York, 1966) is perhaps the most classic example of nationwide studies relating locus of control as a predictor of academic success. The report stated that among non-white children, achievement was best predicted by measures of the child's belief that academic outcomes were the result of his own efforts. Coleman reflected on the findings as they relate to one's sense of control:

The importance of attitudes such as this is the effect such an orientation toward the environment can have on other resources, by creating an active, driving stance toward the environment rather than a passive one. Suggestive evidence of its importance is provided by a striking result: Those 9th grade Negroes who gave the "Hard work" response scored higher on the verbal achievement test, both in the North and South, than those whites who gave the "good luck" response . . .

(Coleman 1971, p. 28)

An early investigation concerned the implication of locus of control with achievement was reported from the work of Crandall, Katkovsky, and Preston (1962). The focus of their studies was to predict achievement behavior from free play activities of children at a week's day camp. Children had to choose whether success or failure experiences described in items of the questionnaire given to them would be the result of their own behavior or external influencers. For the males the attribution of personal responsibility was more important for predicting achievement activity.

To gather further data Crandall, Katkovsky and Crandall (1965) conducted additional studies and found that the greater the females (grades 3 and 4) sense of responsibility for her academic success, the more successful she was likely to be as measured by report card grades. In grades 6, 8, 10 and 12 scores on the California Achievement Test were only occasionally related to Intellectual Achievement Responsibility Questionnaire (IAR used to measure attributions for success or failures). Significant relationships did exist between report card grades and IAR scores however. Ninth graders showed a positive

relationship between reading, language and arithmetic and attribution for responsibility.

According to Lefcourt (1976) several investigations have established that achievement is associated with locus of control. He cites Franklin (1963), James (1965), McGhee and Crandall (1968), Lessing (1969), Nowicki and Roundtree (1971) and Stephens (1972). The results revealed inconsistent findings according to various measures of locus of control and achievement behaviors. Sense of control correlated highly most often however with achievement behavior regardless of socioeconomic status to attest to the value of considering locus of control as a predictor in such studies.

Other researchers have reported findings of the relationship of locus of control to deferred gratification. Zytoskee, Strickland and Watson (1971) found that poor black children were significantly more external than poor white children in their sample of Southern children. The blacks were more likely to choose immediate and little reinforcement than to delay three weeks to receive greater reinforcement. In a later study Strickland (1972) found similar results. In the later study, however, Strickland found that for black children the race of the experimenter was a factor. One conclusion reached was that the black child tends to look outward so that the external world is considerably more important than the personal characteristics of the black child.

Walls and Smith (1970) found that the more educated the individual the more internal they were. These same individuals proved to be more likely to prefer delayed reinforcement.

No review of related literature of locus of control studies is complete without including the findings of deCharms work (1972). This longitudinal study was designed to determine the effects of encouraged origin behaviors in the schools. The thesis of the study was that to enable a person to behave as an initiator of his success (origin behavior) the person must be helped to (1) know his strengths and weaknesses, (2) determine realistic goals, (3) determine the action to reach his goals and (4) consider whether the action being taken is producing the desired effect. Black teachers from black inner-city schools were trained in ways to promote origin (internal) rather than pawn (external) behavior. The results showed that children exposed to trained teachers increased in origin-type behavior. Increasing the students' sense of personal causation resulted in no loss in achievement test scores from fifth to seventh grades while control group children exhibited increasing discrepancy from national norms. In addition, experimental group children averaged fewer absences than the untrained control group students. In short, changes in students' perception of causality produced changes in achievement-relevant activity.

Summary

The types of locus of control studies have been varied. The results of locus of control study reveal interesting findings. Primarily, internals have been found to be more perceptive to the situational and environmental factors in their lives. Internals appear from the research to be more efficient in their use of information than are externals.

Research relating locus of control to achievement indicates that achievement activity and skill-demanding tasks require that individuals view themselves as being in control of self. The data does produce inconsistencies however, which may be accountable through differences in instruments as well as other variables yet to be more thoroughly studied.

Lefcourt (1976) offers caution about interpretations of results of locus of control study. First, he cautions that locus of control is only one expectancy construct and other interacting variables include the value of reinforcements. Then, no person is totally internal or external. These terms are used to indicate a person's tendencies to expect events to be dependent on or independent of their actions. Further, there is speculation that the term "control" has been misused in the sense that control suggests successful manipulation. Lefcourt indicates rather that "contingency" was more the intent of the construct than "control" because of the many confounding elements resident in the notion of control. Since it is usual that the research is based on control as an absolute or strong predictor, then the researcher should consider designing specific assessment devices for the area being studied. The results of studies therefore would speak to internal or external control expectants as predictors of specific aspects of life rather than to simply characterize subjects as internal or external.

Studies Related to Selected Correlates of Career Maturity

Many of the previously included studies focused on several of the same aspects of career development as involved in this current study.

It is important, however, to cite additionally some work that is directly related to other selected correlates of career maturity.

A relationship between vocational maturity and socioeconomic status has been found in several studies. The most well known, a nationwide study by Gibbons and Lohnes (1964), revealed socioeconomic status as a significant correlate to vocational maturity as measured by the Readiness for Vocational Planning Scales. Super and Overstreet (1960) stated from their work on the Career Pattern Study, another landmark study, that the higher the socioeconomic status the greater the level of vocational maturity. Crites (1969) concluded from his Vocational Development Project, however, that socioeconomic status and vocational maturity have little correlation. Cover's (1968) study of high school students revealed similar results. Still others (Rosen, 1959, and Bennett and Gist, 1964) state that there is considerable documentation to support that aspirations are affected by socioeconomic status.

Cosby and Picou (1973) revealed that paternal occupation and education have less effect on lower socioeconomic blacks than on lower socioeconomic Anglos. Duncan (1968) found that socioeconomic status of the black family has less impact on males' occupational choices than in white families.

Career development theories assume that all individuals have equal chance to attain occupational goals and freedom of choice. Dillard (1980) reminds his readers that there is a lack of positive work related experience available to lower socioeconomic blacks. Further, persons who are limited in educational experience, resources in the immediate

environment and access to career information have built in impediments to career choice making which is an integral part of career development.

The results of Hall's study (1973) indicate that among high socioeconomic students the family was reported more frequently as a source of career interest. Also, the expectation level was closely related to the social class of the family. The highest percentages of occupational indecision were low socioeconomic black males and high socioeconomic white males.

Dillard's (1976) study involved 252 sixth grade black males from urban and suburban New York state. Suburban males whose families were classified as middle-socioeconomic status were highest in career maturity followed by urban middle and then urban lower socioeconomic status males. The conclusion of the study was that socioeconomic status was a significant influence on career maturity.

