



3 1293 01566 0768




This is to certify that the
dissertation entitled
Vocational Identity, Racial Identity, and
Personality Type: A Study of African American
High School Juniors and Seniors in an Urban Community
presented by

Patricia Lynn Peeke

has been accepted towards fulfillment
of the requirements for

Ph.D. degree in Counseling Psychology


Major professor

Date 7/19/96

**PLACE IN RETURN BOX to remove this checkout from your record.
TO AVOID FINES return on or before date due.**

DATE DUE	DATE DUE	DATE DUE
DEC 02 2004	DEC 07 1800 2004	
DEC 09 2004		

VOCATIONAL IDENTITY, RACIAL IDENTITY, AND
PERSONALITY TYPOLOGY: A STUDY OF AFRICAN AMERICAN
HIGH SCHOOL JUNIORS AND SENIORS
IN AN URBAN COMMUNITY

By

Patricia Lynn Peeke

A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Counseling, Educational Psychology and Special Education
College of Education

1996

ABSTRACT

VOCATIONAL IDENTITY, RACIAL IDENTITY, AND PERSONALITY TYPOLOGY: A STUDY OF AFRICAN AMERICAN HIGH SCHOOL JUNIORS AND SENIORS IN AN URBAN COMMUNITY

By

Patricia Lynn Peeke

The relationship between racial identity attitudes, personality typology, and vocational identity was examined in an urban, predominantly African American high school setting. Two hundred eighty-nine high school juniors and seniors completed a combination of the following instruments: the *My Vocational Situation* (MVS; Holland, Daiger, & Power, 1980), the *Racial Identity Attitudes Scale - Form B* (RAIS-B; Helms, 1990; Parham & Helms, 1981), and the *Myers-Briggs Type Indicator - Form G* (MBTI; Myers & McCaulley, 1985). Regression analysis of the participants' sex, racial identity attitude stage, and personality characteristics revealed that; (a) vocational identity scores did not significantly differ between males and females, (b) racial identity attitudes did not explain a significant portion of the variance obtained in vocational identity scores, and (c) only the dimension of introverted versus extraverted personality characteristics were found to account for a significant amount of the variance in vocational identity scores. An analysis of variance determined that vocational identity scores did not significantly differ across personality typologies for these high school students. These findings suggest that a strong association to either an introverted or extraverted pattern of interacting may contribute to higher scores on the My

Vocational Situation instrument. In addition, the possibility exists that factors other than racial identity and personality typology may be more significant contributors to the variance in vocational identity. The implications of these findings for counselors addressing African American vocational identity development and vocational counseling in the context of a predominantly African American urban high school setting are discussed. Considerations are given to the generalizability of the study, and recommendations for further research are made.

DEDICATION

To RJS,

whose guidance helped to initiate the exploration,

whose enthusiasm gave it life,

and whose friendship sustained the effort,

and

To LGP,

who continually reminds me what is important in life.

TABLE OF CONTENTS

LIST OF TABLES	vii
LIST OF FIGURES	viii
ACKNOWLEDGEMENTS	ix
CHAPTER 1 INTRODUCTION	1
Vocational Development of African Americans	1
Evidence of Vocational Identity	6
Limitations in African American Vocational Identity Development Literature	7
Operational Definitions	11
Statement of Purpose	12
CHAPTER 2 REVIEW OF THEORY AND LITERATURE	14
Vocational Identity	14
Racial Identity and Vocational Identity	20
Personality Type and Vocational Identity	28
Racial Identity and Personality Type Linked to Vocational Identity	33
Research Null Hypotheses	35
CHAPTER 3 RESEARCH METHODOLOGY	36
Research Setting	36
Participants	37
Procedures	37
Measures	38

CHAPTER 4 RESULTS	44
Demographics	44
Regression Analyses	53
Correlations	59
Analysis of Variance	70
Procedural Process	74
 CHAPTER 5 DISCUSSION	 75
Vocational Identity	76
Racial Identity	81
Personality Typology	86
Practical Implications	88
Study Limitations and Recommendations for future research	90
 REFERENCES	 94
 APPENDICES	 101
Appendix A - Student Consent Form	101
Appendix B - Demographic Sheet	102
Appendix C - My Vocational Situation (MVS)	103
Appendix D - Racial Identity Attitude Scale - B (RIAS-B)	104
Appendix E - Myers-Briggs Type Indicator (MBTI)	105

LIST OF TABLES

TABLE 1: SIGNIFICANCE OF MULTIPLE REGRESSION EQUATION. . .	55
TABLE 2: SIGNIFICANCE OF PREDICTORS IN MULTIPLE REGRESSION EQUATION.	57
TABLE 3: CORRELATIONAL MATRICES FOR ALL DATA	60
TABLE 4: CORRELATIONAL MATRICES FOR ALL COMPLETED DATA SETS (N=79)	61
TABLE 5: MEANS, STANDARD DEVIATIONS, AND CORRELATION MATRICES FOR MVS	62
TABLE 6: SCALE RELIABILITIES FOR MVS	63
TABLE 7: CORRELATIONAL MATRICES FOR RIAS-B	64
TABLE 8: SCALE RELIABILITIES FOR RIAS-B	66
TABLE 9: MYERS-BRIGGS TYPE CORRELATIONAL MATRICES FOR MATCHED DATA SETS	68
TABLE 10: MYERS-BRIGGS TYPE CORRELATIONAL MATRICES FOR COMPLETE DATA SETS (N=79)	69
TABLE 11: ANOVA: VOCATIONAL IDENTITY SCORES BY PERSONALITY TYPE	70
TABLE 12: MEAN VOCATIONAL IDENTITY SCORES BY MBTI TYPE . .	71
TABLE 13: 2-WAY ANOVA: VOCATIONAL IDENTITY BY PERSONALITY TYPE AND SEX	72

LIST OF FIGURES

FIGURE 1: 16 MYERS-BRIGGS PERSONALITY TYPOLOGIES	30
FIGURE 2: DISTRIBUTION OF VOCATIONAL IDENTITY SCORES . . .	45
FIGURE 3: REPRESENTATION OF RACIAL IDENTITY ATTITUDE STAGES.	47
FIGURE 4: MYERS-BRIGGS TYPE INDICATOR PROFILE RESULTS . . .	49
FIGURE 5: REPRESENTATION OF BI-POLAR MBTI PREFERENCES . . .	50
FIGURE 6: MALE-FEMALE REPRESENTATION ACROSS INSTRUMENTS	52
FIGURE 7: RELATIONSHIP BETWEEN INTROVERSION/EXTRAVERSION PREFERENCES AND VOCATIONAL IDENTITY	58

ACKNOWLEDGEMENTS

I want to extend my appreciation for the help, support, encouragement, and challenge that were consistently provided by my advisor, Dr. Robbie J. Steward, and my committee members Drs. Lee June, Gloria Smith, Joyce Putnam, and Lauren Young. Their guidance and perspective contributed not only to the development of a more sound piece of research, but challenged me to look beyond the boundaries of the study to explore the greater sociological implications the type of research I undertook.

I want to extend my gratitude to Community High School's students and personnel. Their willingness to support on-going research efforts such as this clearly demonstrates the value they place on attempting to better understanding the needs of their students. I want to specifically thank the classroom teachers and students who gave of their time, and energies in participating in the study.

I am also indebted to the internship committee at Park Center, Inc., particularly Dr. Stephen Ross, who actively supported my work and encouraged my growth as both a researcher and practitioner. Thanks Steve, for the laughter and the learning.

Lastly, I want to thank my husband whose love, support, guidance, and tremendous sense of humor helped me recognize my limitations, explore new perspectives, and challenged me to grow and develop, personally and professionally, in ways I never knew I was capable of.

CHAPTER 1

INTRODUCTION

The process of career development during adolescence has received limited attention and is poorly understood despite the long-held belief that a primary task of adolescence is to establish a sense of identity with respect to the world of occupations (Erikson, 1968). A principal task involved in establishing a sense of identity is clarifying one's goals and interests. The clarity with which adolescents are able to identify and express their vocational goals and interests determines the ease of their vocational decision-making, and their tolerance for ambiguity, and ultimately, translates into the development of a strong sense of vocational identity (Holland, Gottfredson & Power, 1980). The strength of vocational identity parallels the ease with which vocational decisions are made in the face of inevitable ambiguity and environmental pressures. For adolescents, the pressures encountered during the process of formulating career options are overwhelming. For African American adolescents living in an urban environment these pressures may be even more pronounced.

Vocational Development of African Americans

African American youth have historically been confronted with countless, obvious and subtle sociopolitical forces contributing to a sense of frustration, discrimination, alienation, and rejection. The influences exerted by sociopolitical, racial, and cultural sources can impair the development of an adequate definition of

vocational interests and goals thereby impeding the process of vocational identity development. The dynamics of this oppressive situation erode the ability of African American youth to establish a solidified sense of identity with respect to the world of work. For many urban African American adolescents, life is complicated by problems of poverty, illiteracy, and racism. Unemployment for African Americans is nearly twice as high as for the White population, in general, and can range from 37% to nearly 50% among African American youth (Parham & McDavis, 1987). Urban youth who face the greatest risk of unemployment also run the greatest risk of inadvertently internalizing barriers and discriminating practices, and prematurely foreclosing on their exploration of career opportunities. The sense of hopelessness shared by urban African American youth may contribute to (or hinder) the development of adequate vocational identity. Consideration of the effect of hopelessness is crucial to understanding patterns of vocational exploration, under-employment, and the perpetuation of unnecessarily skewed patterns of racial distribution among vocations for African American adolescents.

Vocational literature continues to report the perpetual under-representation of African Americans in a variety of high-status career fields (Hall & Post-Kammer, 1987; Parham & Austin, 1994) and over-representation of African Americans in low paying/low-status jobs. Chronic under-representation and over-representation within occupations feeds into deleterious stereotyping and contributes to misconceptions of African Americans as vocationally handicapped or as having negative attitudes (Smith, 1980). African American adolescents are not only statistically under-represented but precluded or discouraged from considering a range of career options. Leong (1991) suggested that perceptions of cultural biases, discriminating practices, limited opportunities, or racial identity incongruence influence occupational self-

segregation. These factors directly challenge the evolving image African American adolescents have of themselves and of their potential contributions in the world of work. Such factors directly impact the process of vocational identity development and the ability of adolescents to maintain a satisfactory sense of vocational identity in the face of adverse sociopolitical conditions.

African American adolescents identify with and often choose career paths based on their perception of that career's relatedness not only to their personality and interests (Holland, 1985) but also to their own racial identity (Griffith, 1980; Helms & Piper, 1994; Parham & Austin, 1994). Racial identity can be defined as the development of a positive self and group identification. This sense of relatedness, by interests or by attitudes about racial group membership, has an influence on the vocational identity development of African American adolescents. Whether encouraged by role models (or discouraged by lack thereof), by historical precedence, or by training, individuals tend to select occupations based on their ability to see themselves reflected in a particular work environment or career field (Helms & Piper, 1994; Holland, 1985) – this, in essence, is the basis for vocational identity.

Despite recognition that racial identity plays a defining role in African American youths' ability to perceive themselves in various occupational roles, researchers have failed to consider thoroughly how racial identity influence career decisions or affect the development of vocational identity (Parham & Austin, 1994). The significance of racial identity and its influence on career decision-making continues to be debated. According to some theorists (e.g. Griffith, 1980), racial identity plays a significant role in vocational development while, for others (e.g. Parham & Austin, 1994) racial identity is deemed to be less directly related. Foremost in the literature on the career development of African Americans, and the inclusion of racial identity

attitudes as an extension of that research, is a consensus for further empirical research (Tinsley, 1994).

Efforts to define the influence of racial group membership on vocational identity, or in related areas of academic success and career selection, have resulted in several divergent theories which are reflected in the following questions: (1) Are individuals who seek academic and social success "acting White"? (Fordham & Ogbu, 1986); (2) Are they embracing the values of the dominant culture?; or (3) Have they deemed themselves "raceless" (Fordham, 1988) in order to establish their own success in contrast to the values of the African American culture or community? This disparity in views and theories suggests that little is understood about how attitudes regarding membership in the African American race influences personal or vocational identity development for students. African American youth have been faced with resolving, for themselves, the ambivalence that comes with academic success and the selection of certain professional careers. How these decisions are influenced not only by racial group membership but also by racial identity attitudes has yet to be firmly established.

In addition, African American youth are still without adequate exposure to role models, support systems, and resources to facilitate and promote adequate vocational exploration and the development of a strong vocational identity. Without a firm understanding of the process of vocational identity development for African American youth, it has become the norm to rely on established career theories as guiding principles. Historically, career theories have been designed to explain patterns of vocational development for the White majority in the absence of practical or theoretical application to members of other racial groups. Broad applications have been assumed without a basis for understanding the dynamics of racial group

membership that may be influencing the path of vocational development for African American youth. Expanding current career theories to sufficiently address the diverse needs of African American youth would appear to have little heuristic value without a greater focus on the influence of racial group membership and racial identity attitudes on vocational development. Because vocational identity development implies the systematic appraisal of one's identity in career terms, it becomes necessary to make specific application to African Americans (Griffith, 1980). Devising entirely new theories of career development for African American individuals, or for adolescents, may not be profitable or even necessary. Inherent in existing theories is a foundation from which to expand. It may be possible to acknowledge and include the existence and importance of a racial identity continuum in current career development theories (Parham & Austin, 1994).

One approach developed to remediate the situation for African Americans has involved increased interest in the area of racial identity development. In response to the need for more within group explorations, several models have been developed that outline specific differences among individuals on a continuum of racial identity development (Cross, 1971, 1978; Helms, 1985). In most cases, racial identity models assume a linear progression of attitudes and feelings, which move from perceptions of self-degradation to self-pride and self-acceptance. For some individuals, racial status may be such a critical and pervasive part of their identity that it directs and determines their career decision-making and vocational development. For others, racial identity may play a less significant role (Griffith, 1980). Assessing the within group variability on such a salient factor as racial identity development becomes a crucial part in understanding the vocational identity development process of African Americans. According to Parham and Austin (1994), "racial identity models provide an

important interpretive lens through which to view the personality dynamics and vocational behaviors of African Americans" (p. 144).

Broad implications for the field of vocational counseling arise from the racial identity models, for example, the developmental progression suggests that individuals of the same age may be functioning at different stages of racial identity. Individuals' beliefs and attitudes may be different, and these differences affect their vocational behavior. Incorporating the knowledge gained through the examination of racial identity attitudes and developmental stages into the construct of vocational identity logically lends itself to an increasingly explanatory picture of how vocational identity is experienced by African Americans. How are racial identity attitudes impacting career development and the adherence of African American individuals to traditional career theories? Specifically, how are African Americans of various racial identity attitudes and developmental stages experiencing and utilizing vocational identity in career decision-making particularly when faced with adverse situations. The inclusion of racial identity attitudes and more broadly, racial identity development in the application of traditional career theories now points to the need for more comprehensive explanations of within group differences.

Evidence of Vocational Identity Development for African Americans

Recurrent efforts to draw attention to the lack of theoretical and empirical research adequately addressing the vocational identity development of African Americans have had limited effects on the amount and quality of the results produced. At present, the research on the vocational identity development of African American individuals - both adult and adolescent - constitutes a disparate and tangled body of knowledge. Theory relating racial identity to vocational behaviors in general is close to non-existent (Tinsley, 1994), and some researchers doubt that a clear link exists that

would contribute to the prediction of career variables, vocational identity in particular, based solely on an assessment of racial identity (Helms & Piper, 1994). Despite the lack of established theory guiding current research, attempts continue to be made to establish a reliable link between the two constructs (Grace, 1984), and cursory evidence has been found that links specific stages of racial identity development to levels of vocational identity (Manese, 1984; Thompson, 1985). The modest results may be an indicator of the presence of other variables that have not been taken into account. Differences in levels (high vs. low) of vocational identity have not been firmly established based racial group membership or sex alone (Leong, 1991). However, the consistent reporting of barriers to the establishment of a strong vocational identity and subsequent career selection have been found among African Americans of all ages (Miller & Wells, 1988). Taken together, these results might suggest that Helms and Piper (1994) were correct in their assessment that perhaps no reliable relationship exists between racial identity attitudes and vocational identity, however, these studies are characteristically limited in their approach to assessing the vocational identity of African Americans by using small sample sizes (Miller & Wells, 1988), lacking in sufficient attention to within group differences among the measured constructs, and using homogeneous samples which limit generalizability.

Limitations in Vocational Identity Research with African Americans

During the past two decades, contributors to the vocational literature have attempted to provide a more comprehensive understanding of African American individuals' vocational identity development through empirical study. However, several concerns arise from these efforts: (1) attempts have been made to understand African American individuals by examining differences across racial/ethnic groups on developed criteria that may or may not be reflective of African Americans (e.g. Levy,

Murphy & Carlson, 1972; Kaufman, McLean & Underwood, 1992; Kaufman, Kaufman & McLean, 1993); (2) attempts have been made to increase the number of African American participants in studies of predominantly White populations without the knowledge or conceptual basis for understanding or explaining the implications of increased representation (e.g. Munson, 1992); (3) attempts have been made to understand African American individuals by imposing traditional career development theories developed by and for European-American males without considering the implications of this assumptive approach (e.g. June & Pringle, 1977; Parham & Austin, 1994); (4) participants, even African American participants, have been primarily limited to the college student population (e.g. Leong, 1991; Miller & Wells, 1988; Munson, 1992), and (5) research has typically been conducted with African American participants in predominantly White settings.