Several investigations have been conducted which report a positive relationship between achievement and career development. According to Dillard (1976) few have been reported which indicate whether reading skills and/or achievement account for differences in career maturity in blacks. In his study Dillard (1976) found that reading achievement accounted for only 2.1 percent of the variability on career maturity. Davis, Hagan and Strouf (1962) had previously reported from a study involving twelve-year-old blacks that reading was positively associated with career maturity.

Wilton (1978) investigated sex differences in career development. Specifically the study's concern was to determine the degree to which

females' inclination to make socially acceptable responses has an effect on career maturity and locus of control. The population of the study was white middle class suburban Boston sixth and eighth grade males and females. The study confirmed that students with more internality are also higher in career maturity. The study also showed a parallel relationship between lack of consistent findings concerning relationship between achievement and locus of control for females and similarly inconsistent results from females when considering the relationship between locus of control and career maturity.

There are several reports of interest which relate career development to parental influence. Hummel and McDaniels (1979) purported that parents are the greatest potential helpers for their children's career planning and that youth view their parents as models. Roe (1964) stated early in the literature that early childhood experiences and relationships with parents are the greatest influences affecting healthy career development. Pallone, Hurley and Rickard (1970, 1973) found that parents were the primary influence on adolescents' expected occupations.

In a study by Dillard and Campbell (1981) generated from beliefs that parents influence children's career choices, the relationship of career maturity, expectations, aspirations and parents' career behavior were examined. Puerto Rican, Anglo and black participants composed the sample. Results of the analysis of the data indicated that the aspirations of the black parents were more highly related to their

children's career aspirations. Career values of the parents were not significantly related to the career maturity of the black adolescents. Only 4% of the variance in the career maturity of adolescents could be accounted for by either aspirations or values of their parents. Black mothers seemed to contribute more strongly to children's career development than did black fathers. The findings indicated that in the three ethnic groups neither parents' aspiration nor career values seemed to be significant influencers of adolescents career maturity. This does not appear consistent with the idea advanced by Crites (1971) that psychological conditions emerging from parental attitudes may be related to adolescents' career development. Super and others (1963), too, had cited the influence extended by the family as role models in the development of attitudes necessary for career development.

It has been suggested by Henderson (1966) that many black parents of lower socioeconomic status lack the experience to be helpful to their children during early stages of career development. Dillard (1980) states however, that researchers have demonstrated that black adults have been successful in their occupational development although they lacked parental role models. Perhaps, he says, parental role models may not be as significant among blacks. Further, few opportunities are available for the majority of black adolescents to interact with and internalize positive work attitudes from the adult association within their immediate community.

Summary

It appears from the studies reported that socioeconomic status is a primary factor in the career development particularly of blacks. Since socioeconomic status impacts greatly on the potential for parental influence which has also been reported as a strong factor, that influence may have effect on career development from various perspectives.

It is generally true, from the research literature, that the higher achievers are also more vocationally mature. Studies particularly concerned with blacks are few in number and mostly are those which compare blacks and whites at all levels.

Caplow (1954) wrote that parental influence can even take the form of "inheritance" of an occupational level. Middle-class parents are especially ambitious for their children's social rise through education and occupational choice. Children, therefore, make vocational decisions within the range to which they have been led by parental influence regardless of the stimulus of that influence.

CHAPTER III

METHODOLOGY

This chapter includes discussion of relevant aspects of the plan for the research. The population and sample will be described, the instrumentation used will be discussed, the procedures for collecting data will be detailed, and the methods of analyzing the data will be explained.

Population

The population of this ex-post facto study was students in an urban high school which was majority black. The percentage of white students was approximately 2% in a total enrollment of about 1750 students housed in two buildings. Students in this high school are enrolled in one of three programs: academic, business or general. Approximately 40% of the graduates continue their training or higher education. The students are typically from low to middle-income families.

Sample

The sample consisted of all minority students who compose the senior class in the selected high school. Students were nonrandomly selected, then, for the study. Participation in the study depended on the granting of parental permission for students younger than 18 years old. Those 18 and over participated on a voluntary basis.

Instrumentation

The instruments used to obtain data from the participants included Rotter's (1966) Internal-External Scale, Crites' Attitude Scale of the Career Maturity Inventory, and a Personal Data Form developed by the investigator.

Rotter's I-E Scale

Rotter's I-E Scale (1966) was developed as the result of several revisions to similar instruments, the first of which was introduced by Phares (1957). James' revision to the Phares instrument was retained as a Likert-type scale. It consisted of items to determine internality or externality as a personality variable and included filler items. From a one hundred item questionnaire further reduced to a sixty-item instrument, the current Rotter Scale of twenty-nine forced-choice items was produced. Filler items remain in the present instrument. The range of possible scores, zero to twenty-three, can measure internality indicated by low scores and externality indicated by high scores.

Use

The Rotter I-E Scale was used to measure locus of control of the students who participated in the study. The scores were used to determine whether locus of control was a predictor of the career maturity of these participants when correlated with their scores on Crites' Attitude Scale. The instrument was administered with a packet of three instruments including Crites' Attitude Scale and a Personal Data Form.

Relevancy

According to related literature more than six hundred studies concerned with external-internal orientation had been conducted and published (Rotter, 1975). Many of these studies related career development to this personality variable. Among late studies of this type are those by Roark (1978), Schrock (1981) and Kelsey (1983).

Roark (1978) used the I-E Scale to determine the relationship between locus of control and subjects' perception of chance in finding jobs. Her conclusion was that finding a job was the result of combined perceived chance happening and the individuals' actions. Schrock (1981) administered the Rotter Scale to determine the relationship between locus of control and adolescent females' career choices. One conclusion from her study was that locus of control did not significantly influence females' career choices among the subjects in her study. Kelsey (1983) used the Rotter Scale to determine the relationship between locus of control and career decision making styles. She found that personality was an influence in the career decision making process of the black adolescents included in her study, and that locus of control was significantly related to their career decision making styles.

Reliability and Validity

Reliability and validity data on the Rotter I-E Scale were based on the results from testing four hundred Ohio State University students, two hundred males and two hundred females. An internal consistency analysis yielded a correlation of .70 for males and similarly for the females. Two subgroups of the population provided data for the

computation of test-retest reliability coefficients. A lapse of one month produced reliability coefficients for males of .60 (N=30), for females, .83 (N=30) and combined was .72 (N=60). Two months later the reliability coefficients for males was .49 (N=63), for females .61 (N=54), and combined .55 (N=117). Many other studies have given evidence of the construct validity of the Rotter instrument.

Crites' Attitude Scale, Career Maturity Inventory

The Career Maturity Inventory developed by John O. Crites (1973) consists of two parts: an Attitude Scale and a Competence Test. The premise upon which the CMI was developed was that vocational behavior is a process, developmental in nature, and progresses through adolescence to adulthood and continues on to old age. The Attitude Scale was used in this study to provide scores to determine the relationship between the aspects of career maturity which it measures to locus of control, socioeconomic status, academic achievement and sex.

The Attitude Scale

The Attitude Scale consists of fifty items designed to measure the feelings that the individual possesses to making a career choice and entering the world of work. One's subjective reactions to career choice making is an underlying theme throughout the scale.

The fifty items which compose the Scale require a true or false response. These statements relate one's feelings toward five attitudinal clusters which are:

1. Involvements in the career choice process
2. Orientation toward work
3. Independence in decision making
4. Preference for career choice factors
5. Conceptions of the career choice process

Crites utilized career development theory and the dimension of his model of career maturity (consistency of career choice, realism of career choices, career choice competencies and career choice attitudes) as the foundation for formulating the fifty items (Crites, 1973). The reading level for this instrument has been judged as sixth grade.

Reliability and Validity

Crites' Attitude Scale has proved to be reliable and valid for use with varying populations and in many different settings. It has been widely used in schools and colleges as well as in business and industry. Data collected from grades six through twelve using 1,648 youths over a one-year interval reveal a test-retest reliability of .71. Validity data indicate a relationship with achievement and intelligence (Crites, 1973).

Relevancy

Numerous studies relating career maturity to career development and various correlates of the process have been conducted using the Attitude Scale. In a study by John Dillard (1976) of career maturity among black youths he used the Attitude Scale to measure career maturity of the 252 sixth grade black males in the study. The purpose of his study was to

determine the relationship, if any, existing between career maturity and socioeconomic status. Dillard found that middle class males were higher in career maturity than lower class males. He also found that reading achievement may have little effect on career maturity.

In an additional investigation by Dillard (1981) to determine the relationships between Puerto Rican, Black and Anglo adolescent children's career aspirations and maturity, and parents' values the Attitude Scale was used to measure the career maturity of the 194 participants. The results revealed that neither the career aspiration nor career values of the parents are significantly related to the career maturity of the Black adolescents.

Personal Data Form

A questionnaire to elicit each respondent's first and second career choice, and other data pertinent to the study adapted with permission from forms developed by Schrock (1981) was used. (See Appendix C.)

The instrument included two questions related to choice of a career.

- (1) If you could become anything you wanted to, what career would you choose?
- (2) Considering your interests and abilities, and recognizing your chances for going on for training or college, as well as your interests, what career do you actually plan to pursue?

As in Schrock's study (1981), the current study was concerned only with the real choices of minority adolescents. The question about an ideal choice of a career was used as in the Schrock Study to distinguish

between what career students would like to pursue, and a career that they actually planned to pursue. Personal data to identify parents, give information about educational attainment, and occupation were solicited from this questionnaire.

Data Collection

Data were collected in Winter, 1983 in the conduct of this ex-post facto study. The researcher requested parental permission forms after approval of the study, following the school system's required procedures. (See Appendix A.)

Participants were given the Personal Data Form, Rotter's Scale and Crites' Attitude Scale to be completed in one sitting. Groups of students were assembled as convenient to the school's schedule. Instructions were given by the researcher to clarify the purpose of the study. Questions were answered as appropriate.

The three instruments were combined as a packet for administration to the participants. They were presented and completed in the following order: personal data questionnaire, Rotter's I-E Scale, Crites' Attitude Scale. The investigator administered each of the instruments orally to eliminate the possibility of misreading. Directions for administration are listed in Appendix B. This procedure permitted completion of the instruments within one class period. Data were analyzed using local facilities.

Research Hypotheses

The following research hypotheses were developed to guide this study:

- H₁ - There is no relationship between locus of control and career maturity among minority adolescents.
- H₂ - There is no relationship between socioeconomic status and career maturity among minority adolescents.
- H₃ - There is no relationship between academic achievement and career maturity among minority adolescents.
- H₄ - There is no relationship between career maturity among minority adolescents and their sex.

Data Analysis Procedures

Correlation and multiple regression procedures were used to analyze the data. Independent variables included students' I - E scores, grade point average, sex, and socioeconomic status. The students' scores on Crites' Attitude Scale of the Career Maturity Inventory were the dependent variable.

Students' scores on Rotter's Scale were used as the measure of locus of control for each participant. Crites' Attitude Scale scores provided students' measures of career maturity related to attitudes involved in the career choice making process.

Socioeconomic status was determined and career choices were categorized using Hollingshead's Two Factor Index of Social Position (1957). The occupation of the parent from two-parent homes which was used was the one with higher status as suggested by Hollingshead. Hollingshead's Two Factor Index of Social Position (1957) provided the means for classifying occupational choices named by the subjects and for determining socioeconomic status for their families. The occupational

sub-scales of Hollingshead's plan categorize occupations on a hierarchy which ranges from Level I (Executive) to Level VII (Unskilled worker). The system of scores which assigned occupations on a scale of 1 to 7 devised by Hollingshead (1957) provided a uniform procedure for classifying occupational choices. Table I shows the categories and scores used in the system.

The assumption underpinning Hollingshead's Index is that one's occupation reflects the influence which the individual is most likely to exert as he/she performs the work of the occupation. To calculate the Index of Social Position score, the scale value for the occupation (indicated by category number) multiplied by that factor's weight, 7, was added to the scale value for education multiplied by that factor's weight, 4. The spread of possible scores, 11 to 77 was sub-divided so that the following ranges are used to denote social position or socioeconomic status.

Range of Scores	Social Class
11 - 17	I
18 - 27	II
28 - 43	III
44 - 60	IV
61 - 77	V

The second factor, educational level attained, is added to the formula to standardize the determination of social position or socioeconomic status. Educational level attained is divided into seven

Table I
Scores for Occupational Categories

Score	Types of Occupations
1	Higher executive, major professionals, proprietors of large concerns. Example, bank president, physician, university teacher, government officials.
2	Business managers, proprietors of medium sized businesses, lesser professionals. Example, Office manager, nurse, teacher (elementary and high).
3	Administrative personnel, small independent business, minor professionals. Example, Insurance agent, private secretary, radio announcer, beauty shop owner, mortician.
4	Clerical and sales workers, technicians, owners of little businesses. Example, bank teller, shipping clerk, warehouse clerk, laboratory technicians, news stand operator.
5	Skilled manual employees. Example, auto body repairman, butcher, carpenter, postman, plumber, fireman, chef, barber, hair stylist.
6	Machine operators and semi-skilled employees. Example, hospital aide, bus driver, housekeeper, practical nurse, tenant farmer, factory machine operators.
7	Unskilled employees. Example, Cafeteria worker, stock handler, unemployed, domestic, public welfare recipient.

positions: (1) Graduate training, (2) College graduation, (3) Partial college training, (4) High school graduate, (5) Partial high school, (6) Junior High School, (7) Less than seven years of school. The number of the category represents the scale value assigned for calculating purposes.