Researchers have increased the diversity within their samples by including handfuls of African American participants (e.g. Munson, 1988). Simply including racially diverse subjects does little to add to the literature in a meaningful or relevant manner. The number of African American participants included has been either under-representative, statistically insignificant, or based solely on physical characteristics or prescribed membership in a particular racial group (without attention to racial identity attitudes or awareness of the implications of including heterogeneous racial samples). Racial identity theorists and researchers stress that the significance of race does not derive from differences of physical appearance but from a complex configuration of cognitive and affective attributes (Helms, 1995). Being African American is not "simply a minority status or state of being non-White but rather a pre-existing, independent, and evolving specific identity" that is greatly influenced by the environment and responsive to external pressures (Griffith, 1980, p. 301). The failure of

researchers to recognize that nominal racial categories are not theoretical frameworks may explain why existing nominal studies of race and vocational identity yield such inconsistent results and have contributed to generalized negative stereotypes of African American individuals' vocational development. "Vocational development literature must question the use of nominal racial designation as a predictor variable, and instead consider the notion that within group variability on factors such as racial identity [personality traits, vocational identity] may have more utility in examining the relation between race and other career development constructs" (Parham & Austin, 1994, p. 144).

Efforts to examine the dynamics of race and racial identity attitudes in the context of vocational development have typically been done in limited and homogeneous populations. Adolescents are among the countless groups overlooked when examining and evaluating racial identity development theories and vocational identity development constructs. However, the primary task of adolescents is to engage in a process of personal exploration that culminates in personal identity achievement (Marcia, 1967). Successful identity achievement may be comprised of an exploration of racial identity attitudes and development, personality development, and vocational identity exploration and development. These identity development tasks are critical for high school students, especially African American high school students, who are not only preparing to explore career options, make vocational decisions, and enter the workforce for the first time, but do so under historically oppressive and restrictive conditions.

Research addressing African American youth in the context of predominantly African American settings have typically been done in the context of historically Black Universities (e.g. Grace, 1984). Other empirical research evaluating the vocational

identity of African American individuals has occurred primarily in the context of larger, more heterogeneous samples or within the confines of a university setting. Previous research has indicated that many African American youth never make it to college and those who do may have have substantially different vocational identities. What is lacking and necessary to understand African American vocational identity development are research efforts that explore African American adolescents' vocational development generally, and vocational identity in particular, within naturally occurring racially homogeneous settings. African American youth who live in racially homogeneous urban environments are one such population worthy of researchers' attention.

Secondary to the exploration of racial identity attitudes of African American students is the examination of the influence of personality types. Both components become critical in the effort to understand the process of vocational identity development within this single racial group. Career theorists have consistently found significant evidence relating personality dynamics and vocational development (Holland, 1985; Super, 1957) and such a relationship should not be different for African American students.

Tinsley (1994) outlines several potential barriers that stand in the way of developing further meaningful research addressing the vocational identity of African American students: (1) the obvious lack of theories linking racial identity to vocational identity; and (2) the lack of reliable and valid instrumentation available to measure these constructs. The former barrier is clearly evident and presents a justifiable concern from a theoretical standpoint. The latter issue is a persistent concern in the field of psychology. The areas of racial identity development, personality assessment, and vocational identity are no exception and have their share of instrument criticism.

Despite the absence of a well developed theory, potential links have been identified between vocational identity and personality traits (Henkels, Spokane & Hoffman, 1981; Holland, Gottfredson & Power, 1980; Munson, 1992; Savickas, 1985), between vocational identity and racial identity (Grace, 1984; Griffith, 1980; Helms & Piper, 1994; Leong, 1991; Manese, 1984; Miller & Wells, 1988; Tinsley, 1994; Thompson, 1985), and between racial identity and personality traits (Cross, 1991; Goldschmid, 1967; Kaufman, Kaufman & McLean, 1993; Levy, Murphy & Carlson, 1992; Parham & Helms, 1985). This study will explore the predictive capacity of racial identity and personality traits with regard to the vocational identity of African American adolescents in an urban, racially homogeneous environment.

Operational Definitions

In this study, the constructs of vocational identity, racial identity, and personality typology will be utilized, assessed, and further developed. In the context of this research project, vocational identity will be defined as "the possession of a clear and stable picture of one's goals, interests, and talents" (Holland, Gottfredson, & Power, 1980, p. 1191). The construct of vocational identity will be assessed by the Vocational Identity subscale of the My Vocational Situation questionnaire (MVS: Holland, Daiger & Powers, 1980).

Racial identity and the construct of racial identity attitudes and developmental stages are defined as the process by which an individual develops (or does not develop) a healthy racial collective identity (Cross, 1971). Racial identity development occurs when movement is made from a position of racial degradation to a position of positive racial identity and group membership acceptance. Racial identity will be assessed through the use of the Racial Identity Attitudes Scale - Form B (RIAS-B: Helms, 1990; Parham & Helms, 1981).

Personality typology will be defined in accordance with Jung's theory of personality type. Specific personality characteristics and types will be measured by the Myers-Briggs Type Indicator (MBTI: Myers, 1962). The MBTI provides scores on four bipolar personality preference scales (i.e. Introversive vs. Extraversive). The combination of these four preferences yield one of 16 possible personality types (i.e. INTJ, ESFP).

Statement of Purpose

The intent of this study is to examine the relationships among urban African American high school students' expressed level of vocational identity, their racial identity attitudes, and their predominant personality characteristics.

To provide effective personal and career counseling to these students, it is necessary to understand the influence of individual students' unique personality dynamics and their primary racial identity attitudes on their vocational identity development. The clarification of the relationship between vocational identity and other aspects of personal identity (i.e. racial identity, personality type) would enhance not only the development of more generalizable personality theories and career interventions but also facilitate the understanding of racial identity in the context of personal and vocational development. More effective vocational counseling interventions would result. This study will directly examine the premise that, "interventions designed to facilitate acceptance of racial identity as part of total identity are necessary for adequate career counseling of African American youth" (Griffith, 1980, p. 82).

The null hypotheses developed in relation to this study include:

(1) racial identity attitudes as measured by the Black Racial Identity Attitudes Scale (RIAS-B: Helms, 1990) will not significantly contribute to variance in

vocational identity scores as measured by the My Vocational Situation questionnaire (MVS: Holland, Daiger & Powers, 1980);

(2) personality type as measured by the Myers-Briggs Type Indicator (MBTI: Myers, 1962) will not significantly contribute to variance in vocational identity scores obtained on the MVS;

3) sex will not significantly contribute to variance in vocational identity scores obtained on the MVS;

4) racial identity attitudes as reported on the B-RIAS, personality preferences as determined by the MBTI and sex together, will not significantly contribute to variance in vocational identity scores obtained on the MVS.

CHAPTER 2

LITERATURE REVIEW

Empirical studies linking the constructs of racial identity attitudes and personality types to the vocational identity development of African American individuals, adolescents in particular, are virtually non-existent (Tinsley, 1991). Therefore, this chapter will provide an integrative summary of the existing research in each of these areas in an effort to build a foundation from which to relate, conceptually and practically, the constructs of vocational identity, racial identity, and personality typology. Each construct will be independently presented and then followed by an integrated overview and discussion of their relationship in the current study.

Vocational Identity

"Vocational identity is the degree to which a person possesses a clear and stable picture of their own occupational goals, interests, and talents" (Holland, Gottfredson & Power, 1980, p. 1191). A clear and strong vocational identity is manifested by the narrowing of aspirations to a small number of occupational goals and interests. The possession of clear goals and interests leads to relatively untroubled career decision-making and confidence in one's ability to make decisions in the face of some inevitable environmental ambiguities. Conversely, a low or weak vocational identity is related to the existence of multiple, disparate occupational goals, a lack of confidence in decision-making, and difficulty executing decisions in the face of environmental pressure. For urban, African American youth who face significant environmental challenges and ambiguities, a strong vocational identity is essential.

The construct of vocational identity derives its importance from its initial design and purpose as a diagnostic construct (Holland, Daiger, & Power, 1980). Awareness of vocational identity (high or low) was intended to suggest alternative methods of career counseling and facilitate the selection of treatment goals for clients with diverse vocational needs.

Vocational identity is purported to be measured by the My Vocational Situation inventory (MVS; Holland, Daiger & Power, 1980). The original items for the scale were collected from a large national sample (n=2000) of high school and college students who were asked to explain their experiences of vocational indecision. The search for correlates of career indecision, summarized in Holland and Holland (1977), yielded two promising scales for assessing vocational identity and vocational decision-making difficulties: the Identity Scale (Holland, Gottfredson, & Natzinger, 1975) and the Vocational Decision-Making Difficulty Scale (VDMD; Holland & Holland, 1977). The elaboration and revision of these preliminary scales led to the development of the Vocational Identity subscale (VI), the Occupational information subscale (OI), and the Barriers subscale (B) which, together, serve to operationalize the diagnostic scheme of the present-day My Vocational Situation (MVS) instrument (Holland, Daiger, & Power, 1980). The underlying diagnostic assumptions of this scheme suggest that the majority of difficulties in career decision-making fall into one or more of the following categories: (a) problems of vocational identity, (b) lack of information or training, or (c) environmental or personal barriers.

Studies have consistently suggested that the MVS instrument is an effective measure of vocational identity and the need for additional career information or assistance. The MVS provides a brief measure suitable to be used with individuals

possessing a sixth grade reading level or higher and is appropriate for use in the time-limited situation dictated by the formal guidelines imposed by the public school day.

Research studies attempting to examine the construct of vocational identity have typically focused on college or university students. As a consequence, the results of these studies have rather limited generalizability; specifically, the results may only be applicable to a population that has already significantly narrowed their career aspirations, goals, and interests. Although the vocational identity of college or university students is bound to fluctuate given extraneous factors, it is anticipated to be relatively stronger and more well-defined than the vocational identity of students in high school. Indeed, a strong vocational identity may have contributed, in some manner, to the pursuit of higher education.

Relatively few studies have utilized the MVS instrument, alone or in combination with other measures, to examine the vocational identity of high school students. Although the construct of vocational identity was derived from high school students' responses and the current measure of vocational identity (i.e. the MVS) was normed on high school students, questions continue to be raised about the validity of the vocational identity construct and the reliability of vocational identity measures when applied to adolescents. It has been suggested that the adolescent population may be at a unique developmental point that causes their vocational identity to be unstable (Leung, Conoley, Scheel & Sonnenberg, 1992). However, the Vocational Identity (VI) subscale of the MVS has been deemed to have sufficient reliability and validity with high school students in distinguishing decided from undecided students (Holland & Holland, 1977). Fluidity of vocational identity in adolescents is expected as individuals begin to engage in the process of career exploration. However, fluidity and even instability does not imply that vocational identity does not exist, that it is

invalid in high school students, or that it is undetectable using the MVS instrument. It is specifically the issue of uncertainty in the construct of vocational identity of high school students and the various factors that may contribute to the subsequent development of vocational identity that need to be better understood.

Lucas, Gysber, Buescher, and Heppner (1988) report that regardless of age (high school, college, or older), individuals who were undecided about their career plans, as compared to those who had made career decisions, obtained lower vocational identity scores on the MVS instrument. These findings support the initial research conducted by Holland, Gottfredson and Power (1980) that identified the MVS scales as more directly related to the types of interests people expressed and the clarity of their interests than to their specific age. Therefore, it seems a logical conclusion that not only is an effort to study high school students warranted but the utilization of the MVS in the process is appropriate.

The examination of the vocational identity construct with African American individuals has paralleled the deficiencies found throughout the vocational literature in explaining vocational development with diverse racial minority groups. Munson (1992) measured the relation between vocational identity and self-esteem for 251 high school students. A strong relationship was found to exist between vocational identity level and self-esteem. High scores on the MVS correlated to higher levels of reported self-esteem. The results imply that vocational identity is a meaningful construct with high school students and suggests that it may be equally related to other personality variables as well. Unfortunately, only 6% of the sample was identified as African American. The limited number of African American subjects presented in the study negate the generalizability of these findings to African American high school students. The authors specifically recommend further examination of the relationship between

these two constructs (vocational identity and self-esteem) with a more racially diverse sample. A more appropriate approach may be to explore the relationship between these constructs within racial groups.

Miller and Wells (1988) examined the barriers that were assumed to hinder the career development of African American high school students using the Barriers (B) subscale of the MVS. Little difference was found between the barriers identified by these 64 African American high school students and those identified by older individuals. The hypotheses developed to explain the lack of differences between the groups suggest either that the students possessed a limited awareness of potential barriers or that they had perhaps already developed a realistic perception of their future that included circumscription of their career options based on their experiences and perceived choices available to African American students. The results nonetheless continue to support the notion that vocational identity is not age-dependent. This study, however, only represents a cursory attempt at developing an understanding of the potential barriers that influence the career development process of African American high school students. The results add little to the current understanding of how the barriers identified by African American high school students are related to their vocational identity or what the contributing factors were that precipitated the perception of barriers.

In an effort to identify and clarify cultural/racial differences in vocational identity, a sample of 83 Caucasian and 63 Asian university students were compared to one another (Leong, 1991). No statistical differences in vocational identity were found between the cultural groups (Asians $M=15.46$, $SD=5.74$; Whites $M=14.25$, $SD=5.38$). To conclude that vocational identity is in fact unrelated to, or unaffected by, racial status may be inappropriate. Other racial and cultural constructs (i.e. acculturation, racial

identity) would need to be explored in an effort to either tease out the relationship between attitudes and experiences of being the member of a minority group and vocational identity, or to dismiss the connection altogether. Apparently, no opportunity was provided during which the participants were able to express existing attitudes about their racial group membership or minority status and its effect on their vocational identity level. Therefore, an argument can be made for utilizing a racial identity attitude scale in conjunction with measures of vocational identity when assessing members of a minority racial group.

Secondary to the broader concept of vocational identity of African American high school students is the possibility of differences in vocational identity based on sex. Previous studies that have considered sex differences have consistently found no difference in level of vocational identity due to sex (Grotevant & Thorbecke, 1982; Munson, 1992; Savickas, 1985). Two of these studies measured high school students (Grotevant & Thorbecke, 1982; Savickas, 1985), and the third measured college students (Munson, 1992). While Munson (1992) acknowledged the presence of minority individuals in the study's sample, only six percent (6%) of subjects were African American. As a consequence, little is known about sex differences in vocational identity for African Americans. Grotevant and Thorbecke (1982) suggested that, although male and female adolescents share the same levels of vocational identity, they appear to use different styles of achieving that level of vocational identity development. Further exploration of differences in vocational identity based on sex may provide important results in the context of an adolescent African American population and an urban setting in particular. The relevance of comparing the vocational identity of male and female African Americans becomes clearer when one considers that African American males have the highest rate of unemployment, the greatest representation in

minimum wage jobs, the highest high school dropout rate, and the highest incarceration rate of racial and ethnic groups of similar ages.

In addition, female African American students have typically been found to be more willing to separate themselves from the cultural influences of the African American community and to adopt the value system of the dominant culture. In contrast, males are often more resistant to embrace the values and standards of vocational achievement and success outlined by the dominant culture (Fordham, 1988). The explanation of the differences between male and female students on vocational identity as well as the other constructs utilized in this study will be vital in developing a clearer sense of the factors contributing to higher (or lower) levels of vocational identity and in tailoring interventions to individual needs.

The literature relating the construct of vocational identity to the African American high school population is sparse, and the conclusions are superficial at best. Therefore, there is currently no foundation upon which to draw conclusions other than African American high school students will demonstrate no significant differences in their level of measured vocational identity when examined with racial identity attitudes and personality type. In addition, it is anticipated that, in line with previous findings, there will be no difference in the measured levels of vocational identity between male and female students.

Racial Identity and Vocational Identity

"Racial identity theory attempts to address the processes by which individuals, of various races, develop (or do not develop) healthy racial collective identities in environments in which their socially ascribed racial group is influenced by environmental factors and has differential access to sociopolitical power, which in this case, specifically refers to the world of work" (Helms & Piper, 1994 p.126). Early

attempts to understand the identity struggle of African American individuals and the hypothesized racial identity development process resulted primarily from the work of African American educators and researchers (i.e. Cross, 1971; Jackson, 1975). As a result, numerous attempts were made to operationalize the racial identity development process of African Americans. The racial identity model proposed by Cross (1971) is the most highly developed and widely researched, and it is summarized to provide a foundation for understanding the construct of racial identity development stages and attitudes.

The Cross model (1971, 1978) delineates a four stage pseudo-linear model in which Blacks, in the United States move from a predominantly White frame of reference to a predominantly African American or "Black" frame of reference. Individuals progress through a series of psychological stages as they evolve from a perception in which they degrade themselves for being African American to a perception in which they become secure about themselves as African American individuals. This model is not a rigid stage model; an individual does not necessarily hold only the attitudes, affections, and behaviors associated with only one stage but, rather, may feel associated with each of the stages of racial identity development. Nevertheless, one's predominant racial identity is grounded in a particular stage. In addition, it may be possible that individuals move back and forth through these stages as environmental demands and crises challenge their attitudes and beliefs. The four stages outlined, ranging from least secure to most secure with one's racial identity status, are labeled *pre-encounter*, *encounter*, *immersion-emersion*, and *internalization*. The pre-encounter stage is characterized by individuals who consciously or unconsciously devalue their own racial characteristics. Individuals view and think of the world as being non-Black, anti-Black or the opposite of Black. There is a strong

desire to assimilate into the White society. In the encounter stage, a two-step process begins to occur. First, the individual encounters a profound crisis or event that challenges his/her previous mode of thinking and behaving; second, the person begins to reinterpret the world and a shift in world views results. At the end of the encounter stage, the person has not claimed his or her African American identity but has made a decision to do so. In the third stage, immersion-emersion, a person may initially withdraw from the dominant culture and immerse himself or herself in his or her own racial culture. The level of racial awareness is high, but the degree of internalized, positive attitudes about one's own racial features is minimal. Individuals at this stage may immerse themselves in totally African American life-styles and characteristically tend to denigrate White individuals while glorifying African American people. In the emersion phase of this stage, feelings of guilt and anger begin to dissipate while an increasing sense of pride develops. The final stage, internalization, is characterized by inner security as conflicts between the old and new identities are resolved. Global anti-White feelings subside as the person becomes more flexible, more tolerant, and more bi-cultural/multi-cultural.