Grade point averages representing grades earned from Grade 9 through first semester, grade 12 were calculated by a procedure approved by the National Association of Secondary School Principals (1967) and endorsed by the local school board. These averages were converted to letter grades. This conversion is commonly used and suggested for ease in generalizing about academic achievement. For example, 3.6 - 4.0 and above = A, 3.0 - 3.5 = B, 2.0 - 2.9 = C, 1.0 - 1.9 = D and below 1.0 = F.

Descriptive data were compiled to include sex, grade point average and socioeconomic status. Socioeconomic status was reported on a scale of 1 to 5 with 1 representing the highest class. The cumulative grade point average (grades earned for Grade 9 through first semester, grade 12) converted to letter grades was used to indicate academic achievement level of the student.

Correlation coefficients were derived to test the relationship of career maturity to the independent variables selected for study. A measure of the strength of any one independent variable or any combination of independent variables were explained using regression analysis. The .05 level of significance was used to test the hypotheses.

CHAPTER IV
FINDINGS AND ANALYSES

This chapter presents the findings related to the hypotheses for which the investigation was made. Procedures for the data gathering and analyses were detailed in Chapter 3. Appropriate demographic data and other related data are provided to supplement the analyses.

Description of the Subjects

All seniors, classified as black, in an urban high school in one school division in Central Virginia were approached by the investigator regarding participation in the study. Permission had previously been granted by that school system's Department of Planning and Development to conduct the investigation. Three hundred three of the 325 agreed. The number of cases will vary due to missing information on different parts of the instruments.

Table II presents demographic data which denotes the nature of the group. Demographic data of the population were obtained from the personal data questionnaire completed by the participants in the study. The investigator clarified that no names were to be used in reporting the information supplied.

A brief review of the data revealed that a larger percentage (53.64%) was females. The academic achievement of the group approached a normal distribution over the range of available grades from A to F. Only 6.6% of the group had accumulated academic achievement in the A range, 17.2%, B; 42.1%, C; 31.8%, D; 2.3%, F.

Table II

Characteristics of the Sample

Sex	N	%
Male	140	46.36
Female	162	53.64
Total	302	
<u>Occupational Choice</u>		
Class		
I	8	2.73
II	22	7.51
III	61	10.82
IV	128	43.69
V	74	25.26
VI	0	0.00
VII	0	0.00
<u>SES</u>		
Class		
I	8	2.7
II	22	7.3
III	63	20.9
IV	133	44.2
V	75	24.9
<u>Academic Achievement</u>		
A	20	6.6
B	52	17.2
C	127	42.1
D	96	31.8
F	7	2.3

The choices of anticipated occupations were spread over the range used for classifying occupations. Only 10.2% expected to enter occupations of a Class I (higher executive, major professional) or Class II (business manager, lesser professional) category. A majority tended to make occupational choices which fell into lower classifications, however. More than two-thirds (68.8%) indicated occupational choices in Class IV (clerical and sales workers, technicians) or Class V (skilled manual labor type).

The calculated index of social position for the group revealed a spread over the classifications from Group I to Group V. A greater percentage at the lower end of the scale indicated a majority of lower income and a lower educational attainment among these parents. Group I, the highest category, included only 8 families or 2.7% of the population. Group II included 22 or 7.3%; Group III, 63 or 20.9%; Group IV, 133 or 44.2% and Group V, 75 or 24.9% of the total group. Thus approximately 69% of the participants were from families in Group IV and V, the lowest socioeconomic groups. For two parent families the higher class occupation and educational level were used if both were employed. This procedure is suggested by Hollingshead (1957).

The average age for the group of participants was 17.6 years. Students were requested to give their age as of February 1.

The data reported in Tables III and IV were obtained from responses to the personal data questionnaire. Eleven percent of the students indicated no male parent and an additional 7.02% offered no information related to a male parent. A much greater percentage (97.73%) of the

participants identified their female parent as mother while 70.90% named father as the male parent. Including the stepfather and foster father categories of male parent raised the percentage to 78.93%. These statistics revealed a similarity between the population studied and the minority population of the United States as reported by Matney and Johnson (1983) as related to the currently increasing number of female family householders.

Statistical Analyses Related to Hypotheses

Four hypotheses were tested in this investigation. Scores on the Attitude Scale of Crites' Maturity Inventory were utilized as the dependent variable. Independent variables were scores from the Rotter I-E Scale to determine locus of control, academic achievement, socioeconomic status and sex. Locus of control, academic achievement socioeconomic status and sex were the factors hypothesized as those which are predictors of career maturity among black adolescents.

Hypothesis 1. There is no relationship between locus of control as measured by Rotter's I-E Scale and career maturity as measured by Crites' Attitude Scale among minority adolescents. The scores of the participants on Crites' Attitude Scale and Rotter's I-E Scale were used to determine correlation between career maturity and locus of control.

The scores of participants in the study on Crites' Attitude Scale to measure career maturity showed the group's mean as 33.79 and a standard deviation of 5.498 as shown in Table V. The standardization group of twelfth graders measured a group's mean of 37.23 with a standard deviation of 5.19 (Crites, 1973). The members of the group in

Table III
Identification of Female Parent

Name	N	%	Cum %
Mother	284	93.73	93.73
Step Mother	1	.33	96.04
Foster Mother	6	1.98	94.06
Other	9	2.90	99.01
No Information	3	.99	100.00

Table IV
Identification of Male Parent

Name	N	%	Cum %
Father	212	70.90	70.90
Step Father	20	6.69	77.59
Foster Father	4	1.34	78.93
Other	9	3.01	81.94
None	33	11.04	92.98
No Information	21	7.02	100.00

Table V
Crites' Attitude Scale Scores
Frequency Distribution

	Frequency	Cum %
41-45	29	100.0
36-40	103	90.4
31-35	94	56.3
26-30	52	25.2
21-25	17	7.9
16-20	6	2.2
13-15	1	.3
Total = 302		
Range = 13-45		
Mean = 33.79		
S.D. = 5.498		

this study were lower in career maturity than the norming group as evidenced by the scores earned. It is interesting to note, however, that 34.1% of the participants in this study scored between 36 and 40 on Crites' Scale.

Rotter's (1966) I-E Scale was used to measure participants' locus of control. Many researchers have indicated that this personality variable may be a factor impacting on career development. Scores on the Rotter Scale range from 0 to 23 to represent internality (lower scores) or externality (higher scores). Table VI is a display of the frequency distribution for the scores of the participants in this study. The mean score for all subjects was 10.62. Following the split mean procedure, participants scoring 10 or lower were judged as internals, and those scoring 11 or above were considered as externals.