Models of racial identity development have in common the following assumptions: (a) because of the differential racial group-reward structure, one's racial group membership becomes a critical aspect of one's psychosocial identity; (b) healthy identity development occurs by means of a maturation process in which an individual learns to substitute internal definitions and standards of racial group identity for external socially imposed definitions; and (c) the maturation process potentially involves increasingly sophisticated differentiations of the stages (Helms & Piper, 1994). Although the process of racial identity development is considered to be similar,

the content of the process is hypothesized to differ according to whether one is member of an advantaged or disadvantaged racial group in society.

Cross's stages of racial identity development for African American individuals are most often operationalized via the Racial Identity Attitude Scale, Form - B (RIAS-B: Helms, 1990; Parham & Helms, 1981). The Racial Identity Attitudes Scale - Black Version, is a self-report measure designed to assess attitudes thought to be characteristic of each of the four stages of the model. Since its development more than a decade ago, the RIAS-B has become the most frequently used and most widely researched instrument of its kind.

The application of this four stage model to understanding African American individuals' experience of racial identity development has left some questions unanswered. One assumption made in the literature is that, as individuals move through these stages of development, there are concurrent shifts in their self-concept. These shifts affect their identity development -- both personally and vocationally. Cross's model provided the basis for examination of the relations between stages of racial identity and self-esteem (Parham & Helms, 1985). The Racial Identity Attitudes Scale - Black Version (Parham & Helms, 1981) was used in conjunction with a Self-Regard Scale (Shostrom, 1963) to assess 166 African American college students on a predominantly White campus. The results indicated that pre-encounter and immersion racial identity attitudes are associated with low self-esteem. Encounter attitudes were associated with positive self-esteem, and internalization attitudes were regarded as inconclusively related to positive self-esteem. Although the percentage of variance explained by racial identity attitudes was less than substantial (15%) , the results are important because they underscore the need to recognize that racial identity attitudes and personality features (i.e., self-esteem, self-concept) are not homogeneous for all

African American individuals. The specific relationships identified by scores attained on the RIAS-B provide an example of the need for assessing within group differences. Although the study's generalizability is limited by the inclusion of African American students interacting on a predominantly White campus, one clear conclusion is that those who devalue themselves because of their racial status report lower self-esteem. This result also suggests that racial identity attitudes may impact other aspects of self-concept (i.e., vocational identity) that simply have yet to be investigated.

Cross (1991) maintains that self-concept is composed of both reference group orientation and personal identity. The reference group orientation includes (among other factors) race awareness and racial identity. Personal identity included self-esteem, self-confidence, and personality as well as other factors. Racial identity attitudes and various dimensions of self-concept arguably have a profound effect upon one another. Researchers have found results linking racial identity attitudes with self-concept (e.g. Grace, 1984; Munson, 1985) and have suggested that certain stages of racial identity development are perhaps more adaptive than others (Parham & Helms, 1981).

Grace (1984) used RIAS-B to explore the relation between racial identity attitudes and typical versus atypical (typical = high representation of Black individuals present; atypical = low number of Black individuals present) career aspirations among African American students at an historically Black university. The utilization of African American students on a racially homogeneous campus provided a very specific context from which to evaluate the impact of racial identity attitudes. Self-concept was found to be directly related to attitudes about racial group membership, but racial identity attitudes themselves were not related to the students' career aspirations - typical or atypical. The results of this study add further support to

the developing pattern demonstrating the impact of racial identity attitudes on African American individuals self-concept regardless of the environment in which they are assessed -- predominantly White or predominantly Black.

The lack of significant results linking racial identity to career selection is curious. Conceptually, the connection between racial identity attitudes and career aspirations is conceivable, but there may be a piece missing -- an individual's vocational identity. Exploring how African American individuals view themselves in relationship to vocational opportunities along with the attitudes they possess about their racial group membership may be more critical, at this juncture, to improving our understanding of the career development of African American individuals than examining the actual career selections they make.

Evans and Herr (1994) were unable to find statistically significant relationships between racial identity attitudes and career aspirations, in spite of hypotheses anticipating the opposite and qualitative studies suggesting the contrary (Griffith, 1980). Griffith (1980) states that attitudes about racial group membership do in fact influence the career decisions of African American individuals entering certain professional careers. The more significant racial identity is to an individual, the more strongly it influences his or her perceptions and ultimate selection of a career. The conflicting results and inconsistent findings of a relationship between racial identity attitudes and career aspirations indicates that more research is needed and that "other factors need to be investigated more closely" (Cross, 1991; Evans & Herr, 1994). Recommendations have been made that suggest that not only racial identity attitudes be included in further studies but "other aspects of identity as well ... including personality traits" (Evans & Herr, 1994, p. 183).

If racial identity significantly impacts self-concept and self-esteem (and self-esteem has been strongly correlated with vocational identity), then a link potentially exists between racial identity attitudes and vocational identity. In a direct challenge to this deductive logic, Helms and Parham (1994) report that there appears to be no obvious reason why racial identity should be predictive of most of the individual career variables (including vocational identity) in which racial effects have been sought. However, evidence has been found that supports the link between racial identity attitudes and aspects of vocational identity. Manese (1984; as cited in Helms & Piper, 1994) found that individuals experiencing the pre-encounter and internalization stages of racial identity development were more likely to express vocational identity foreclosure. These two stages were significantly and positively correlated with vocational identity foreclosure such that the stronger and more rigid attitudes associated with these two racial identity development stages were held, the greater the number of career options that were discarded.

Thompson (1985; as cited in Helms & Piper, 1994) also examined the relationship between students' racial identity attitudes and the process of vocational identity foreclosure. In addition, the level of tolerance of undecidedness these students experienced was examined. The pre-encounter stage was again found to be related to a low tolerance of career undecidedness. This result supports Manese's (1984) findings that students at the pre-encounter stage were more likely to foreclose on their vocational identity development (prematurely ending this career exploration) as a means of managing the stress in their lives. Thompson (1985) also noted that individuals in the encounter stage were the most open and least likely to experience foreclosure in their career exploration. Taken together, these two studies suggest that an interaction may be occurring between levels of racial identity and the ability to, or

tolerance for, the process of vocational identity development. These studies highlights the need to understand the individual, cultural, and sociopolitical factors associated with racial identity attitudes when providing career counseling or career interventions. Different interventions may need to be used when assisting students in the encounter stage (compared to assisting individuals in the other stages), with their career exploration because they have been found to be the most likely to foreclose, the least tolerant of undecidedness, and the most influenced by career assistance (Manese, 1984; Thompson, 1985).

Questions are posed by Evans & Herr (1994) about how African American individuals, who each experience their own racial identity so differently, affects career selection. Would an individual in the midst of the immersion-emersion stage limit themselves to career pursuits (regardless of their abilities) which guarantee the sustainment of values or ties to African American culture? Similarly, would African Americans in the pre-encounter stage of racial identity pursue only those occupations which value self-preservation, competition, and a material outlook? If racial identity is a determining force, superseding other salient factors such as interests, skills, and career outlook, than attention must be given, during the career exploration process to the cultural frame of reference, vocational aspirations and sociopolitical realities associated with racial status and attitudes (Parham & Austin, 1994). The use of racial identity models are further supported in their application of the exploration the development of vocational identity.

The application of racial identity models has almost exclusively limited to the college population regardless of whether it was on a predominantly White or Black campus. Therefore, several unanswered questions remain: (1) how do racial identity attitudes contribute to vocational identity; (2) how is racial identity

expressed by African American individuals (males and females) in a predominantly urban African American setting; and (3) how is racial identity related to vocational identity for urban African American high school students?

Personality Type and Vocational Identity

The influence of personality characteristics on career development was recognized many years ago (Super, 1957, Holland, 1959). Understanding this influence and describing relationships between personality characteristics and vocational behavior are now major interests of career theorists and researchers. One of the most enduring personality theories is that of Carl Jung (1971). Jung proposed that people tend to have specific preferences for perceiving (taking in information) the world and judging preferences for processing information. Jung's perception of the extravertive-introvertive types (E-I) concerned the use of internal psychological processes or external awareness and a general orientation to people. The extravertive type is characterized as having an outward orientation with thoughts feelings and behaviors largely determined by and consistent with objective conditions. The introvertive type is more concerned with inner psychological processes and prefers solitary activities. The sensation-intuition (S-I) dichotomy reflects two different modes of perceiving. The sensing type prefers direct perception of the observable through their senses and often results in practical and realistic personality characteristics. The intuitive type prefers to go beyond the information given by the senses and look for meanings and potentialities and is reflected in creative and imaginative characteristics. The dichotomy of thinking-feeling (T-F) reflects two different ways of forming judgements. The thinking types prefer to arrive at judgement by logical or impersonal methods in contrast to the feeling types who engage their sense of affiliation and harmony in

reaching a decision. The judgement-perception (J-P) dichotomy reflects preferences for organization and stability versus flexibility and spontaneity.

The terminology of personality types has become a convenient way of communicating about personality differences (Block & Ozer, 1982) despite the criticism the theory has received about its oversimplification of a complex and continuous dimension (Mendelsohn, Weiss, & Feimer, 1982). The underlying assumption of the construct of personality is that much of the seemingly chance variation in human behavior is not due to chance at all but is in fact the logical result of a few basic observable preferences (Myers & McCaulley, 1985).

Jung's (1971) theory of psychological types provides the foundation from which the Myers-Briggs Type Indicator (Myers, 1962; Myers & McCaulley, 1985) evolved. The Myers-Briggs Type Indicator was designed explicitly to make it possible to test Jung's theory of personality types and put it to practical use. The four personality type dichotomies, or continuums, were operationalized into a 95 item, forced choice, self-report instrument intended for use with a non-clinical population. The MBTI purports to generate preference scores in the four interlocking dimensions. The instrument has been extensively investigated and has met successfully most challenges to its rationale, test construction, and results (Murray, 1990).

ISTJ	ISFJ	INFJ	INTJ
ISTP	ISFP	INFP	INTP

ESTP	ESFP	ENFP	ENTP
ESTJ	ESFJ	ENFJ	ENTJ

FIGURE 1: 16 MYERS-BRIGGS PERSONALITY TYPOLOGIES

Personality traits have been hypothesized to covary significantly with choice of college major thus providing an initial link between personality features and future vocational behaviors (Goldschmid, 1967). The MBTI was used along with 4 other instruments (California Psychological Inventory (CPI); Minnesota Multiphasic Personality Inventory (MMPI); Omnibus Personality Inventory (OPI) & Strong Vocational Interest Blank (SVIB)) across several college students samples (presumably White) ranging in size from 61 to 307. The findings of this study support the contention that "deep-seated and long-standing personality differences" are the primary contributors to vocational choice.

Noting that generalizations derived from studies on White samples were not necessarily applicable to African American subjects, Levy, Murphy, and Carlson (1972) assessed the personality type distribution and stability among African American college students. Over 750 undergraduates from a predominantly Black university were asked to complete the MBTI. Personality type distributions found among the college students were contrasted to findings from previous studies of White undergraduates

(N=3676). Striking differences between the samples were found; nearly a quarter of the African American sample was found to express 'ESTJ' characteristics as compared to less than ten percent of the White sample. Almost one half of the African American sample was found to possess personality preferences represented by '-STJ' implying the presence of either 'ISTJ' or 'ESTJ'. The White sample was represented by significantly more within group diversity; no personality preference exceeded ten percent of the sample. Sex differences within both racial groups were in the direction one would expect from theory; males were found more likely to be sensing, thinking, and judging as compared to females. The African American students – male and females alike -- were clearly more often sensing and judging in comparison with White undergraduate counterparts. The actual conclusions drawn from these results appear to reflect the zeitgeist of the time in which the study was conducted and are of less relevance today. The authors' explanations for the differences in personality distributions found in the study include an assumption that attention to immediate and concrete details were a necessary part of survival and achievement for Black students at the time, thus inhibiting the development of innate preferences for more intuitive or perceptive modes of experiences. This hypothesis lends itself to consideration of an individuals' experience of the environmental influences and racial factors on vocational identity development. The findings of the study suggest that substantial differences may exist both between racial groups and that substantial diversity may exist within racial groups on personality dimensions. Despite the questions this study raises about the sociocultural implications of the findings of this self-report instrument, the study provides support for the use of the MBTI as a psychometrically stable instrument capable of reflecting within and between group differences and determining the distribution of personality within a predominantly African American educational setting. Levy, Murphy and Carlson's

study (1972) provides a historical foundation upon which to step from in examining the personality preferences of minority students in this study.

Other researchers have more recently explored the distribution of personality types across and within various racial and ethnic groups (Carlson & Levey, 1973; Kaufman, Kaufman & McLean, 1993; Kaufman, McLean, & Underwood, 1992). Kaufman, McLean and Underwood (1992) examined differences between personality preferences as measured by the MBTI, of 142 African American and 1155 White participants. Kaufman, Kaufman and McLean (1993) extended these results by integrating the findings from 65 Hispanic participants as an additional comparison group. A multivariate analysis of covariance (MANCOVA) was conducted with race/ethnic group and sex as independent variables, continuous scores on the four MBTI indices as dependent variables, and educational attainment as the co-variate. The analysis produced a significant main effect for race/ethnic group with the African American sample demonstrating a greater preference for the thinking style than did either the Hispanic or White respondents.

The application of the MBTI to a high school-aged sample is rather uncommon particularly in the vocational literature. Samples of high school students have been utilized in examining the relation between personality preferences and grade point average (GPA). Substantial links, however, between personality type and vocational identity have yet to be demonstrated.

Jung's theory is concerned with the cognitive operations of perception and judgement. Jung believed he was describing mental processes common to the entire human species. To the extent that he was correct, personality type differences should be consistent across cultures. Research thus far has shown otherwise. Studies have demonstrated both within and across racial group differences on the distribution of

personality traits and preferences. Despite the research, it is predicted that the African American high school sample utilized in this study will show no significant within group difference on the personality dimensions measured by the MBTI. In addition, it is expected that personality type will not significantly explain the variance in vocational identity scores.

Linking Racial Identity, Personality Type, and Vocational Identity

Although vocational identity has invariably been viewed as representing only part of the overall identity development process, it has, at times, been addressed in relative isolation from other developing identity constructs (e.g. racial identity, personality) (Holland, Daiger & Power, 1980). Identity development encompasses an increasing awareness of individuality through the processes of exploration and commitment. Broken down, the process of identity formation occurs not on a single global scale but as a process of smaller integrated aspects of the whole person. The fluid and unstable process of exploration in each of these areas greatly affects individuals' self-concept, their perceptions of the environment, and their evaluation of career options. Cross (1991) maintains that self-concept is composed of both a reference group orientation as well as a personal identity. The reference group orientation includes (among other factors) race awareness and racial identity, while personal identity includes self-esteem, self-confidence, and personality typology. Addressing multiple dimensions of self-concept (personal and group orientation) in conjunction with vocational identity becomes increasingly important when seeking to understand the complexities of within group differences and develop generalizable applications.

The theoretical links that have been discussed thus far, and the empirical evidence outlined, support the existence of relationships between any two of the three proposed constructs in this study. Empirical research has provided evidence of

substantial and consistent relationships between vocational identity and various aspects of personality. Evidence has also been provided supporting a relationship between vocational identity and racial identity attitudes, albeit of modest statistical significance. The fragility of this relationship between vocational identity and racial identity may, in part, be attributable to extraneous factors (i.e. personality characteristics) that have not yet been accounted for. It becomes important to expand the discussion to incorporate, theoretically and practically, the constructs of racial identity and personality typology in understanding the construct of vocational identity in African American youth. The utilization of these constructs together provides a increasingly complex and complete framework from which to: (1) better understand within group diversity of African American youth with regard to vocational identity; (2) expand existing knowledge of the theories regarding personality as a significant influence on vocational behaviors; (3) further understand how racial identity attitudes and personality characteristics influence the development of vocational identity for African American high school students functioning in a homogeneous urban setting; and (4) develop specific career counseling interventions.

Research Null Hypotheses

The research reviewed above provides a basis for suggesting the following null hypotheses:

- (1) Racial identity attitudes as measured by the RIAS-B will not significantly contribute to the variance of vocational identity scores obtained on the MVS;
- (2) Personality type as measured by the MBTI will not significantly contribute to the variance in vocational identity scores obtained on the MVS;
- (3) Sex will not significantly contribute to the variance in vocational identity scores obtained on the MVS; and
- (4) Racial identity attitudes as measured by the RIAS-B, personality type as measured by the MBTI, and sex will not significantly contribute to the variance in vocational identity scores obtained on the MVS.

CHAPTER 3

RESEARCH METHODOLOGY

Research Setting: Community High School

Community High School is located in a predominantly African American community consisting of just over 40,000 people on the outskirts of a large urban area in the midwest. The community is generally of a lower socioeconomic status with the mean household income of just over \$8,200 indicating that nearly 40% of the population area is living at or below the poverty level (based on family size and income). The unemployment rate in the area is nearly 27%. Sixty three percent (63%) of the households below the poverty level are headed by females and include children under the age of 18 years. The racial composition of the population surrounding the high school has been identified to include nearly 85% African American, 13% White, and 2% individuals of other racial/ethnic designations.

According to data obtained by the community school system, Community High School served an average of 1,250 students during the 1993-1994 academic year and slightly less in 1994-1995. Ninety-three percent (93%) of the student body identified themselves as African American. The racial composition of the staff is entirely opposite that of the student body. The school's staff consists of 65 teachers and 4 administrators, the majority of whom are self-identified as Caucasian. The high school's mean GPA is 1.75. The school's formal records indicate that the school

experiences a daily absenteeism rate of nearly 15% and an overall dropout rate of over 12%.