To test for the relationship between career maturity and locus of control a coefficient of correlation was determined. The value of the coefficient, $r = -.09$, $P < .0858$, showed no significant relationship between these variables (Table VII). There was no difference in career maturity among the students in the study according to their beliefs about what was responsible for the outcome of events in their lives. Those who believed that chance or luck was the major cause of what happened to them (externals) were no different in their career maturity than those who believed that they themselves exercised control over their fate (internals). According to Sue (1975) although minorities tend to be external, this is not viewed negatively in light of the many forces which have impacted on their lives. Since there was no

Table VI
Frequency Distribution of Rotter's I-E Scores

Score	Frequency	Cum. %
19	2	100.0
18		
17	7	99.3
16	8	97.0
15	25	94.4
14	18	86.1
13	29	80.1
12	33	70.5
11	28	59.6
10	42	50.3
9	33	36.4
8	23	25.5
7	21	17.9
6	13	10.9
5	14	6.6
4	4	2.0
3	1	.7
2		
1	1	.3

Table VII
 Correlation of Career Maturity with Locus of Control,
 Academic Achievement, Socioeconomic Status
 and Sex

Variables	R	T	P	Means	S.D.
Locus of Control	-.09		.0858		
Academic Achievement	.38		.0010		
Socioeconomic Status	-.26		.0001		
Sex		2.516	.0124		
Female				34.54	5.25
Male				32.95	5.68

significant relationship between career maturity and locus of control, the hypothesis was accepted.

Hypothesis 2. There is no relationship between socioeconomic status and career maturity among minority adolescents as measured by Crites' Attitude Scale. Educational level attained and current occupation were the two factors used to calculate the socioeconomic status or class of the families of the participants. Hollingshead's Two Factor Index of Social Position as discussed previously provided the procedure for uniformity in the calculations. Tables VIII and IX present the data gathered from personal data questionnaire to show the educational level attained for parents of the students in the study. A considerably better percentage of female parents completed high school (43.6% compared to 30.4% of the male parents) and slightly better than 7% of male and female parents attended or completed graduate programs. Female parents of these subjects had attained higher educational levels than the male parents.

The calculated socioeconomic status for the families showed that the greater percentage of families were of lower income and lower educational attainment. Data in Table X revealed that more than two-thirds of the families' fell into the two lowest classes.

The second hypothesis, there is no relationship between socioeconomic status and career maturity among minority adolescents was tested utilizing a correlation procedure. Scores on Crites' Attitude Scale and the calculated socioeconomic status of the families provided the data. An examination of the statistical results in Table VII

Table VIII
Educational Status of Female Parent

Level	N	%	Cum. %
Completed Jr. High	4	1.32	1.32
Some High School	65	21.45	22.77
Completed High School	132	43.56	66.34
Some College	60	19.80	86.14
Completed College	26	8.58	94.72
Graduate School	11	3.63	98.35
No Information	5	1.65	100.00

Table IX
Educational Status of Male Parent

Level	N	%	Cum. %
Completed Jr. High	13	4.94	4.94
Some High School	69	26.24	31.18
Completed High School	80	30.42	61.60
Some College	50	19.01	80.61
Completed College	24	9.12	89.73
Graduate School	10	3.80	93.54
No Information	17	6.46	100.00

Table X
Socioeconomic Status of Families

Class	N	%
I	8	2.7
II	22	7.3
III	63	20.9
IV	133	44.2
V	75	24.9

revealed a significant correlation between these variables, $r = .26$, $p < .0001$. According to this correlation the extent to which families' socioeconomic status predicts career maturity of their adolescents is significant. Status, determined by educational background and earnings of the family, contributed to the aspects of career maturity measured by Crites' Attitude Scale. The hypothesis was rejected.

Hypothesis 3. There is no relationship between academic achievement and career maturity among minority adolescents as measured by Crites' Attitude Scale. Averages, obtained from student responses on the personal data questionnaire, were converted to letter grades (A, B, C, D, F) for ease in generalizing about academic achievement as a variable. The average of the level of achievement for these students was revealed as a high "D" or slightly below "C" grades. The median, by inspection of Table XI, is well within "C" range.

The correlation coefficient, $r = .38$, $P < .001$, calculated using scores from Crites' Attitude Scale and overall averages attained, indicated a positive relationship between the two variables (Table V). These results gave evidence that students with higher averages tended to possess a higher level of career maturity. Those who were lower in achievement, according to their averages, were less mature as indicated by their scores on the Attitude Scale. For the students in this study, academic achievement was related to their career maturity. The hypothesis, there is no relationship between academic achievement and career maturity among minority adolescents, was therefore rejected.

Hypothesis 4. There is no relationship between career maturity among minority adolescents as measured by Crites' Attitude Scale and their sex. Scores earned on Crites' Attitude Score revealed that there was a difference between the sexes and their level of career maturity. Table VII showed this difference using the calculated means: 34.54 (S.D. = 5.25) for females and 32.95 (S.D. = 5.68) for males. The t-test procedure was used to determine if any relationship existed between sex and career maturity. The calculated $t = 2.516$, $p < .0124$ indicated a significant relationship between the variables. Hypothesis 4 was rejected indicating that sex was a predictor of career maturity for the students in this study.

Although males, in general, showed a lower level of career maturity than females indicated by the difference in their mean scores on the Attitude Scale, when taken as one group their sex did not make a difference to their career maturity.

The variables which showed significance as related to career maturity in the group of black adolescents in this study then were academic achievement, socioeconomic status and sex when considered one at a time. Locus of control was not significant as a contributor to career maturity for these subjects.

A regression analysis procedure was done to determine the most significant predictor of career maturity for the adolescents in this study. Variables were entered in the following order: academic achievement, socioeconomic status and sex. The analysis showed the most significant variable to be academic achievement as indicated in Table

Table XI
Academic Achievement Attained

Grade	N	%
A	20	6.6
B	52	17.2
C	127	42.1
D	96	31.8
F	7	2.3

Mean - 1.94

XII. Socioeconomic status was revealed as the second most significant predictor, and sex was the least significant predictor according to the analysis made. No other variable in the study met the 0.0500 significant level for entry into the procedure.

In summary 302 black adolescents, seniors in an urban high school in Central Virginia responded to a personal data questionnaire, Crites' Attitude Scale and Rotter's I-E Scale in an investigation of selected factors related to career maturity. The study is summarized, conclusions are offered and recommendations are made for further study in Chapter V.