Subjects

Participants in the study included 289 public high school students (males and females) recruited from the junior and senior classes of same high school over the course of a school year. The sample was racially homogeneous with 100% of the sample self-described on the demographic questionnaire as African American. The demographic questionnaire is included in Appendix B.

Procedures

After reading a brief description of the study to the students, teachers asked students under the age of 18 to take consent forms home in order to obtain a parent's signature. In addition, all students, regardless of age, were asked to provide their own written assent by completing and signing an information sheet (Appendix A) at the time of assessment.

Data collection occurred during normal school hours on two consecutive days. Research assistants and teachers instructed in the methods of administering the instruments provided each eleventh and twelfth grader with a packet containing a consent form and the Myers-Briggs Type Indicators (Appendix E), the My Vocational Situation (Appendix C) and the Black Racial Identity Attitudes Scale (labeled the "Social Attitudes Scale") (Appendix D). The completion of these packets was scheduled to occur during one class period of the regular school day.

During questionnaire administration, subjects participating in the study were separated from those students who did not participate due to grade level, lack of parental consent, or unwillingness to participate. Examiners read aloud all directions and provided assistance in reading and understanding the instruments as well as

answering individual questions. The instruments were chosen for their applicability to the high school setting and their specific reading level requirements. In return for participation in the study, students were provided with a personality profile and career assessment packet. The career profile and informational packet consisted of an explanation and interpretation of the Myers-Briggs Type Indicator and its application to identified career interests and future career exploration endeavors. As a result, questionnaire packets were not completed with total anonymity. Names or other identifying information were used on the instruments in an effort to facilitate the generation of career profile packets.

Measures

My Vocational Situation. The My Vocational Situation (MVS: Holland, Daiger, & Power, 1980) is a brief test, the underlying assumptions of which are that the majority of career decision-making difficulties fall into one or more of the following categories: (1) problems with vocational identity, (2) lack of information or training, or (3) environmental or personal barriers. The MVS provides information in each of these three categories. The MVS instrument consists of 20 items. The first 18 true/false items comprise the Vocational Identity (VI) subscale (e.g., "I need reassurance that I have made the right choice of occupation"). This subscale is purported to "measure the clarity of a person's vocational goals and self-perceptions..." (Holland, 1985, p. 28). The Vocational Identity (VI) subscale was originally developed by combining two earlier scales, the Vocational Decision-Making Difficulty Scale (VDMD) (Holland & Holland, 1977) and the Identity Scale (Holland, Gottfredson & Nafzinger, 1975). The Vocational Identity subscale is scored by totaling the number of false responses. Low scores on the Vocational Identity subscale indicate the presence of confusion about vocational identity, potential difficulty in vocational decision-making, and a lower

sense of self-satisfaction. High scores on the subscale are representative of individuals who have developed a strong and clear sense of vocational identity.

Vocational Identity is only one of three constructs measured by the MVS questionnaire. Item 19 (Occupational Information subscale; OI) and item 20 (Barriers subscale; B) consist of four-part questions that examine the amount of occupational information the respondent needs to make a decision (e.g., "I need... more information about employment opportunities") and the perceived barriers to implementing a career decision (e.g., "I don't have the money to follow the career I want most"), respectively. Low scores on these scales indicate significant obstacles to career choice. Holland, Daiger and Power (1980) expect the MVS to help determine the type of vocational assistance needed by respondents and to facilitate the development of individual interventions.

The MVS was designed to be used with high school freshmen and older students. Studies have reported age ranges on the MVS including 16-69 years. The MVS test manual (Holland, Daiger & Power, 1980) provides means and standard deviations, by gender, for samples of high school students, college students, and full time workers. Internal consistency reliability coefficients were reported for high school students (N=496), and college students (N=592) used in the norming of the scales. The KR-20 reliability coefficients for these three samples ranged from .86 to .89 for the Vocational Identity subscale, from .39 to .79 for the Occupational Information subscale, and from .23 to .65 for the Barriers subscale. No test-retest reliability data is available on the MVS instrument.

Three personality variables and four vocational variables were correlated to the Vocational Identity subscale in an attempt to assess the construct validity of the measure (Leong & Morris, 1989). The results of the study provide further support for the

construct validity of Holland, Daiger and Power's (1980) measure of vocational identity.

The MVS is deemed most appropriate for normal persons and those experiencing anxiety or difficulty regarding career concerns. However, its validity as a diagnostic instrument is limited. Inclusion of the MVS in research can be justified on the basis of the existing validity data (Tinsley, 1985), but it is not recommended to be used in an applied setting as a screening device as Holland (1980) originally suggested. It has been judged to be most useful in research addressing the development of vocational identity and in assessing the interventions used to foster vocational identity (Lunnenborg, 1985).

The Racial Identity Attitude Scale - Form B. The Racial Identity Attitude Scale (RIAS-B: Helms, 1990; Helms & Parham, 1985; Parham & Helms, 1981) was developed on Cross' assumption that individuals of a particular race, as they move from a position of degrading their racial identity to feeling secure with their racial identity, progress through four identifiable stages: Pre-encounter, Encounter, Immersion and Internalization. The RIAS-B is intended to measure beliefs or attitudes a Black person has about themselves and the respondents' answers reflect how well the items describe themselves.

The short form of the RIAS-B consists of 30 attitude statements with a corresponding 5 point Likert-type response format ("Strongly agree" to "Strongly disagree"). The RIAS-B is scored by averaging ratings for the appropriately keyed items assigned to each of four subscales: Pre-encounter, Encounter, Immersion, and Internalization. Averaged subscale scores can range from one to five, with higher scores indicating greater endorsement of the attitudes represented by each subscale. Higher

scores indicate greater levels of particular racial identity attitudes and indicate the prevailing racial identity development stage.

The original version was derived from the responses of 54 college students attending a predominantly White midwestern university. Additional normative samples were drawn from both predominantly White and historically Black universities (Pyant & Yanico, 1991). Internal consistency reliability estimates for the RIAS-B are reported for each stage of racial identity: Pre-encounter .69, Encounter .50, Immersion .67, and Internalization .79. Cronbach's alpha was used again to commute respective reliability coefficients as follows: Pre-encounter, .76; Encounter, .51; Immersion, .69; and Internalization, .80 (Helms & Parham, 1985). These reliability scores were derived from a sample of 175 individuals on the long version of the instrument. The RIAS-B is clearly the most researched racial identity measure available; however, little research has been published that outlines how the developmental process of racial identity formation is expressed in African American high school students.

Myers-Briggs Type Indicator. The Myers-Briggs Type Indicator (MBTI: Myers, 1962) is a 94 item forced-choice, self-report inventory that attempts to measure personality variables stemming from an adaptation of Carl Jung's (1971) theory of conscious psychological type. The instrument exploits the assumption that human behavior, perceived as seemingly random and diverse, is actually quite orderly and consistent. The MBTI classifies individuals along four theoretically independent dimensions. The measure consists of four bipolar scales: Extraversion-Introversion (E-I), Sensation-Intuition (S-N), Thinking-Feeling (T-F), and Judging-Perceiving (J-P). The dominant process in each pair is the one on which a person relies the most. The E-I scale is presumed to measure interest in things and people or concepts and ideas; the S-

N scale measures tendencies to perceive through direct sensory processes or indirectly influenced by the unconscious; the T-F scale involves the style of information organization and the preferred mode of forming judgements; and the J-P scale reflects the dominate preference for dealing with the surrounding environment. Two kinds of measures are obtainable from the instrument: continuous scores, representing the extent of development of various dimensions, and the bipolar type categories. Combinations of the four preferences exhibited by each respondent determine the 16 possible personality type combinations (i.e. ESTJ, ESFJ, ENFP, INFJ, ISTP, etc.). Each type represents qualitatively different patterns of organization of the basic Jungian variables and defines a unique set of characteristics and tendencies in behaviors.

Reliability estimates for the individual personality preferences obtained from the MBTI include; .70 to .81 (E-I), .82 to .92 (S-N), .66 to .90 (T-F), and .76 to .84 (J-P). Stability in type scores has been reported using test-retest intervals of varying lengths. The preference scores were found to exhibit relatively stable reliabilities over an eight week period including: .69 to .83 (Carlyn, 1975); .86 to .89 (except J-P) (Steele & Kelly, 1976). Females were found to have test-retest reliability of .73 to .87, and males .56 to .79 (Carskadon, 1977). In addition, test-retest reliabilities of .78 to .87 were found in a duplicate study occurring two years later. McCarley and Carskadon (1983) used Form G in yet another test-retest evaluation and found, over a five week period, reliability estimates ranging from .77 for (T-F) to .89 to (J-P). The T-F scale typically exhibits the lowest reliability scores, and the S-N scale, generally, exhibits the highest reliability. The stability of the MBTI personality type scores have been demonstrated with African American students at a historically Black University (Levy, Murphy, & Carlson, 1972). The test-retest reliability estimates for males students were found to range from .69 to .80, and for females, from .78 to .83. The MBTI has therefore been

declared an instrument capable of reliability assessing specific personality traits of African American college students.

The MBTI is the most widely used personality instrument (DeVito, 1985). It has also undergone substantial evaluation and critique as evidenced by over 1,500 studies cited in the MBTI test manual (Myers & McCaulley, 1985). Although the majority of reliability information was obtained on a previous version of the MBTI instrument (Form F), a strong argument has been made that Forms F and G could be used interchangeably since almost no differences exist on the questions that are scored. Therefore, the data base and information of Form F is conceptually considered sufficient support for using Form G.

CHAPTER 4

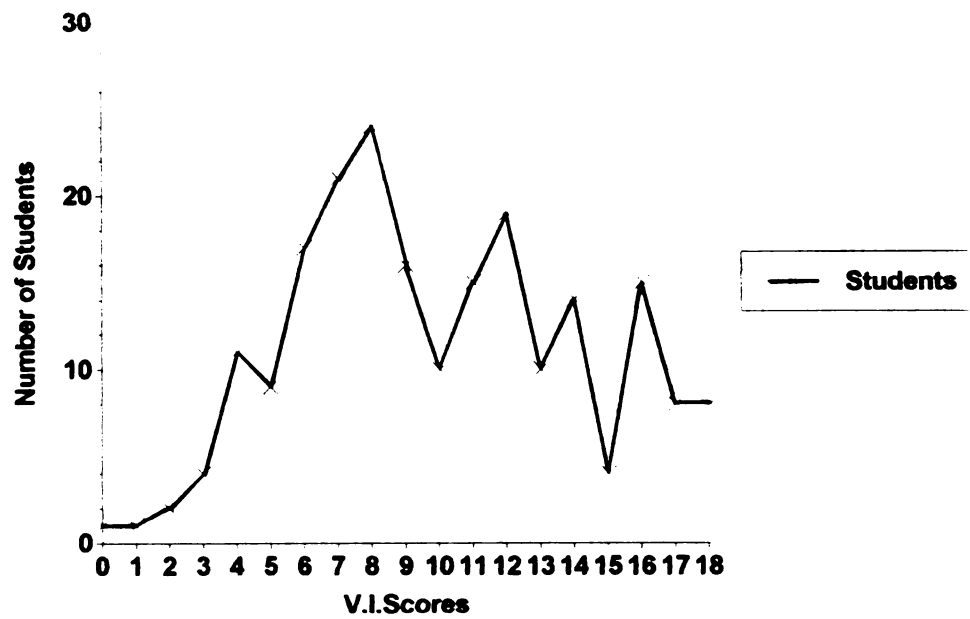
RESULTS

Participants

In total, 289 African American high school juniors and seniors were assessed on one or a combination of proposed attributes including vocational identity, racial identity and personality type. The mean age for the sample was 17 years with 55% of the sample being seniors.

Demographics

Vocational identity was measured using the My Vocational Situation (MVS) for 146 seniors and 63 juniors with 55.5% (n=116) of the sample consisting of females and 44.5% (n=93) of the sample represented by males. Vocational identity was measured on the (VI) subscale of the MVS: a scale that ranges from a possible low score of zero to a high score of 18. Cumulative vocational identity (VI) scores for the 209 completed MVS instruments were found to exist at all possible levels of vocational identity development as depicted in Figure 2.

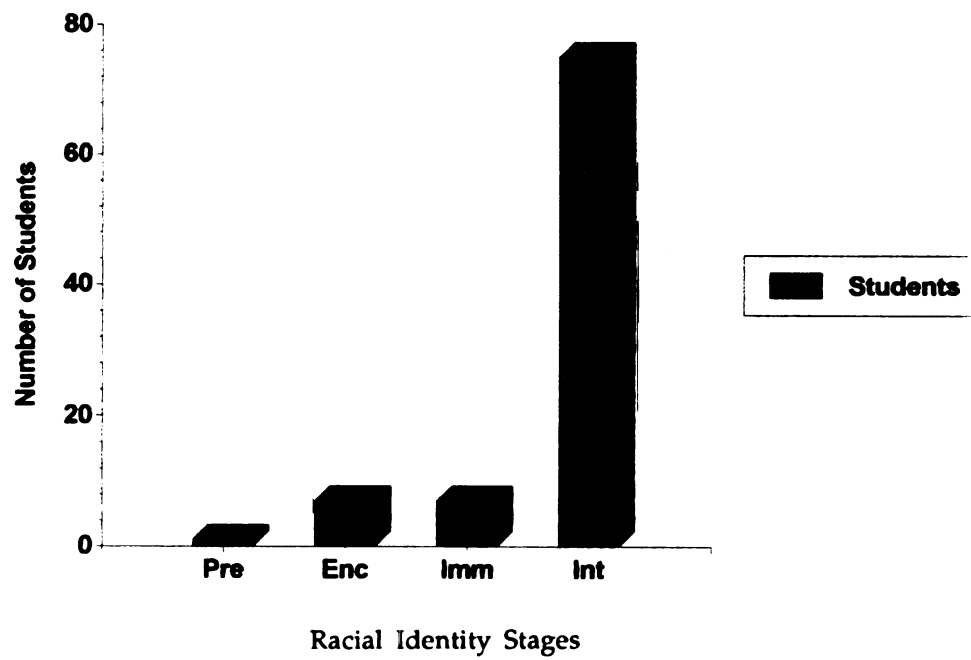


The mean is 10.0; standard deviation is 4.18 (N=209).

FIGURE 2: DISTRIBUTION OF VOCATIONAL IDENTITY SCORES ON THE MVS

The mean vocational identity score for all 209 participants who completed the MVS was 10.00 (SD=4.18), whereas the mode was determined to be 8.00 (11.5%). The MVS instrument includes not only the predominant vocational identity (VI) subscale scores but also an occupational information [needed] subscale (OI) and a [perceived] barriers (B) subscale. The mean score on the occupational information (OI) subscale for the 209 completed MVS instruments was 3.13 (SD=1.08) out of a possible high score of four points. Nearly 50% of the sample positively endorsed all the occupational information (OI) subscale items. This pattern of responses suggests that the students are interested in obtaining additional vocational information and/or counseling. A mean score of .918 (SD=.939) was obtained for the barriers (B) subscale as nearly 40% of the 209 students sampled reported no perceived barriers or difficulties inhibiting the development of their vocational identity and subsequent career selection.

Racial identity attitudes were measured using the Black Racial Identity Attitudes Scale (RIAS-B) for 60 high school seniors and 32 juniors. This subsample consisted of 51 (56%) females and 39 (44%) males. Racial identity was determined by calculating the likert-scale point totals for the items constituting each of the four the attitude scales and then identifying the scale that received the highest total average score. Figure 3 shows that nearly 84% of the 92 students sampled (n=75) endorsed items reflecting a belief that they themselves fell in the highest, most sophisticated stage of racial identity development; that of racial identity internalization. The remaining three stages were found to contain only 15 students collectively. The pre-encounter racial identity stage was represented by less than 2% of the students sampled and both the encounter and immersion stages of identity development were represented by less than 10% of the 92 participants.



Pre=Pre-encounter stage; Enc=Encounter stage; Imm=Immersion stage; Int=Internalization stage

FIGURE 3: REPRESENTATION OF RACIAL IDENTITY STAGES ON THE RIAS-B

Personality characteristics and personality typology as measured by the Myers-Briggs Type Indicator (MBTI) were assessed for 72 high school seniors and 101 juniors with 57% of the sample being female (n=98) and 43% of the sample being male (n=74). Each of the possible 16 MBTI personality profiles was found to exist in the sample (see Figure 4). The [personality types] 'ISTJ' and 'ISTP' were the two most represented: 17.3% and 16.8% of the sample, respectively. The 'ESTJ' personality type accounted for nearly 14.5% of the sample. These findings are consistent with Kaufman, Kaufman, and McLean's (1993) results in which the 'ESTJ' profile was endorsed by 14.10% of the African American male college students and 13.08% of the female college students. As anticipated, over 56% of the students in the current study who completed the MBTI indicated that their predominant interpersonal and learning style preference included both a 'sensing' and 'thinking' component ["--ST--"]. The prevalence of this combination of personality characteristics has been noted in previous research endeavors (Kaufman, Kaufman & McLean, 1993; Levy, Murphy & Carlson, 1972).

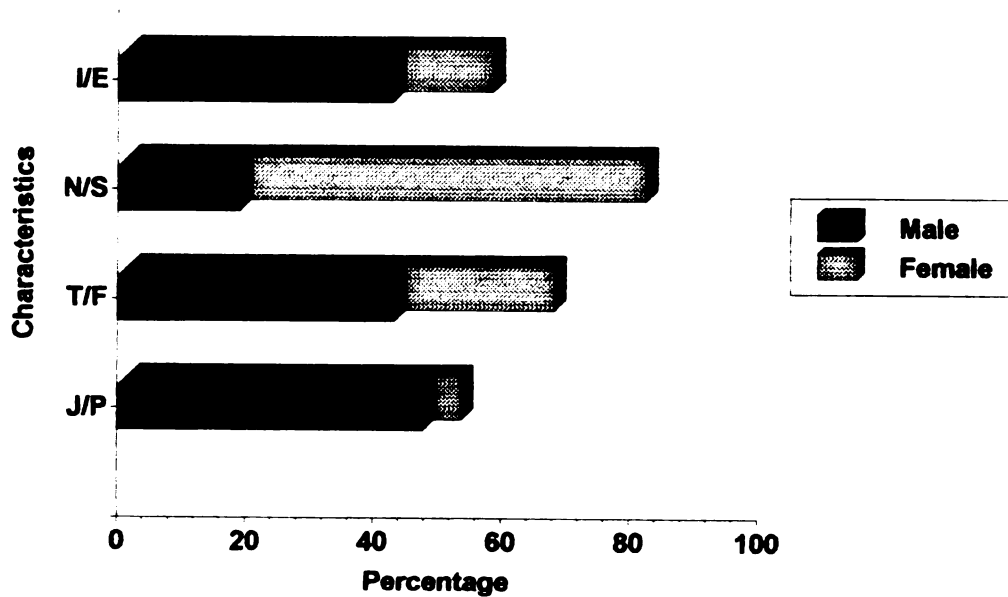
ISTJ	ISFJ	INFJ	INTJ
N=30	N=13	N=3	N=2
17.3%	7.5%	1.7%	1.2%
<hr/>			
ISTP	ISFP	INFP	INTP
N=29	N=12	N=4	N=6
16.8%	6.9%	2.3%	3.5%
<hr/>			
ESTP	ESFP	ENFP	ENTP
N=13	N=9	N=6	N=4
7.5%	5.2%	3.5%	2.3%
<hr/>			
ESTJ	ESFJ	ENFJ	ENTJ
N=25	N=9	N=2	N=6
14.5%	5.2%	1.2%	3.5%

Note: the results are based on the 173 students who completed the MBTI.

FIGURE 4: MYERS-BRIGGS TYPE INDICATOR PROFILE RESULTS

The MBTI personality profiles least represented in the sample were 'ENFJ' (n=2), 'INTJ' (n=2), and 'INFJ' (n=3). A preference for the 'intuitive' characteristic 'N' (i.e. learning through intuition and imagination rather than facts) was endorsed by less than 19% of the students. These findings are also consistent with previous research results in which less than 19% of the African American participants endorsed items consistent with the 'intuitive' preference while nearly 36% of the White students indicated a clear preference for 'intuitive' learning styles (Kaufman, Kaufman & McLean, 1993).

Figure 5 depicts the nearly even sample representation split across six of the eight personality characteristics within the preference dyads measured, as well as one significant discrepancy noted in the 'sensing/intuition' (S-N) preference dyad.



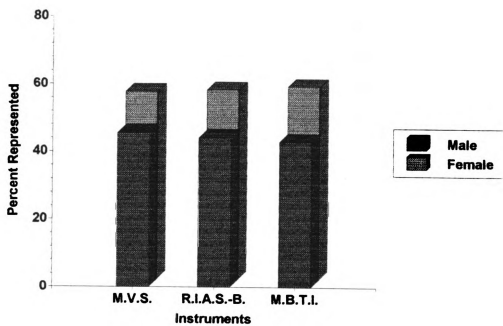
The results are based on the 173 students who completed the MBTI.

FIGURE 5: REPRESENTATION OF BI-POLAR MYERS-BRIGGS TYPE PREFERENCES

It was found that 57% of the sample declared a preference for an introverted 'I' rather than extraverted 'E' interpersonal style; 66.6% of the sample showed a preference for utilizing logic and thinking 'T' over emotions in decision-making 'F'; and 52.1% of the sample indicated a stronger tendency toward an organized, predictable 'J' orientation to their environment versus a more spontaneous and carefree 'P' orientation. On the dimensions of sensing 'S' and intuition 'N', 80.9% of the sample endorsed 'S' characteristics as a stronger preference over 'N' characteristics. These results are consistent with previous research findings suggesting that African American high school students show a clear preference for concrete and logical learning and interacting rather than a more intuitive and abstract integrative process (Kaufman, Kaufman & McLean, 1993; Levy, Murphy & Carlson, 1972).

Variation clearly exists in the number of high school students composing each of the three instrument subsamples (e.g. the number of participants who completed each of the three instruments: MVS, RIAS-B, MBTI) as well as the number of participants who completed all three intended assessments .

The male/female ratio of the high school participants was relatively consistent across each instrument and within the composite subsample as shown in Figure 6.



The results are based on 209 completed MVS; 92 completed RIAS-B; and 173 completed MBTI.

FIGURE 6: MALE-FEMALE REPRESENTATION ACROSS INSTRUMENTS

Regression Analyses

In order to determine the relationship that exists between participants' sex, grade level, racial identity attitudes, personality characteristics and preferences, and vocational identity development several multiple regression analyses were conducted. The first regression equation was a purely step-wise multiple regression equation utilized to elicit specific individual factors that may significantly contribute to explaining the variance of vocational identity scores obtained for these African American high school students. The data used for this regression analysis consisted of the 79 complete data sets.

The step-wise regression equation is as follows:

$$VI = Constant + Sex + Grade + E + I + S + N + T + F + J + P + Pre + Enc + Imm + Int$$

Not one of the specified variables were found to significantly contribute to the explained variance in vocational identity scores at either the .01 or .05 level of significance. This equation provides support for all the purported null hypotheses in their claim that neither sex, nor grade, nor racial identity, nor personality type would significantly contribute to the explained variance of vocational identity scores obtained on the MVS for African American high school juniors and seniors. The factors therefore, that significantly contribute to and/or perhaps predict levels of vocational identity development for African American high school juniors and seniors remain undetermined.

A second hierarchical, step-wise regression equation was then conducted in which the variables of sex, grade, racial identity and personality characteristics were again entered but this time they were entered as complete units.

The second regression equation included:

Step (1) VI = Constant + Sex + Grade

Step (2) + Personality Characteristics

Step (3) + Racial Identity Attitudes

The first step involved determining whether the combination of controlled factors – students' sex and grade level in school – significantly contributed to the explained variance in vocational identity scores obtained for this sample of students. Sex and grade combined were not statistically significant predictors of the variance in vocational identity scores ($F(2,76) = .89, p=.42$) (see Table 1).

In addition to the controlled factors of sex and grade, the second stage of the multiple regression equation involved the addition of the eight specific personality preference variables obtained on the MBTI. The combined effect of the predictor variables did not account for a significant amount of the variance on vocational identity scores ($F(8,68) = 1.13, p=.36$). The change in R squared for the overall equation was not found to be statistically significant. Overall, although this full model accounted for 13.7% of the explained variance in vocational identity scores, the amount of explained variance was not statistically significant ($F(10,68) = 1.08, p=.39$).

TABLE 1
MULTIPLE REGRESSION FOR BLOCK DESIGN EQUATION

	Variables entered	F model	F change
Step 1	CONSTANT SEX GRADE	F (2,76) = .886, p=.416 R squared = .023	F (2,76) = .886, p=.416 Change in R squared = .023
Step 2	ISCORE ESCORE NSCORE SSCORE TSCORE FSCORE JSCORE PSCORE	F (10,68) = 1.081, p=.388 R squared = .137	F (8,68) = 1.127, p=.356 Change in R squared = .114
Step 3	PRE-ENCOUNTER ENCOUNTER IMMERSION INTERNALIZATION	F (14,64) = 1.109, p=.367 R squared = .195	F(4,64) = 1.154, p=.339 Change in R squared = .058

Note: Regression analyses were conducted on 79 complete data sets.

The last stage of the regression equation required the addition of the racial identity attitude variables. The combined effect of the four racial identity scales was not significant ($F(4,64) = 1.15, p=.34$). The additional amount of variance explained in the R squared was 5.87%. Overall, although the full model accounted for 19.5% of the explained variance in vocational identity scores, this amount is not statistically significant ($F(14,64) = 1.11, p=.37$).

In the final model, neither of the control variables of sex or grade were found to account for a significant portion of the variance obtained in vocational identity scores (see Table 2). Of the personality variables entered in the equation, 'E' and 'I' were both found to be significant predictors with $F(64) = 4.49, p=.04$ and $F(64) = 5.95, p=.02$, respectively. These results indicate that the personality characteristics of introversion 'I' and extraversion 'E' both contribute to explaining vocational identity scores and the more strongly one endorses either the 'I' or 'E' orientation, the higher the expected level of vocational identity scores. In addition, the Internalization stage of racial identity development was found to be approaching statistical significance within the final model $F(64) = 3.84, p=.053$. This marginally significant finding fails to support the null hypothesis that purporting that racial identity attitudes do not significantly contribute to the explanation of variance found in vocational identity scores obtained from the MVS. Although approaching statistical significance, this finding may be misleading and impractical since nearly 84% of the students fell within the internalization stage of racial identity development thus negating the variability and apparent normalcy of the data pool.

TABLE 2

MULTIPLE REGRESSION RESULTSFull Model: $VI = B0 + B1SEX + B2GRADE + B3I + B4E + B5S + B6N + B7T + B8F + B9J + B10P + B11Pre + B12Enc + B13Imm + B14Int$

Variable	B	t	p-value
CONSTANT	-19.0221	-1.169	.2469
SEX	.0377	.069	.9453
GRADE	1.6696	1.575	.1202
I SCORE	.6243	2.441	.0174
E SCORE	.5449	2.125	.0374
S SCORE	-.1792	-1.159	.2509
N SCORE	-.2476	-1.109	.2717
T SCORE	.2193	1.646	.1047
F SCORE	.2469	1.234	.2219
J SCORE	-.3897	-1.398	.1670
P SCORE	-.4100	-1.416	.1616
PREENCOUNTER	.0766	.853	.3970
ENCOUNTER	-.1146	-1.213	.2298
IMMERSION	-.0185	-.164	.8703
INTERNALIZATION	.2109	1.964	.0539

Note: Regression analysis is based on 79 complete data sets. The overall $F(14,64) = 1.1095$, $p = .3671$.
 The R^2 squared = .195

The block design regression equation in its entirety accounted for only 19.5% of the overall explained variance in the vocational identity scores of these high school juniors and seniors. For the overall model, the $R^2 = .1953$ and the R^2 change = .058, $p = .339$, whereas the overall $F(14,64) = 1.109$, $p = .367$. However, this variance is not statistically significant.

The significance of both the 'E' and 'I' MBTI personality preferences in explaining the variance obtained in vocational identity scores suggests the presence of the relationship depicted in Figure 7. The endorsement strength of either an extraverted or introverted interpersonal style appears positively related to the increasing level of vocational identity reported.

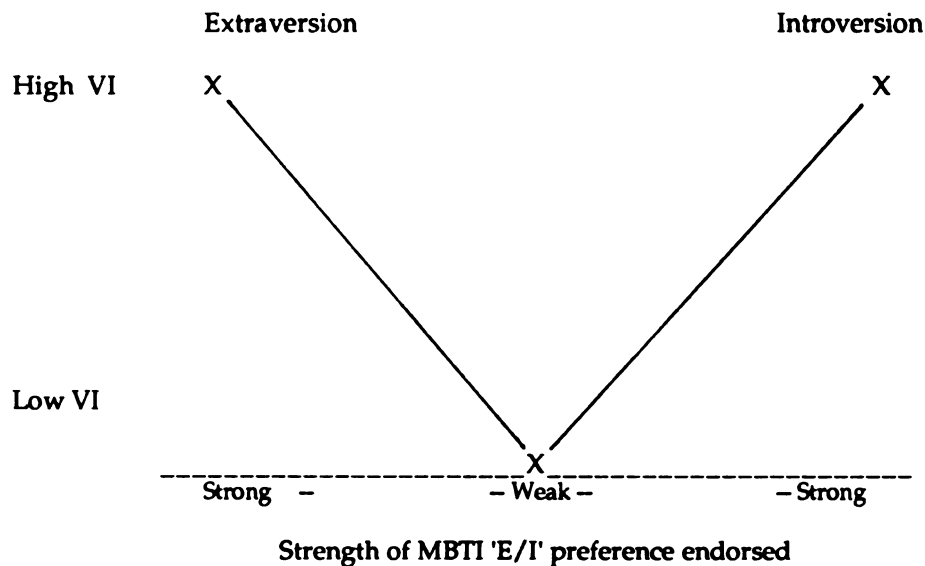


FIGURE 7: PROPOSED RELATIONSHIP BETWEEN MBTI INTROVERSION/EXTRAVERSION PREFERENCES AND VOCATIONAL IDENTITY SCORES

Correlations

Pearson Product correlations were conducted among vocational identity scores obtained from the MVS and the MVS subscales; Occupational Information (OI) and Barriers (B); the four levels of racial identity identified on the RIAS-B, and the eight personality preferences assessed on the MBTI. The results for the correlations obtained from using all completed instruments are presented in Table 3. These correlations are based on a variable number of completed instruments ranging from the 79 completed RIAS-B instruments to 209 completed MVS instruments. Correlations obtained specifically from the 79 complete data sets are presented in Table 4.

TABLE 3: CORRELATIONAL MATRICES FOR ALL DATA

	VIS	INFO	BAR	E	I	S	N	T	F	J	P	PRE	EN	IM	IN
VIS	1.00														
INFO		1.00													
BAR			1.00												
ESCORE				1.00											
ISCORE					1.00										
SSCORE						1.00									
NSCORE							1.00								
TSORE								1.00							
FSORE									1.00						
JSORE										1.00					
PSORE											1.00				
PRE												1.00			
ENC													1.00		
IMM														1.00	
INT															1.00

Note: The correlations are based on all completed instruments. The number of completed instruments used in the analyses are listed in parentheses. VIS=MVS Vocational Identity subscale score; INFO=MVS Information subscale score; BAR=MVS Barriers subscale score; E/ESCORE=MBTI Extraversion subscale score; I/ISCORE=MBTI Introversion subscale score; S/SCORE=MBTI Sensing subscale score; N/NSCORE=MBTI Intuitive subscale score; T/TSCORE=MBTI Thinking subscale score; F/FSORE=MBTI Feeling subscale score; J/JSORE=MBTI Judging subscale score; P/PSORE=MBTI Perceiving subscale score; PRE=RIAS-B Pre-encounter subscale score; EN/ENC=RIAS-B Encounter subscale score; IM/IMM=RIAS-B Immersion subscale score; IN/INT=RIAS-B Internalization subscale score.

TABLE 4: CORRELATIONAL MATRICES FOR ALL COMPLETED DATA SETS (N=79)

	VIS	INFO	BAR	E	I	S	N	T	F	J	P	PRE	EN	IM	IN
VIS	1.00														
INFO		1.00													
BAR			1.00												
ESCORE				1.00											
ISCORE					1.00										
SSCORE						1.00									
NSCORE							1.00								
TSCORE								1.00							
FSCORE									1.00						
JSCORE										1.00					
PSCORE											1.00				
PRE												1.00			
ENC													1.00		
IMM														1.00	
INT															1.00

Note: The correlations are based on 79 complete data sets. VIS=MVS Vocational Identity subscale score; INFO=MVS Information subscale score; BAR=MVS Barriers subscale score; E/ESCORE=MBTI Extraversion subscale score; I/ISCORE=MBTI Introversion subscale score; S/SCORE=MBTI Sensing subscale score; N/NSCORE=MBTI Intuitive subscale score; T/TSCORE=MBTI Thinking subscale score; F/FSCORE=MBTI Feeling subscale score; J/JSCORE=MBTI Judging subscale score; P/PSCORE=MBTI Perceiving subscale score; PRE=RIAS-B Pre-encounter subscale score; EN/ENC=RIAS-B Encounter subscale score; IM/IMM=RIAS-B Immersion subscale score; IN/INT=RIAS-B Internalization subscale score.

The Vocational Identity subscale of the MVS was found to be negatively correlated with both the Occupational Information ($r = -.3489$, $p < .05$ ($N = 79$); $r = -.4312$, $p < .1$ ($N = 209$)) and Barriers subscales ($r = -.3237$, $p < .05$ ($N = 79$); $r = -.3458$, $P < .01$ ($N = 209$)) of the same instrument. These results are displayed in Table 5. As expected, the higher one's vocational identity score, the less indication that there is a need for additional information about career selection and training and the less barriers are perceived to exist inhibiting the process of career development and implementation. Vocational identity was not found to be significantly correlated with any other construct in the study suggesting that perhaps it is a separate entity unto itself.

TABLE 5

MEANS, STANDARD DEVIATIONS, AND CORRELATION MATRICES FOR MVS

Measure	Mean	SD	VI	INFO	BAR
VI	10.00	4.18	1.000	-.4312 $p < .001$	-.3458 $p < .001$
INFO	3.130	1.08	-.3489 $p = .002$	1.000	.2195 $p = .001$
BAR	0.918	0.93	-.3237 $p = .004$	.1472 $p = .196$	1.000

Note: The correlations above the diagonal are based on 209 completed MVS. The correlations below the diagonal are based MVS that were part of the 79 complete data sets.

The need for additional occupational information as measured by the Occupational Information (OI) subscale of the MVS was, however, marginally significant and negatively correlated with the sensing 'S' interpersonal and learning

characteristic measured by the MBTI ($r=-.1918$, $p=.06$) (see Tables 3 and 4). The relationship between these two constructs suggests that the stronger the endorsement of the 'sensing' preference and the underlying characteristics of that specific learning style the less the need for additional career information or assistance is expressed.

Internal consistency reliability (KR-20) estimates of the MVS subscales have previously been noted to range from .86 to .89 for the Vocational Identity (VI) subscale; from .39 to .79 for the Occupational Information (OI) subscale and; from .23 to .65 for the Barriers (B) subscale. Subscale reliability estimates for the MVS when used with 209 African American high school juniors and seniors were found to be extremely comparable. The MVS reliability estimates found in the current study, listed in Table 6, include Vocational Identity (VI) .810; Occupational Information (OI) .618; and Barriers (B) .346.