Table XII
Regression Analysis for Career Maturity

Variables	Beta Weights	F	P
Academic Achievement	1.903495	30.35	.0001
Socioeconomic Status	0.862887	7.45	.0067
Sex	1.192269	3.90	.0493

CHAPTER V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

The purpose of this study, the research procedures and data analysis procedures will be reviewed in this chapter. The findings will be compared with results in related literature pertinent to career development among black adolescents. Conclusions and recommendations resulting from the study will be given.

Summary

The present study was designed to investigate factors which may predict career maturity among black adolescents. A review of related literature indicated a need for studies involving only black adolescents to add to the sparse accumulation of information about blacks and career development (Smith, 1975). Locus of control, socioeconomic status, academic achievement and sex were considered among the most influential factors impacting on career development. These variables, then, were selected for inclusion in the study.

Three hundred twenty-five black adolescents, seniors in an urban high school in Central Virginia, were the subjects in this investigation. Data from a personal questionnaire, their scores from Crites' Attitude Scale of the Career Maturity Inventory and Rotter's I-E Scale were analyzed to determine factors which predicted career maturity the most for this group of students. The questionnaire designed by the researcher was used to collect data about age, career choice, family income and family educational level. The group was a majority female

(53.64%). Academic achievement in terms of overall grade point averages earned for the group approached a normal distribution over the range of grades A to F; the mean achievement was slightly below "C". The majority indicated choices of occupations which fell into lower classifications as categorized using Hollingshead's Two-Factor Index of Social Position. A greater percentage of the families were of lower income and lower educational attainment so that 69% fell into Levels IV and V on the Hollingshead's Index of Social Position Scale. Slightly more than 7% of their parents attended or completed graduate programs while approximately 27% did not complete high school. A considerably larger percentage of female parents completed high school (43.6% compared to 30.4% for male parents). Eleven per cent of the students indicated no male parent and 7.02% offered no information related to a male parent.

From the choices of anticipated occupations listed by the students, 10.2% expect to enter occupations of a Class I (Executive or Professional) or II (Business manager or lower professional) designation. A similar percentage of their families fell into Class I or II when classified according to their socioeconomic status.

Correlations and regression analysis procedures were used to analyze the data collected. Independent variables were academic achievement, locus of control, socioeconomic status, and sex. The scores on Crites' Career Maturity Attitude Scale were the dependent variable.

Findings

In testing for hypothesis 1, the correlation revealed no relationship between career maturity as measured by the Attitude Scale

and locus of control as measured by Rotter's I-E Scale. The hypothesis was retained.

For hypothesis 2 a correlation was calculated between scores on the Attitude Scale and socioeconomic status as determined from data given on the personal data questionnaire. A relationship was revealed, therefore the hypothesis was rejected.

The results of testing for hypothesis 3 revealed a significant relationship between scores on the Attitude Scale and academic achievement. Hypothesis 3 was therefore rejected.

The findings of the t-test procedures indicated a difference in the maturity of males and females in the study. Further, the procedure revealed a significant relationship between sex and career maturity; hypothesis 4 was rejected.

A regression analysis procedure was done to determine the variables which were the strongest predictors of career maturity of the black adolescents in this study. Variables were entered into the analysis according to the order: academic achievement, socioeconomic status, sex. Locus of control was not included because no relationship was indicated between internality or externality and career maturity for these subjects. Academic achievement was revealed as the most significant predictor of career maturity and sex the least significant according to the analysis made.

Discussion

The review of literature related to this study showed that very few investigations have been conducted involving only black adolescents. It

is also noteworthy that current theories of vocational development are based on results of studies involving primarily urban, white middle-class males. Those studies involving blacks have tended to exclude subjects of lower socioeconomic status and therefore little has been projected about career development among the larger population of blacks. That which is known has been sparse and has been comparative in nature. This study has been an attempt to involve all black seniors in an urban high school in a study to determine predictors of their career maturity to learn more about aspects of career development among black adolescents. The following is a discussion of the major areas of concern to this study.

Academic Achievement

This study found a relationship between career maturity and academic achievement. Of the variables studied: socioeconomic status, locus of control, academic achievement and sex, academic achievement was found to be the most significant predictor of career maturity for the population of this investigation. The results are in agreement with Lawrence and Brown's study (1976) which found a positive relationship between intelligence and career maturity. Lawrence and Brown reported that many earlier researchers such as, Whitty and Lehman, 1931; Wrenn, 1935; Holden, 1961; Davis, 1962; Crites, 1969, and Super and Bohn, 1970 had concluded similarly. In contrast to Dillard's study (1976) reading achievement accounted for only 2.1 per cent of the variability on career maturity. Dillard also stated that few studies have been reported which

indicate whether reading skills and/or achievement account for differences in career maturity in blacks.

Socioeconomic Status

A number of researchers have observed that ethnic membership and cultural background impact on socioeconomic status and influence career development behavior (Smith, 1975; Griffith, 1980). In Millard's study (1975) socioeconomic status seemed to have a greater influence on vocational maturity than did self-concept.

Socioeconomic status was determined to be a significant factor in the career maturity of participants in this current study. This finding is congruent with that of Gribbons and Lohnes (1968), and Super and Overstreet (1960) in their often cited landmark studies. These researchers have stated that socioeconomic status is a determinant of vocational behavior to the extent that higher status is reflected by more mature vocational behavior.

Crites (1969) and Cover (1968) on the other hand found little correlation between socioeconomic status and vocational maturity. Caston (1982) in a recent study also conducted in an urban setting in Central Virginia found family income to be an insignificant factor in career choice attitude. Kelsey (1983) reported also from her study of black adolescents' career decision making styles that socioeconomic status was a non-significant factor. She added that this was probably true in her study because of the little variation in the status of subjects included.

Sex

In general, males and females differ in their rates of maturation, therefore, it is reasonable to suspect differences in all forms of maturity which are dependent on the developmental process. The participants in this study differed by sex in their level of career maturity as indicated by mean scores for females and males on Crites' Attitude Scale. Females scored higher. Studies conducted by Smith and Herr (1972) revealed similar results.

Sex was a significant predictor of career maturity for the participants in this study. This finding is not supported by theory posited by Crites (1972) who found no difference between scores of males and females on his instrument. Smith (1976) reported no significant sex differences in her study of twelfth grade blacks; neither did LoCasio and Nessleroth (1976). Only a few studies have analyzed the relationship of sex differences to black youth's career maturity according to Smith (1981), and that which has been reported indicated conflicting results.

Locus of Control

Locus of control was not found to be a predictor of career maturity for the subjects in this investigation. The Thomas study (1974) results differed in that locus of control was confirmed in that study as accounting for significant variance in vocational maturity. Kelsey (1983) also found that locus of control was significantly related to career decision making styles of the southern black adolescents involved in her study. Many other researchers (Cowan, 1979; Curry, 1980; Wilton,

1978 and Ifenwanta, 1978) concur that locus of control is significantly correlated with various measures of career maturity. Schrock (1981) in her study of females' career choice making found that locus of control did not significantly affect adolescents' career choices.

Conclusions

Based on the study the following conclusions are drawn:

- (1) Academic achievement: Students with higher academic averages tended to have a higher level of career maturity. Likewise, lower achieving students showed less career maturity.
- (2) Socioeconomic status: The educational level that a family has attained and the work engaged in to produce earnings are determinants of their status. The status of the family, in turn, reflects on the career maturity of the adolescent family members. That is, the higher the socioeconomic status, the higher the level of career maturity. Conversely, the lower the socioeconomic status, the lower the level of career maturity.
- (3) Sex: Sex does impact on career maturity. Females tended to score higher in career maturity than males.
- (4) Locus of control: Whether individuals believe that events in their lives are controlled by luck or chance, or by themselves did not predict their career maturity.

Recommendations for Research

Considering the results and observations in this investigation, the following recommendations are made:

- (1) Similar studies should be conducted with samples drawn from other settings to determine if the findings are congruent with those of this study.
- (2) Longitudinal studies should be conducted to affirm the career development process among the black population.
- (3) Additional research utilizing only black adolescents at several age, grade and socioeconomic levels as subjects is needed to add to the knowledge base regarding career development among blacks.
- (4) Studies should be conducted which focus on a variety of intervention approaches that are suspected as enhancers to career development among minorities. Approaches such as mentoring, shadowing, field trips, part-time work, computerized career guidance, career guidance as an integral part of the curriculum, specifically planned career guidance classes, in-service with teachers, parent groups, and any combination of interventions have been cited in career development literature.
- (5) Studies of psychological and environmental influencers on black adolescents' career maturity are needed to give direction to improving career development emphases as schools implement their existing programs.
- (6) Research is needed to determine the impact of increasing career maturity on academic achievement. There is considerable evidence to indicate that high achievers also possess a high level of career maturity. Investigations to test the converse possibility are recommended.

Implications of the Study

Implications from the findings of this study can be drawn which may be useful to stimulate other action on behalf of black adolescents' career maturity.

Considering the findings in this study that females tend to possess a higher level of career maturity than males, the implication is that more attention may need to be directed to adolescent males through appropriately designed career guidance. Also, considering the growing numbers of females who are engaged in non-traditional occupations, it is even more demanding that males' career maturity level is raised.

The findings from this study indicated that there was a positive relationship between academic achievement and career maturity. The students who were higher achievers also showed a higher level of career maturity and vice versa. It is therefore reasonable to expect the possibility that a focus on career development may be a positive stimulus for improving academic achievement. The counselor, trained to deliver career guidance, should systematically pursue such a thrust by exercising the three faceted role of the counselor: counseling, consulting and coordinating. The strategies to be used need to be limited only by the creativity and skill of the counselor. The counselor, as student advocate, will have to remain vigilant to assure that the school fulfills its responsibility to raise the sights and initiate opportunities for increased achievement.

Counselors need to help teachers learn to improve self-esteem among minority students (McDavis and Parker, 1981). Minorities especially need to have supportive experiences to improve their view of themselves

as a forerunner of achievement. Teachers have numerous occasions to use positive image building.

Socioeconomic status was a significant predictor of career maturity for the students in this study. Generally, it is true that the family of low socioeconomic status does not provide the kinds of exposure that would lend to a high level of career maturity. The implication is clear that the school could be responsive in creating opportunities which the home is not likely to offer to its adolescent family members. This is particularly necessary for minorities according to Smith (1975). Using its resources the school must provide successful role models through well executed career day activities, shadowing, part-time work and mentoring as examples. The use of computer-assisted career exploration is a fairly recent avenue which has much appeal for gaining information. Building collaborative programs utilizing the business community has the potential for multiplying opportunities. Positive relations between the schools and businesses are also a beneficial by-product. All such programs designed to facilitate the process by which low socioeconomic minority students will acquire appropriate knowledge, skills and attitudes to enhance their total career development require the professional counselor's commitment.

Counselors have the skills to conduct parent groups. These groups established to assist parents to understand and guide their adolescents are helpful for all parents, but especially for the parents of lower socioeconomic status. Sharing information about employment trends and occupational change is valuable for parents' use. Parents have been

reported to be key influencers of their children's career development (Hummel and McDaniels, 1979).

Recognizing that society is not homogeneous, counselors and other educators need to lead the way to promoting and providing career development programs to benefit all segments of the population. Having completed well conducted assessments as a means of determining needs of students whose culture differs from the needs of the majority culture, counselors are obliged to develop meaningful programs and to re-evaluate and re-design as necessary. These steps, properly taken, are essential for the existence of effective career development programs (Williams, 1979). Indeed, the end result is more likely to be a totally productive population and our nation the major beneficiary.

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APPENDICES

APPENDIX A
CORRESPONDENCE

Richmond Public Schools

301 NORTH NINTH STREET
Richmond, Virginia 23219

March 16, 1983

Mrs. LaVerne B. Spurlock
1611 Forest Glen Road
Richmond, Virginia 23228

Dear Mrs. Spurlock:

Your study entitled "The Relationship of Aspects of Career Decision Making to Locus of Control and Selected Correlates" has been tentatively approved by the Administrative Cabinet and can be pursued in Richmond Public Schools.

Since you have not indicated clearly what your sample size is intended to be, it would be necessary for you to make such a determination before you can proceed with your study and the building Principal can be notified. Additionally, it would be also necessary for you to have parental consent forms signed since you are asking access to students' permanent records.

Should you have any questions, please feel free to contact me.

Sincerely,

B. Krishna Singh, Director
Planning and Development

ssj

MARSHALL-WALKER HIGH SCHOOL

JOHN MARSHALL BUILDING

4225 OLD BROOK ROAD, RICHMOND, VIRGINIA 23227

Office of the Principal

March 28, 1984

Dr. B. Krishna Singh
Department of Planning and Development
Richmond Public Schools
301 N. Ninth Street
Richmond, VA 23219

Dear Dr. Singh:

Thank you for your letter informing me of approval to do my study as requested.

Enclosed is a copy of the letter which I plan to send by students to parents for permission to participate. Mr. LaCourse has agreed to allow one hour for seniors at Marshall to participate.

Very truly yours,

LaVerne B. Spurlock



RICHMOND PUBLIC SCHOOLS
Marshall - Walker High School

John Marshall Building
 4225 Old Brook Road
 Richmond, Virginia 23227
 Telephone 321-2040

Office of the Principal

March 28, 1983

Dear Teacher:

I have been granted approval to conduct a study of high school seniors in Richmond Public Schools. The study is designed to determine factors which impact on how students make career choices.