TABLE 6

SCALE RELIABILITY OF THE MVS (Cronbach's Alpha or KR-20)

<u>Vocational Identity Scale</u>	<u>Alpha</u>
Vocational Identity	.8102
Information	.6182
Barriers	.3461

Note: The reliabilities are based on 209 completed MVS instruments.

Table 7 depicts correlations between the four racial identity attitude subscales (i.e. Pre-encounter, Encounter, Immersion, and Internalization) of the RIAS-B for the 92

completed instruments as well as the RIAS-B instruments specifically included as part of the 79 complete data sets. As expected, a negative correlation exists between the Pre-encounter and Internalization subscales ($r=-.2155$, $p<.05$ ($N=79$); $r=-.2037$, $p=.052$ ($N=92$)) suggesting that a high score on one of the two scales contributes to a lower score on the other. This relationship supports the theoretical claim that these stages, the Pre-encounter and Internalization, are essentially independent and mutually exclusive in the beliefs, experiences, and attitudes they represent.

TABLE 7

CORRELATIONAL MATRICES FOR RIAS-B**Based on all available RIAS-B data**

	PRE	ENC	IMM	INT
PREENCOUNTER	1.000	.1938 $p=.064$	.0459 $p=.664$	-.2037 $p=.052$
ENCOUNTER	.1747 $p=.124$	1.000	.4855 $p<.001$	.2690 $p=.010$
IMMERSION	.0124 $p=.914$	.4568 $p<.001$	1.000	.2900 $p=.005$
INTERNALIZATION	-.2215 $p=.050$	.2410 $p=.032$	.2915 $p=.009$	1.000

Note: The correlations above the diagonal are based on 92 RIAS-B. The above the correlations below the diagonal are based on RIAS-B that were part of the 79 complete data sets.

The other racial identity stages measured by the RIAS-B were not as discretely separated from one another statistically. The correlation results indicate that the Encounter and Immersion stages are positively correlated with one another ($r=.4568$, $p<.01$ ($N=79$); $r=.4855$, $p<.01$ ($N=92$)), that the Immersion stage is positively

correlated with the Internalization stage ($r=.2915$, $p<.01$ ($N=79$); $r=.2900$, $p<.01$ ($N=92$)), and that the Internalization stage is significantly correlated with the remaining Encounter stage ($r=.2410$, $p<.05$ ($N=79$); $r=.2690$, $p<.01$ ($N=92$)). Upon further examination these intercorrelations appear to be resulting from the overlapping items that contribute to the scoring constellation of each scale. The significant, positive correlations found in the current study run contrary to the distinct relationship expected of these stages from a theoretical standpoint.

The Immersion stage of the RIAS-B was found to be positively correlated with the thinking 'T' preference on the MBTI ($r=.2915$, $P<.01$ ($N=79$)) and negatively correlated with the feeling 'F' preference ($r=-.2388$, $p<.05$ ($N=79$)). These results suggest that individuals who endorsed items reflective of the immersion stage of racial identity development were also likely to endorse personality preferences including a preference for logic and deductive reasoning, particularly in problem solving and decision making. The stronger the preference for "feeling" characteristics and the use of values in decision making the less strongly they endorsed items that reflected attitudes and beliefs addressed in the immersion subscale of the RIAS-B.

In a post hoc analysis, the specific subscale items that constitute the RIAS-B were correlated with one another. Nine items are intended to constitute the Pre-encounter subscale. One of the items, however, was found to be extremely weak in its relation to the other items and not significantly correlated with any other item constituting the Pre-encounter scale. The items intended to constitute the Encounter subscale are minimal in number and also weakly correlated with one another. The same holds true for the Immersion scale as it too contains items that are negligibly correlated to the other identified subscale items. The internalization subscale also contained at least one item that was marginally correlated to the other subscale items. The items in

this scale, however, were the most intra-correlated. The inconsistency that exists in the number of subscale items utilized in scoring as well as both the lack of intra-subscale item correlations and an abundance of inter-subscale correlations raises theoretical and practical questions about instrument construction.

Internal consistency reliability estimates for the RIAS-B have been previously listed for each stage as; Pre-encounter, .76; Encounter, .51; Immersion .69; and Internalization .80 (Helms & Parham, 1985). These reliability estimates were based on the responses of 175 students on the *long* version of the instrument. Cronbach's alpha used to compute respective reliability coefficients of .69, .50, .67, and .79 for the four scales of the short version. The internal consistency reliability estimates obtained in the present study are notably lower than those previously published for the long version, however, with the exception of the Encounter scale coefficient they are comparable to reliability estimates expected for the short version of the RIAS-B (see Table 8). The reliability estimates for the four racial identity subscales are as follows: Pre-encounter .66; Encounter .26; Immersion .49; and Internalization .65.

TABLE 8

<u>SCALE RELIABILITY OF THE RIAS-B</u>	<u>(Cronbach's Alpha)</u>
<u>Racial Identity Scale</u>	<u>Alpha</u>
Preencounter	.6571
Encounter	.2600
Immersion	.4921
Internalization	.6532
<u>Note: The reliabilities are based on 92 completed RIAS-B instruments.</u>	

Correlations were conducted to assess the relationships between the eight personality variables (i.e. I, E, S, N, T, F, J, & P) constituting the MBTI personality typologies. The results of these analyses are reported in Tables 9 and 10. As expected, the 'extraversion' preference was found to be strongly negatively correlated with the introversion preference ($r = -.9263$, $p < .01$). These two specific personality characteristics as measured by the MBTI were not found to significantly correlated with any other MBTI characteristics suggesting complete subscale independence.

The 'sensing' subscale score was found be negatively correlated with the 'intuitive' subscale score ($r = -.7739$, $p < .01$) also supporting the bipolar nature of these specific preferences. In addition, the 'sensing' preference was found to be positively correlated with the 'judging' preference ($r = .2629$, $p < .01$) and negatively correlated with the 'perceiving' preference ($r = -.3131$, $p < .01$). This relationships suggests that individuals who endorse items reflecting a preference for obtaining information and learning in a more tangible, concrete fashion also are likely to more strongly endorse a preference for structure, routine and predictability in the their daily lives. These individuals appear less likely to strongly endorse a preference for spontaneity and lack of predictability in their environment. These preferences clearly begin to build a vocational preference profile to be considered in the context of vocational counseling relationship. The preference for utilizing an intuitive approach to learning was positively correlated with both a preference for assessing feelings and values in decision making ($r = .2614$, $p < .05$) and for spontaneity and lack of structure in daily routine ($r = .4018$, $p < .01$). The judging and perceiving preferences were, as would be predicted, strongly negatively correlated with one another ($r = -.9365$, $p < .01$) as were the 'thinking/feeling' dyad ($r = -.8225$, $p < .01$).

TABLE 9
MYERS-BRIGGS TYPE CORRELATION MATRICES FOR MATCHED DATA SETS

	ESCORE	ISCORE	SSCORE	NSCORE	TSCORE	FSCORE	ISCORE	PSCORE
ESCORE	1.000	-.9311 p<.001	-.1787 p=.019	.0499 p=.515	.0220 p=.774	.0215 p=.779	.0283 p=.712	-.0606 p=.429
ISCORE		1.000	.2272 p=.003	-.0590 p=.441	-.0381 p=.618	-.0143 p=.852	-.0266 p=.728	.0615 p=.422
SSCORE			1.000	-.7490 p<.001	.0679 p=.375	-.1538 p=.043	.2234 p=.003	-.2199 p=.004
NSCORE				1.000	-.1628 p=.032	.2600 p=.001	-.2770 p<.001	.3169 p<.001
TSCORE					1.000	-.8225 p<.001	.0954 p=.212	-.0980 p=.200
FSCORE						1.000	-.1429 p=.061	.1612 p=.034
JSCORE							1.000	-.9327 p<.001
PSCORE								1.000

Note: The correlations are based on the 173 completed MBTI instruments. ESCORE=MBTI Extraversion subscale score; ISCORE=MBTI Introversiion subscale score; SCORE=MBTI Sensing subscale score; NSCORE=MBTI Intuitive subscale score; TSCORE=MBTI Thinking subscale score; FSCORE=MBTI Feeling subscale score; JSCORE=MBTI Judging subscale score; PSCORE=MBTI Perceiving subscale score.

TABLE 10
MYERS-BRIGGS TYPE CORRELATION MATRICES FOR COMPLETE DATA SETS

	EScore	IScore	SScore	NScore	TScore	FScore	JScore	PScore
EScore	1.000	-.9263 p<.001	-.1438 p=.206	-.0298 p=.794	.0792 p=.488	-.0426 p=.709	-.1578 p=.165	.1234 p=.279
IScore		1.000	.1817 p=.109	.0473 p=.679	-.1247 p=.274	.0660 p=.563	.1251 p=.272	-.0729 p=.523
SScore			1.000	-.7739 p<.001	.1198 p=.293	-.1819 p=.109	.2629 p=.005	-.3131 p<.001
NScore				1.000	-.1739 p=.125	.2614 p=.020	-.3104 p=.005	.4018 p<.001
TScore					1.000	-.8028 p<.001	.1114 p=.328	-.1257 p=.270
FScore						1.000	-.1295 p=.255	.1732 p=.127
JScore							1.000	-.9365 p<.001
PScore								1.000

Note: The correlations are based on the 79 MBTI included in the complete data sets. EScore=MBTI Extraversion subscale score; IScore=MBTI Introversion subscale score; SScore=MBTI Sensing subscale score; NScore=MBTI Intuitive subscale score; TScore=MBTI Thinking subscale score; FScore=MBTI Feeling subscale score; JScore=MBTI Judging subscale score; PScore=MBTI Perceiving subscale score.

Analysis of Variance (ANOVA)

The relationship between vocational identity scores and the students' identified predominant personality typology was also examined using an analysis of variance (ANOVA). It was hypothesized that the strength of vocational identity would significantly differ across the 16 personality typologies. The overall ANOVA was not significant, $F(15,95) = .846, p > .05$ indicating that the level of vocational identity scores did not significantly vary from one personality type to another. The results of this analysis are presented in Tables 11 and 12.

TABLE 11

RESULTS FOR VOCATIONAL IDENTITY BY PERSONALITY TYPE ANOVA

<u>Effect</u>	<u>F-ratio</u>	<u>df</u>	<u>p-value</u>
Type main effect	207.721	15	.625
Residual	1310.238	80	
Total	1517.958	95	

TABLE 12

MEAN VOCATIONAL IDENTITY SCORES BY PERSONALITY TYPE

<u>Type</u>	<u>Males</u>	<u>Females</u>	<u>Combined</u>
1. ISTJ	10.43 (7)	8.75 (8)	9.53 (15)
2. ISFJ	6.50 (4)	11.67 (6)	9.60 (10)
3. INFJ	0.00 (0)	9.00 (1)	9.00 (1)
4. INTJ	7.00 (1)	0.00 (0)	7.00 (1)
5. ISTP	8.89 (9)	8.55 (11)	8.70 (20)
6. ISFP	13.25 (4)	9.57 (7)	10.91 (11)
7. INFP	9.00 (2)	8.00 (2)	8.50 (4)
8. INTP	10.67 (3)	17.00 (1)	12.25 (4)
9. ESTP	11.00 (4)	10.33 (3)	10.71 (7)
10. ESFP	8.00 (2)	14.50 (2)	11.25 (4)
11. ENFP	0.00 (0)	7.00 (2)	7.00 (2)
12. ENTP	9.00 (2)	0.00 (0)	9.00 (2)
13. ESTJ	11.80 (5)	11.00 (5)	11.40 (10)
14. ESFJ	12.00 (1)	13.00 (2)	12.67 (3)
15. ENFJ	4.00 (1)	0.00 (0)	4.00 (1)
16. ENTJ	0.00 (0)	6.00 (1)	6.00 (1)

Note: The cell numbers are listed in parentheses. The average vocational identity score for the 45 males who completed the MBTI was 9.82 whereas for the 51 females who completed the MBTI their average vocational identity score was 9.88.

Next a two-way ANOVA was conducted to assess whether vocational identity scores significantly differed by personality type and sex of the participant. The overall model was not found to be significant ($F=.981$, $p=.50$) and no interaction was present, suggesting that vocational identity scores do not significantly differ across personality type according to the sex of participants. The results are presented in Table 13.

TABLE 13

2-WAY ANOVA: VOCATIONAL IDENTITY BY PERSONALITY
TYPOLOGY AND SEX

<u>Source</u>	<u>F-ratio</u>	<u>df</u>	<u>p-value</u>
Main Effects			
TYPE	208.015	15	.606
SEX	.380	1	.878
TYPE x SEX	185.596	9	.261
Explained	393.697	25	.503
Residual	1124.261	70	
Total	1517.958	95	

Despite the abundance of students claiming to adhere to a predominantly sensing/ thinking ['--ST--'] MBTI interpersonal style, no significant identifiable level of vocational identity was found to exist for this group. An ANOVA was used to assess whether vocational identity scores significantly differed between students who indicated a preference for the '-ST-' profiles (i.e. ESTJ, ISTP, ESTP & ISTP) versus non-

'-ST-' profiles including INFJ, ENFP, etc. The overall ANOVA was not significant ($F(1,80) = 1.11, p=.27$)

These findings may better be explained when the earlier introversion/extraversion findings are taken into account. The strength of one's endorsement of either introversion 'I' or extraversion 'E' interpersonal style appears to be related to the level of vocational identity expressed. It is the nearly equal representation of students across this statistically significant dimension that appears to be more characteristic of the lack of significance found in this ANOVA.

As a result of the unequal distribution of students across the four racial identity development stages, an ANOVA was not conducted addressing the possibility that vocational identity might vary as a result of racial identity stage. It was anticipated that if vocational identity scores significantly differed between racial identity stages that it would be attributed, unnecessarily and prematurely to the overly inflated representation of students in stage four - that of racial identity internalization.

Procedural Process

The reaction spawned by the administration of the Racial Identity Attitude Scale - Form B (RIAS-B) to over 92 African America high juniors and seniors is noteworthy as it may have had a significant impact on the reliability and validity of the data gathered. The RIAS-B instrument itself, was passively completed by only a handful of students who displayed little curiosity, asked minimal questions, and expressed no overt resentment or hostility regarding the item content. For a number of students, however, the instrument itself and the perceived, overt and subtle, implications of the items generated confusion, verbalized resentment, and even visible anger.

The spread of both individual and group hostility, apparent peer pressure, and resulting confusion may have contributed to the response of several dozen students who subsequently self-selected themselves out of the study. Those students who in other ways typified the characteristics of an 'encounter stage' individual seemed to manage their frustration and express their perceived mistrust by tearing up their instruments, rescinding their consent, persuading fellows students to join in their non-compliance, and to question the authority of the examiners. This reaction and the pattern of behaviors exhibited did not vary when the race of the evaluators changed. The same issues arose for both African American and Caucasian examiners.

The actions of even a few students may have greatly influenced the beliefs, feelings, and reactions of other students in both overt and subtle ways. The dissent that spread throughout a number of the high school classrooms and the subsequent loss of participants and missing data may have had a significant and irreparable impact on the reliability and validity of the data pool obtained.

CHAPTER 5

DISCUSSION

Individually, the effects of racial designation (i.e. Black vs. White), sex, racial identity attitudes, and personality characteristics in the process of vocational development and career selection is well documented (i.e. Helms & Piper, 1994; Holland, 1985; Holland, Gottfredson & Power, 1980; Grace, 1984; Griffith, 1980; Manese, 1984; Parham & Austin, 1994; Thompson, 1984). Only recently have studies been undertaken to examine the possible relationship between racial identity development, personality variables, and the combined effect they may have on individuals' vocational identity development. African American adolescents identify with, and often choose, career paths based upon their perception of that career's relatedness not only to their own personality and interests (Holland, 1985) but also to their own racial identity (Griffith, 1980; Helms & Piper, 1994; Parham & Austin, 1994). This study was specifically designed to determine which of these factors (i.e. racial identity attitudes, personality typology, sex), if any, contribute to measured variance in perceptions of vocational identity among African American adolescents. The results of the present study, similar to previous research efforts (Leong, 1991), indicate that the proposed variables do not significantly explain what contributes to a high or low vocational identity nor do they account for a significant amount of the variance obtained in vocational identity scores for African American high school students.

In the next section, these findings will be discussed in more detail with implications elaborated upon and related back to theoretical assertions as well as past empirical efforts. The practical implications of the results are then outlined and suggestions for assessment and intervention are made. Finally, the limitations of the study are evaluated and future directions for research within the area of assessing African American adolescents' level of vocational identity, racial identity and personality typology are discussed.

Vocational Identity

Awareness of vocational identity level (high vs. low) was originally intended to guide the implementation of alternative methods of career counseling and to facilitate the selection of goals for individuals with diverse vocational needs (Holland, 1985). The primary focus of this investigation was to assess the vocational identity of African American high school students and to evaluate additional factors that may contribute to the variance in measured level of vocational identity development for this specific population. The samples' mean vocational identity scores fell just above the half-way point between an extremely low and extremely high vocational identity score and every possible score on the 18 point scale was represented suggesting a widely varied, and apparently normal distribution of reported levels of vocational identity development. The disparity between high and low scores and diversity of scores found to exist within an otherwise racially homogeneous sample of high school students confirms that there are perhaps other contributory factors at work to account for the diversity and range of scores obtained and it emphasizes the need for tailored vocational education and career counseling services.