It is necessary to administer three short instruments to gather data from the students. This will take approximately one class period. I will administer the instruments.

I need your help to distribute letters to the students to be involved. Since school time is involved and I will have to inquire about parent's occupation and educational level attained, parental permission is required. In the case of the 18 year old student, that student may offer to participate as an independent student, however.

I need at least 300 subjects, and would appreciate your help in getting the forms returned within two days. I am trying to prevent lag time from setting into this effort.

Thank you for your assistance.

Very truly yours,

LaVerne B. Spurlock
 Guidance Coordinator

APPENDIX B
DIRECTIONS FOR ADMINISTERING INSTRUMENTS

Directions for Administering Instruments

GOOD MORNING. THANK YOU FOR AGREEING TO PARTICIPATE IN THIS STUDY. YOU WILL BE RESPONDING TO SPECIAL EXERCISES TODAY RELATED TO HOW YOU THINK ABOUT CAREERS. YOU WILL BE ASKED TO RESPOND TO ONE EXERCISE THAT WILL TELL HOW WELL YOU HAVE LEARNED ATTITUDES THAT HAVE TO DO WITH SOUND DECISIONS ABOUT CAREERS. ANOTHER EXERCISE CONSISTS OF PAIRS OF STATEMENTS AND YOU WILL TELL WHICH OF THE TWO YOU BELIEVE TO BE MORE TRUE. THEN, I WILL NEED YOU TO TELL YOUR CAREER CHOICE, YOUR PARENTS' OCCUPATIONS AND THEIR TRAINING. REMEMBER THAT NAMES WILL NOT BE USED TO REPORT ANY OF THE INFORMATION THAT YOU GIVE.

NOW I WILL DISTRIBUTE TO YOU A PACKET OF THE MATERIALS. WAIT FOR DIRECTIONS, PLEASE, BEFORE YOU MARK ANYTHING.

DIRECTIONS: PLEASE WRITE YOUR NAME AND HOMEROOM NUMBER IN THE SPACES PROVIDED ON THE PERSONAL DATA FORM. GIVE YOUR AGE AS OF FEBRUARY 1, AND INDICATE YOUR SEX. PLEASE ANSWER THE QUESTIONS ON THIS FORM AS HONESTLY AS YOU CAN.

I AM INTERESTED IN KNOWING WHAT YOU HAVE SELECTED AS A CAREER. (PROCEED TO READ EACH QUESTION FROM THE QUESTIONNAIRE GIVING TIME FOR THE STUDENTS TO RESPOND.)

AGAIN, PLEASE PRINT YOUR NAME AT THE TOP RIGHT CORNER OF THE ROTTER I-E SCALE. UNDER YOUR NAME WRITE YOUR OVERALL GRADE POINT AVERAGE. NOW, READ THE DIRECTIONS AS I READ THEM ALOUD TO YOU.

REMEMBER THAT THERE ARE NO RIGHT OR WRONG ANSWERS. I WILL READ EACH PAIR OF STATEMENTS TO YOU AND ALLOW TIME FOR YOU TO RESPOND. CIRCLE THE "A" OR "B" TO INDICATE THE STATEMENT IN THE PAIR THAT YOU BELIEVE TO BE MORE TRUE.

NOW YOU SEE THAT YOU HAVE AN ANSWER SHEET IN YOUR PACKET. REMOVE IT FROM UNDER THE PAPER CLIP THAT IS HOLDING YOUR PACKET TOGETHER. IN THE PLACE FOR NAME PRINT YOUR NAME. SINCE YOUR PAPER WILL BE HAND SCORED, YOU DO NOT NEED TO USE THE GRID SECTION. TURN THE ANSWER SHEET OVER. WE WILL ONLY NEED TO USE THE SECTION MARKET "ATTITUDE SCALE". FIND THE BOOKLET CRITES' ATTITUDE SCALE. NOW OPEN THE BOOKLET TO PAGE 2, ABOUT THIS INVENTORY. NOTICE THAT THIS IS NOT A TEST JUST AS NO OTHER ITEM THAT YOU HAVE USED TODAY IS A TEST. LET US READ TOGETHER. (READ THROUGH THE DIRECTIONS.)

ON THE ANSWER SHEET YOU WILL NEED TO DARKEN THE CIRCLE "T" FOR AN ITEM THAT YOU BELIEVE IS TRUE OR THE CIRCLE "F" IF YOU BELIEVE THE ITEM TO BE FALSE. I WILL READ EACH STATEMENT, OR ITEM, TO YOU AND WAIT FOR A FEW SECONDS TO ALLOW YOU TO MARK YOUR ANSWER. (READ EACH STATEMENT) FOR THE DURATION OF THE ATTITUDE SCALE).

NOW THAT YOU HAVE COMPLETED ALL OF THE EXERCISES, PLEASE PUT ALL THREE TOGETHER USING THE PAPER CLIP. CHECK TO SEE THAT YOUR NAME IS ON EVERYTHING EXCEPT THE PRINTED ATTITUDE SCALE BOOKLET. SIT QUIETLY UNTIL THE ITEMS CAN BE COLLECTED. ONCE AGAIN, THANK YOU FOR PARTICIPATING. I HOPE THAT TODAY HAS BEEN ENJOYABLE FOR YOU.

APPENDIX C
PERSONAL DATA FORM

PERSONAL DATA FORM

NAME _____ HOMEROOM _____ AGE _____ SEX _____

Please answer the following questions as honestly as you can. I am interested in knowing what you have decided on as a career choice.

1. If you could be anything you really wanted to be, what career would you choose?

2. Considering your interests and your own abilities, and recognizing your chances for going on for training or college, what career do you actually plan to pursue?

3. Identify your male parent or guardian (Circle the letter of your response)

- a. father
- b. stepfather
- c. foster father
- d. other (uncle, grandfather, etc.)
- e. Have no male parent or guardian

4. Name the occupation of your male parent or guardian. _____

5. Choose one of the following to tell the highest level of education reached by your male parent or guardian.
 - a. less than high school
 - b. some high school
 - c. high school graduate
 - d. some college or other training after high school graduation
 - e. college graduation

6. Identify your female parent or guardian.
 - a. mother
 - b. stepmother
 - c. foster mother
 - d. other (aunt, grandmother, etc.)
 - e. have no female parent or guardian

7. Name the occupation of your female parent or guardian. _____

8. Choose one of the following to tell the highest level of education reached by your female parent.
 - a. less than high school
 - b. some high school
 - c. high school graduate
 - d. some college or other training after high school graduation
 - e. college graduate

**The vita has been removed from
the scanned document**