The specific factors explored within the context of this study included racial identity and personality typology. Differences in levels (high vs. low) of vocational identity have not been firmly established based on racial group membership alone (Leong, 1991). Therefore, our attention is once again drawn to the fact that a biological or sociopolitical definition of race is not sufficient to make generalized assumptions about a population of individuals. Assessing the racial identity of the students and examining the possibility of within group variability on a factor such as racial identity and vocational identity was a means to move past the limited usefulness of a nominal definition of racial classification (i.e. Black vs. White). The measured vocational identity of the over 200 African American students was quite varied and clearly representative of within group differences, but not necessarily as a fact of either their racial classification or racial identity. The construct of racial identity was not sufficient in explaining the variance in vocational identity scores obtained. The results of this study, although they provide no empirical support for the idea that racial identity contributes to the determination of a sense of vocational identity may be inherently biased. The data appear skewed and the conclusion that racial identity does not account for vocational identity development may be erroneous. The sample itself appeared to be influenced by significant high school attrition rates, limited exposure to majority culture experiences, need to answer *correctly*, and self-deselection. Therefore, the conclusion that racial identity is irrelevant to the development of racial identity or plays a role in vocational decision-making may be intrinsically limited.

The lack of significant findings supporting the relationship between racial identity attitudes and vocational identity levels not only confirms Helms and Piper's (1994) observation that perhaps there is in fact no direct link between the racial

identity and vocational identity, but it also appears to support Leong's (1991) research findings that failed to demonstrate a significant difference in vocational identity level between racially/culturally diverse groups. Perhaps other within group racial and cultural constructs (i.e. acculturation, discrimination experiences, etc.) need to be explored in order to tease out differences in vocational identity levels and/or development for African American high school students preparing to enter the workforce.

In addition, the construct and measurement of the concept of racial identity (particularly for high school students) needs to be examined more closely. The construct of racial identity has not only recently undergone a theoretical restructuring that may have implications in how the construct is measured, discussed, and applied, but it raises theoretical questions about its generalizability and application to African American adolescents specifically.

Variance in vocational identity scores was not clearly supported by the predominance of a particular personality typology. The results of the ANOVA indicated that the mean vocational identity score for each of the 16 Myers-Briggs personality types assessed did not significantly differ from one another. Although within group variability was found to exist for the predominance of several specific personality typologies, no direct link was made between the presence of a specific personality constellation and either high or low vocational identity scores. Personality differences have long been thought to be the primary contributor to vocational choice (Goldschmid, 1967; Holland, 1985). The results of the study do not refute this claim but rather, imply that how students see themselves and the level of confidence with which they make decisions about personality-congruent vocational choices are not ultimately based on a unique personality constellation.

The results revealed that the introversion/extraversion dyad, a subset of characteristics composing a Myers-Briggs personality typology was significantly positively correlated with vocational identity scores and was shown to significantly contribute to the explained variance in vocational identity scores. In other words, the stronger the association one feels to either a strongly introverted or strongly extraverted interpersonal style, the more likely one is to express a high or strong vocational identity. This finding appears to tangentially support previous conclusions that vocational identity is greatly affected by variances in self-esteem (Munson, 1992). Although only speculative, it appears that the stronger one's affiliation to a particular interpersonal preference or characteristic the greater clarity with which one can define themselves and engage in the decision-making process. The relationship between strongly endorsed "E/I" preferences and high vocational identity is, however, correlational and provides no clear evidence of the true causative nature of this relationship between interpersonal characteristics and expressed vocational identity levels. The endorsement of either a high 'I' or 'E' characteristic appears to imply the presence of a high vocational identity score. Logic follows that a weak endorsement of the 'E' and 'I' items would lead to reporting a low vocational identity score. It is unknown whether a combination of high and low personality preference scores would correlate with a predictable vocational identity score, nor is possible to confirm at this point that the flexibility of one's endorsement of a combination for either or both of these preferences would lead to a predictable pattern of vocational identity scores.

Previous studies that have considered sex differences in the assessment of vocational identity have consistently found no significant differences in vocational identity levels based solely on sex (Grotevant & Thorbecke, 1982; Munson, 1992; Savickas, 1985). The lack of representation by African American high school and

college students in these samples drew into question the possibility that sex may be a contributing factor in the vocational identity level of African American high school students. The current findings, however, support previous research efforts and suggest that sex is in fact not a significant contributor to the variance in vocational identity levels obtained for an African American high school population.

The possibility also exists that although the process by which each sex reaches his or her level of vocational identity may differ, the end results appears the same. Grotevant and Thorbecke (1982) contend that although male and female adolescents may share the same level of vocational identity, they appear to utilize varying interpersonal styles in achieving their level of vocational identity development. This raises the methodological question of how the process of vocational identity evolves and how it might best be measured. The current study used a static measure, rather than a longitudinal approach, to examine the factors related to vocational identity at a given point in time, and therefore, is unable to address longitudinal and developmental issues of vocational identity development. It has even been suggested that the adolescent population may be at a unique developmental point that causes their vocational identity to be unstable (Leung, Conoley, Scheel & Sonnenberg, 1992).

The variability of vocational identity scores obtained for this sample supports the notion that vocational identity is not age-dependent (Lucas, Gysber, Buescher and Heppner, 1988) and that students of all ages can identify and express their vocational identity. The assumption of instability put forth by Leung, et al. (1992) has merit when contextualized in the longitudinal process of adolescent identity development (Erikson, 1968). For the purpose of assessment and vocational intervention, the static measure of

vocational identity, even for high school students appears appropriate, informative, and relatively effective.

The limited number of identified career development barriers reported on the MVS' Barriers subscale in the current study provides evidence for Miller and Wells' (1988) conclusion that perhaps high school students possess a limited awareness of potential barriers and roadblocks to career selection. The average number of barriers identified was less than one per person. This result appears to lend support to the perception that students have not yet been exposed to the economic, racial, and/or sociopolitical barriers or discrimination experiences that may be identified by older African American students. The isolation and homogeneity inherent in this research setting may contribute to the appearance of naivete and mask the reality of the larger sociopolitical situation.

The absence of perceived vocational identity barriers, however, suggests that these students are open to the possibility of considering a wide variety of career options. Utilizing the open-mindedness and career decision-making confidence of these students in career exploration, may provide the necessary momentum to alter perceived stereotypes, overcome obstacles, and shatter historical trends noted to exist for minority individuals entering in the workforce.

Racial Identity

Previous research efforts have found inconsistent significance in the consideration of race and racial identity attitudes in the context of vocational exploration (i.e. Cross, 1991; Evans & Herr, 1994; Griffith, 1980; Manese, 1984; Thompson, 1984). Helms and Parham (1994), provided evidence for the development of the null hypotheses with their prediction that in fact no statistically significant link

would be found between racial identity attitudes and vocational variables including vocational identity. According to the statistical data alone, racial identity would appear to play little part in determining the concept these students develop of themselves in relation to the workworld or in their reported vocational identity. Superficially, the lack of statistically significant results obtained in the current study support this hypothesis, however, the underlying pattern of racial identity responses obtained appear unable to convincingly address this statement and, in fact, provide room for speculation and skepticism. The data gathered from the administration of the RIAS-B demonstrate that virtually no variability exists in the students' perception of their racial identity attitudes. The vast majority, nearly 84% to be exact, of the high school students sampled rated themselves as holding racial beliefs consistent with the highest level of identity development - that of racial identity integration. Perhaps it is attrition that is to be blamed for the absence of a more substantial representation of pre-encounter, encounter, and immersion stage individuals. Maybe the absence of these students is due to self-elimination from the study or due to an exaggeration of their perception, beliefs, and experiences as an African American individual. Or maybe the absence of a wider band of diversity results from the lack of exposure these students may have had to the same levels of racism and discrimination practices that African American students attending predominantly White colleges and universities are exposed to. It was in this racially heterogeneous higher educational forum that the construct and assessment of racial identity was developed.

The pool of racial identity attitude results gathered from the administration of the RIAS-B, however, are skewed and ignite inquiry into the area of theory and assessment of the construct of racial identity attitudes, particularly with high school students. The original construct of racial identity evolved out of a need to address the

implications of a sociopolitical and economic racial classification. "Racial identity theories do not suppose that racial groups in the United States are biologically distinct, but rather suppose they have endured different conditions of domination or oppression" (Helms, 1995). Thus the explanatory models derived from these perceptions was intended to address the manner in which African American individuals adapted in an environment in which they may be denied access or resources. These models, Helm's (1981) in particular, historically describe the use of a linear, stage-wise progression of self-acceptance and racial identity development. A process assumed to progress from a period of self-hatred to a more highly developed and integrated phase of self-acceptance, tolerance, and appreciation as utilized in the current study.

In a recent reformation of the linear developmental processes, Helms (1995) purports replacement of the static concept of racial identity *stages* with the more fluid descriptor of *statuses*. "The [original] stages have been judged to be inadequate for describing the developmental processes surrounding issues of race" (Helms, 1995). The new descriptor assumes that differential socialization occurs due to racial classification as well as the development of differential reactions to that socialization. The racial identity statuses are now defined as the dynamic cognitive, emotional, and behavioral processes that govern a person's interpretation of racial information in his or her interpersonal environment. Statuses are assumed to give rise to schemata which are behavioral manifestations of the underlying statuses. It is now believed that the RIAS-B assesses the schemata through which an individual responds to their environment rather than static stages of even the underlying statuses. The statuses are still assumed to progress sequentially but are expressed

according to a level of dominance within the individual's personality structure.

Maturity or progression is triggered by need.

The significance of this new development lies in the flexibility of the racial identity development process. Accordingly, it would appear that the statuses and schemata expressed by the African American high school students in the current study consisted of a sophisticated capacity to express a positive racial self and to recognize and resist the multiplicity of practices that exist in the environment to discourage positive racial self-conceptions and group expression. The level of integration and maturity demanded by the expression of this schemata appears far more involved than many adolescents could manage. Therefore, the question remains, why did 84% of the current sample report beliefs and behaviors representative of the most complex and mature level of racial identity development?

One conclusion is that whether the construct of racial identity development is measured in static stages or in fluid statuses and schemata perhaps it is not universal. The underlying assumptions of racial identity development appear to theoretically apply to adolescents, however, the actual assessment of 92 African American high school students raises doubts. Did over four-fifths of the sample describe themselves as having achieved the highest level of racial identity integration and acceptance because they had thoughtfully considered their developing sense of self and through experience, and challenge, come to this pinnacle of understanding? Or, have these students reached an artificial plateau of racial identity development within the limited and homogeneous context in which they spend their daily lives? The latter appears to be a more realistic assessment of the findings. The sample was derived from an extremely homogeneous population of African American high school juniors and seniors in an urban, racially similar, economically disadvantaged setting who have not

yet been exposed to the racism that exists in predominantly White settings. If the racial identity pseudo-stages are cyclical in their development, the option remains that these students have perhaps succeeded in reaching the highest level of racial identity development that this environment and their cognitive, emotional, and social development allows. It is only through further crises, demands, and experiences that they will theoretically cycle back through the racial identity stages in a different setting.

It also plausible that students with less well-defined or well-developed racial identity attitudes were among those students who chose to quit high school. Attrition rates remain high and it is beyond the scope of this study to assess the racial identity of the students who, for one reason or another, chose to leave high school before their junior or senior years.

A multiple regression equation was utilized to assess whether the students reported racial identity stage or status significantly accounted for the explainable variance in vocational identity scores. The actual results indicate that identification with the internalization stage of racial identity alone was not enough to explain a significant portion of the variance in vocational identity scores obtained. Despite the abundance of students who ascribe to the internalization stage of racial identity development, it did not explain the occurrence of either high or low vocational identity scores.

The implications of this conclusion also raises questions about the validity of using the RIAS-B on African American adolescents. The current versions of the scale, both the RIAS-B short and long versions, were developed using a diverse sample of college and university students - primarily African American students attending predominantly White universities. Therefore, it seems reasonable to assume that the

RIAS-B can be appropriately used to assess the racial identity of African American male and female college/university students (Helms, 1993). The question remains as to whether or not this instrument, developed and normed on college students in the midst of a racial identity crises, is valid with high school students, particularly African American youth residing in a racially homogeneous environment. The instrument may lack the sensitivity necessary to capture the subtle differences in racial identity attitudes and development within such a young and homogeneous population.

In spite of the theoretical and assessment concerns regarding racial identity development and its assessment with the RIAS-B, the fact remains that a number of participants in the current study removed themselves from the study, prematurely, in reaction to the affective experience stirred by the RIAS-B itself. The apparent anger and distress presumed to be captured by items on the instrument instead ignited resistance and rebellion to the assessment procedure. Therefore, as a result of the inherent sampling bias that exists for those students who chose to remain in school, it remains difficult to accurately assess the level of influence that racial perception and identity development have on vocational identity levels for African American high school students and suggests that further research endeavors are warranted.

Personality Typology

The influence of personality characteristics on vocational development was recognized decades ago (Super, 1957; Holland, 1959) and remains a primary thrust of current vocational research.

Acting on the assumption that generalizations about personality types derived from an entirely White sample were not necessarily true for African American students, studies were undertaken to explore the existence of personality preferences within and

across racial groups (Carlson & Levey, 1973; Kaufman, Kaufman & McLean, 1993; Kaufman, McLean & Underwood, 1992; Levy, Murphy & Carlson, 1972). The results have consistently presented significant differences in the predominant identified personality preferences and typology for African American and Caucasian college students. Previous findings that suggest a preference for an analytical or "thinking" mode of interaction and learning (Kaufman, Kaufman & McLean, 1993) or for the multiple Myers-Briggs Type Indicator characteristic of "-STJ" (implying the presence of "ISTJ" or "ESTJ") exist for African American students (Levy, Murphy & Carlson, 1972). Fifty percent of the 750 African American students assessed by Levy et al. indicated a preference for the '-STJ' profile, whereas 25% specifically endorsed items representing the 'ESTJ' personality type. This pattern of results is reflected in the data obtained from the current study. The three most highly endorsed MBTI personality profiles endorsed by both African American male and female high school students included: "ISTJ", "ISTP", and "ESTJ". The commonality found within these typologies is "-ST-", a preference noted to commonly occur within African American samples (Kaufman, Kaufman & McLean, 1993; Levy, Murphy & Carlson, 1972). Eighty-one percent of the students reported a 'sensing' learning style preference rather than an 'intuitive' learning-style preference – a nearly exact statistical replication of Kaufman, Kaufman, & McLean's (1993) findings.

The predominance of a preference for '-ST-' learning, decision-making and interpersonal interactions for these students may; (1) be representative of the skills, and characteristics necessary to survive in this high school setting, (2) may be the skills most rewarded in this academic environment, or (3) may reflect a culturally relevant learning style. Regardless of the explanation, the implication remains the same that these students have unique learning needs that demand attention not only in

the classroom but also in the area of career exploration and counseling. The careers most likely to attract strong '-ST-' individuals include; teachers, police officers, farmers, bankers, mechanical engineers, auditors, military personnel, carpenters, sales and marketing personnel, etc. (Myers & McCaulley, 1985).

Despite the predominance of the '-ST-' personality preference individuals who endorsed this set of characteristics did not significantly differ from non '-ST-' students (e.g. INFP, ENFJ, etc.) in their overall level of vocational identity development.

Practical Implications

The limited statistically significant findings in this study linking racial identity attitudes and personality preferences to vocational identity levels does not preclude the possibility that the results are meaningful in more practically applicable ways for students, counselors, and school personnel.

Determining a student's level of confidence in career decision-making and certainty about their career path is a vital aspect in determining the most appropriate form of vocational intervention. If parsimony is a concern, then a measure of vocational identity (i.e. MVS) might be a priority screening measure in assessing and developing career counseling services (Schmidt & Callan, 1992). The MVS instrument was originally intended to assist in the screening of students who required specific career education and counseling (Holland, Daiger & Power, 1980). The measurement of vocational identity through the administration of the MVS continues to maintain its integrity as an appropriate, economical and useful assessment tool for high school as well as college and university students.

The variability found to exist in self-reported vocational identity scores for this particular sample of 209 African American high school students suggests that the

administration of the MVS and the assessment of vocational identity alone may be a valuable place to begin conversations about career decision-making and planning. The exact nature of factors influencing the variability in vocational identity levels remains vague and undetermined and yet, in the absence of this data the measurement of vocational identity appears personally relevant to most high schools students faced with the developmental and practical task of career decision-making and planning. Some students may be having experiences (i.e. educational, skills training, employment, role models, etc.) that result in fostering more well-defined, concrete vocational goals that other students are not exposed to, regardless of their racial identity development or interpersonal preferences. Leong (1991) and Munson (1992), both found little difference in vocational identity scores based on racial or cultural differences alone, however, significant within group variability has now been identified for African American high school students. Therefore, the construct of vocational identity appears to be a viable assessment tool even when considered in isolation.

The single significant contributor accounting for the variance in vocational identity scores was the Introversion-Extraversion (E-I) scale of the Myers-Briggs Type Indicator. The significance of these polar-opposite personality preferences indicates that a personality preference reflected in strong out-going interpersonal characteristics or in more subtle and reflective style, or even the flexibility inherent in ascribing to strong traits of a combination of both 'E' and 'I' preferences, contribute to higher levels of self-reported vocational identity development. All students whether they are actively involved, extraverted, and social, or quiet, reserved, and private, or even somewhere in between, needed assistance in assessing their level of vocational identity as well as the additional information need or barriers perceived to stand in the way of

desired career choices. A lack of self-definition, or ambivalent feelings about interpersonal strengths and preferences may potentially confuse the career exploration process thus leading to a lowered sense of reported vocational identity.

According to the theory guiding the use of the RIAS-B, the most significant assessment instrument available to measure the expression of racial identity stages (or *schematas*), racial identity attitudes and beliefs are either as well-developed in the lives of these students as they can be (within the homogeneity of their environment) or yet to be challenged and to mature. Whether racial identity attitudes are unchallenged or integrated, the possibility of career exploration even when considered against the backdrop of the potential hindrances of artificially imposed sociopolitical racial beliefs and discrimination is never greater. The dilemma that exists as a result of the youthfulness, isolation, and homogeneity of these adolescents' experience, is the opportunity to instill hopes, dreams, and potential in students who might otherwise prematurely foreclose on, or self-select themselves out of certain career opportunities based on perceived racial inequities, historical precedence, self-doubt, or inadequate information.

Study limitations and future recommendations

As with all social science research efforts, this investigation has a number of limitations. While the nearly 300 high school juniors and seniors assessed for this study appeared quite homogeneous, a more complete understanding of the sample characteristics and demographics may have added a different dimension to the results and ability to examine the influence of extraneous experiences and information. For example, the level of education, marital status, and/or occupations of parental figures would have provided information from which conclusions about role models, socioeconomic status, and family expectations could have been made.

Another potentially limiting factor is related to the assessment procedure of the dependent variable and the proposed constructs. The assessment procedure utilized within the high school lent itself to fixed time periods, varying levels of competence, and fluctuating compliance on the part of the students. The battery of instruments the students were asked to complete was successfully and entirely completed by a handful of students during the prescribed period of time. Other students were unable to or unwilling to complete the instruments as quickly or efficiently. The disparity in skills and cooperation caused an inconsistency in the data collection process. Self-selection, mortality, and other inconsistencies also clearly influenced the reliability and completeness of the data pool. Seventy-nine students completed all three instruments with a specified time period, 120 were able to complete two of the instruments and 289 were able to complete just one of the instruments before time expired. According to the published information regarding instrument difficulty, reading level, and expected completion time, all three instrument were anticipated to be completed within one class period. The apparently limited reading skills, lack of cooperation, and variable maturity level found to exist among the students were not anticipated. The strong reaction ignited, specifically by the administration of the RIAS-B, certainly played a role in the validity of using the instrument with this population and well as the validity and reliability of the specific results obtained in the study. In addition, the significant attrition rate from Community High School may have contributed to methodological issues and inherent sampling biases.

A final limitation of the study relates to its research design. As with all correctional studies, no statements pertaining to casual relationships can be made. Part of the rationale for this investigation was related to the fragmented nature of previously conducted studies. Although numerous investigations into vocational

identity have been completed in recent years, little effort has been made to consolidate the findings of vocational identity with racial identity and personality factors. This study was undertaken to fill that gap in the empirical literature. Because of the state of research in this area to date, efforts at determining causal relationships would have been premature. Now that racial identity and personality preferences have been found not to significantly contribute to the explained variance in vocational identity levels, future research endeavors might more strategically be directed at determining other factors of causality.

Future research efforts undertaken for the purpose of uncovering relationships that potentially exist between individuals' vocational identity and other constructs can potentially employ a variety of strategies. For example, a longitudinal approach may be employed. The power of longitudinal research in the exploration of racial identity attitude development and expression or in the development of a particular level of vocational identity remains unknown and worthy of investigation. A longitudinal approach may circumvent the skewed representation of racial identity integration that resulted from a static assessment of a more fluid and developmentally oriented construct. The same may hold true for the developmental construct of vocational identity. Both Leung, Conoley, Scheel and Sonnenberg (1992) and Munson (1992), noted that the process by which individuals reach their measured level of vocational identity differ, particularly between males and females despite similar end results. A longitudinal approach may better clarify the developmental nature of this construct and better direct the more appropriate timing for career interventions.

A second strategy may involve generating a more thorough assessment and understanding of demographic factors if for no other reason than to better control for, and rule out, the potential influence of extraneous information and students'

experiences. Parental educational level and work history, sibling educational experience, marital status, family support, and socioeconomic status, to name a few may be more significant in accounting for the explained variance in individuals' reported vocational identity levels than originally anticipated.

Future research endeavors may employ a more formal preparation session, a qualitative interview, and perhaps even a debriefing process with some or all of the research participants. Through such exchanges a greater understanding of self-perceptions and career-choice influences may be developed. Qualitative conversations may be particularly valuable in establishing a lens through which to interpret the racial identity findings of a minority population. The preparation session appears increasingly important when considered in the context of the strong affective reaction the administration of the RIAS-B stirred. The unanticipated hostility and resentment influenced the decision of some students to eliminate themselves for the data pool and to attempt to persuade others to follow. A structured preparation session may help to counter these reactions and thus promote the collection of a more representative sample of African American high school juniors and seniors and thus contribute to the reliability and validity of the data collected.

Regardless of the technique employed, the idea that being African American is "not simply a minority status, or state of being non-White, but rather a pre-existing, independent and evolving specific identity that is greatly influenced by the environment and responsive to external pressures", (Griffith, 1980) remains primary. Examination of within group variability remains vital to understanding the developmental tasks and vocational process of African American adolescents.

LIST OF REFERENCES

- Block, J. & Ozer, D. J. (1982). Two types of psychologists: Remarks on the Mendelson, Weiss, and Feimer contribution. Journal of Personality and Social Psychology, 42, 1171-1181.
- Blustein, D.L. Devenis, L. E., & Kidney, B. A. (1989). Relationship between the identity formation process and career development. Journal of Counseling Psychology, 2, 196-202.
- Carlyn, M. (1977). An assessment of the Myers-Briggs Type Indicator. Journal of Personality Assessment, 41, 461-473.
- Carskadon, T. G. (1977). Test-retest reliabilities of continuous scores on the Myers-Briggs Type Indicator. Psychological Reports, 41, 1011-1012.
- Carskadon, T. G. (1982). Sex differences in test-retest reliabilities of continuous scores on Form G of the Myers-Briggs Type Indicator. Research in Psychological Type, 5, 78-79.
- Cheatham, H. E. (1990). Africentricity and career development of African Americans. Career Development Quarterly, 38, 334-346.
- Cross, W. E. (1971). The Negro-to-Black conversion experience: Toward a psychology of Black liberation. Black World, 20, 13-27.
- Cross, W. E. (1978). The Cross and Thomas models of psychological nigrescence. Journal of Black Psychology, 5, 13-19.

- Cross, W. E. (1994). Nigrescence theory: Historical and explanatory notes. Journal of Vocational Behavior, 44, 119-123.
- DeVito, A. J. (1985). Review of the Myers-Briggs Type Indicator. In J. V. Mitchell, Jr. (Ed.), Ninth Mental Measurements Yearbook. Lincoln, NE: University of Nebraska Press.
- Erikson, E. H. (1968). Identity: Youth and Crisis. New York: Norton.
- Evans, K. M. & Herr, E. L. (1994). The influence of racial identity and the perception of discrimination on the career aspirations of African American men and women. Journal of Vocational Behavior, 44, 173-184.
- Fordham, S. (1988). Racelessness as a factor in Black students' school success. Harvard Educational Review, 58, 54-84.
- Fordham, S. & Ogbu, J. U. (1986). Black students' school success: Coping with the burden of 'acting White'. Urban Review, 18, 176-206.
- Goldschmid, M. L. (1967). Prediction of college majors by personality types. Journal of Counseling Psychology, 14, 302-308.
- Gottfredson, L. (1981). Circumscription and compromise: A developmental theory of occupational aspirations. Journal of Counseling Psychology, 28, 545-579.
- Grace, C. A. (1984). The relationship between racial identity attitudes and atypical occupations among Black college students. (Doctoral dissertation, Teachers College, Columbia University, 1984). Dissertation Abstracts International, 45, 507A.
- Griffith, A. (1980). Justification for a Black career development. Counselor Education and Supervision, 19, 301-210.
- Grotevant, H.D. & Thorbecke, W. L. (1982). Sex differences in styles of occupational identity formation in late adolescence. Developmental Psychology, 18, 396-405.

Hall, E. R. & Post-Kammer, P. (1987). Black mathematics and science majors: Why so few? Career Development Quarterly, 35, 206-219.

Helms, J. E. (1990). Black and White Racial Identity: Theory, research and practice. New York: Greenwood Press.

Helms, J. E. (1994). Racial identity in the school environment. In P. Pedersen & J. Carey (Eds.), Multicultural Counseling in Schools. Boston: Allyn & Bacon.

Helms, J. E. (1994). Racial identity and career assessment. Journal of Career Assessment, 2, 199-209.

Helms, J. E. & Carter, R. T. (1995). Development of the White Racial Identity Inventory. In J. E. Helms (Ed.), Black and White Racial Identity: Theory, Research and Practice. Westport, CT: Greenwood.

Helms, J. E. & Piper, R. E. (1994). Implications of racial identity for vocational psychology. Journal of Vocational Behavior, 44, 124-138.

Henkels, M. T., Spokane, A. R., & Hoffman M. A. (1981). Vocational identity, personality and preferred mode of interest inventory feedback. Measurement and Evaluation in Guidance, 14, 71-76.

Holland, J. L. (1959). A theory of vocational choice. Journal of Counseling Psychology, 6, 35-45.

Holland, J. L., Daiger, D. C., & Power, P. G. (1980a). My Vocational Situation. Palo Alto, CA: Consulting Psychologists Press.

Holland, J. L., Daiger, D. C., & Power, P. G. (1980b). My Vocational Situation: Description of an Experimental Diagnostic Form for the Selection of Vocational Assistance. Palo Alto, CA: Consulting Psychologists Press.

Holland, J. L., Gottfredson, D. C., & Power, P. G. (1980). Some diagnostic scales for research in decision making and personality: Identity, information, and barriers. Journal of Personality and Social Psychology, 39, 1191-1200.

Holland, J. L. & Holland J. E. (1977). Vocational indecision: More evidence and speculation. Journal of Counseling Psychology, 35, 118-123.

Jackson, B. (1975). Black identity development. Journal of Educational Diversity, 2, 19-25.

June, L. N. & Pringle, A. E. (1977). The concept of race in career development theories of Roe, Super, and Holland. Journal of Non-White Concerns in Personnel and Guidance, 6, 17-24.

Jung, C. G. (1971). Psychological Types. Princeton University Press: Princeton, NJ.

Kaufman, A. S., Kaufman, N. L. & McLean, J. E. (1993). Profiles of Hispanic adolescents and adults on the Myers-Briggs Type Indicator. Perceptual and Motor Skills, 76, 628-630.

Leong, F. T. (1991). Career development attributes and occupational values of Asian American and White American college students. Career Development Quarterly, 39, 221-231.

Leong, F. T. L. & Morris, J. (1989). Assessing the construct validity of Holland, Daiger and Power's measure of vocational identity. Measurement and Evaluation in Counseling and Development, 22, 117-125.

Leung, S. A., Conoley, C. W., Scheel, M. J., & Sonnenberg, R. T. (1992). An examination of the relation between vocational identity, consistency, and differentiation. Journal of Vocational Behavior, 40, 95-107.

Levy, N., Murphy, C. & Carlson, R. (1972). Personality types among Negro college students. Educational and Psychological Measurements, 31, 641-653.

Lucas, E. B., Gysbers, N. C., Buescher, K. L. & Heppner, P. P. (1988). My Vocational Situation: Normative, psychometric, and comparative data. Measurement and Evaluation in Counseling and Development, 20, 162-170.

Lunnenborg, P. W. (1985). Review of My Vocational Situation. In J. V. Mitchell (Ed.), The Ninth Mental Measurements Yearbook (Vol. 11), 1026-1027. Highland Park, NJ: Gryphon.

Manese, J. E. (1984). The relationship between Black students' racial identity attitudes and vocational identity foreclosure and career exploration attitudes. Unpublished Masters Thesis, University of Maryland, College Park, MD.

McCarley, N. & Carskadon, T. G. (1983). Test-retest reliabilities of scales and subscales of the Myers-Briggs Type Inventory and of criteria for clinical interpretive hypotheses involving them. Research in Psychological Type, 6, 24-36.

Marcia, J. E. (1967). Development and validation of ego-identity status. Journal of Personality and Social Psychology, 3, 551-558.

Myers, I. B. (1962). The Myers-Briggs Type Indicator Manual. Princeton, NJ: Educational Testing Service.

Myers, I. B. & McCaulley, M. H. (1985). Manual: A guide to the development and use of the Myers-Briggs Type Indicator. Palo Alto, CA: Consulting Psychologists Press.

Munson, W. W. (1992). Self-esteem, vocational identity, and career salience in high school students. Career Development Quarterly, 40, 361-368.

Murray, J. B. (1990). Review of research on the Myers-Briggs Type Indicator. Perceptual and Motor Skills, 70, 1187-1202.

Parham, T. A. & Austin, N. L. (1994). Career development and African Americans: A contextual reappraisal using the nigrescence construct. Journal of Vocational Behavior, 44, 139-154.

Parham, T. A. & Helms, J. E. (1981). The influence of Black students' racial identity attitudes on preference of counselor's race. Journal of Counseling Psychology, 28, 250-257.

Parham, T. A. & Helms, J. E. (1985). Attitudes of racial identity and self-esteem of Black students: An exploratory investigation. Journal of College Student Personnel, 143-147.

Parham, T. A. & McDavis, R. (1987). Black men, an endangered species: Who's really pulling the trigger. Journal of Counseling and Development, 66, 24-27.

Piper, R. E. (1992). An examination of the relationship between racial identity attitudes and career concerns for Black students. Unpublished paper, University of Maryland, College Park, MD.

Ponterotto, J. G., Casa, J. M. , Suzuki, L. A. & Alexander, C. M. (1995). Handbook of Multicultural Counseling. Thousand Oaks, CA: Sage.

Pyant, C. T. & Yanico, B. J. (1991). Relationship of racial identity and gender-role attitudes to Black women's psychological well-being. Journal of Counseling Psychology, 38, 315-322.

Sabnani, H. B. & Ponterotto, J. G. (1992). Racial/ethnic minority-specific instrumentation in counseling research: A review, critique, and recommendations. Measurement and Evaluation in Counseling and Development, 24, 161-187.

- Savickas, M. L. (1985). Identity in vocational development. Journal of Vocational Behavior, 27, 329-337.
- Schmidt, A. & Callan, V. J. (1992). Evaluating effectiveness of a career intervention. Australian Psychologist, 27, 123-126.
- Steele, R. S. & Kelly, T. J. (1976). Eysenck personality questionnaire and Jungian Myers-Briggs Type Indicator correlation of extraversion-introversion. Journal of Consulting and Clinical Psychology, 44, 690-691.
- Thomas, G. E. (1985). College major and career inequality: Implications for Black students. Journal of Negro Education, 54, 537-547.
- Tinsley, H. E. A. (1985). My Vocational Situation. In D. J. Keyser & R. C. Sweetland (Eds.) Test Critiques (Vol. 2). 509-517. Kansas City, MO: Test Corporation of America.
- Tinsley, H. E. A. (1994). Racial identity and vocational behavior (Editorial). Journal of Vocational Behavior, 44, 115-117.
- Vondracek, F. W. (1991). Current status of the concept of vocational identity. Man and Work, 3, 80-77.
- Yanico, B. J., Swanson, J. L., & Tokar, D. M. (1994). A psychometric investigation of the Black Racial Identity Attitude Scale - Form B. Journal of Vocational Behavior, 44, 218-234.

APPENDIX - A

Demographic Information

About Yourself: Age _____ Sex _____

Average grades:

___ A/ A-
___ A-/B
___ B/B-

___ B-/C
___ C/C-
___ lower then C-

Do you work part-time? _____ Type of work _____

What type of career are you considering? _____

Do you plan to attend college? _____

About your family:

You currently live with (mother, grandmother, uncle, etc.) _____

Your parents are (married, separated, etc.) _____

Your mother's highest level of education (high school, some college, etc.)

Your father's highest level of education (high school, some college, etc.)

Number of brothers _____ Number of sisters _____

APPENDIX - B

Consent Form for Participation in Research Project

The College of Education at Michigan State University and Community High School support the practice of protection for human subjects participating in research. The following information is provided so that you may decide whether you wish to participate in the present study.

This study is concerned with the identification and collection of students' personal characteristics, beliefs, and opinions of their educational experiences. Results will be used to assist freshmen in their efforts to succeed in high school. Results will also assist school staff in their counseling and instruction of students.

Your participation is voluntary. Even if you agree to participate, you are free to withdraw at any time. You are welcome to ask questions about the study. Your name will not be associated with the research findings. If you complete the instruments, you will qualify to receive a free packet of career selection materials including an interpretation of the Myers-Briggs Type Indicator. The instruments will take about an hour to complete.

Michigan State University, Community High School and myself greatly appreciate your cooperation.

Signature of participant

Date

Print name here

Principle Investigator:

Patricia Peeke, M.Ed.
Counseling Psychology Doctoral Student
Michigan State University

Project Supervisor:

Robbie Steward, Ph.D.
Associate Professor, CEPSE
Michigan State University

APPENDIX - C

MY VOCATIONAL SITUATION

by John L. Holland, Denise C. Daiger, and Paul G. Power

Directions: Try to answer each of the following statements as mostly TRUE or mostly FALSE. Circle the answer that represents your present opinion.

In thinking about your present job or in planning for an occupation or career:

- | | | |
|---|---|---|
| 1. I need reassurance that I have made the right
choice of occupation. | T | F |
| 2. I am confused about the whole problem of deciding
on a career. | T | F |

For the last two questions, circle YES or NO.

- | | | |
|--|---|---|
| 1. I need the following information: | | |
| How to find a job in my chosen career. | Y | N |
| 2. I have the following difficulties. | | |
| I lack the special talents to follow my
first choice. | Y | N |

Sample items from *My Vocational Situation* by John L. Holland, Denise C. Daiger, and Paul G. Power. Copyright 1980 by John L. Holland, Denise C. Daiger, and Paul G. Power. Published by Consulting Psychologists Press, Inc., Palo Alto, CA 94303. All rights reserved. Further reproduction is prohibited without written permission from the publisher.

APPENDIX - D

RACIAL IDENTITY ATTITUDES SCALE - Black Version:
"SOCIAL ATTITUDES SCALE"

by Janet Helms

Directions: This questionnaire is designed to measure people's social and political attitudes. There are no right or wrong answers. Use the scale below to respond to each statement.

1	2	3	4	5
Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree

1. ____ I believe that being Black is a positive experience.
2. ____ I know through experience what being Black in America means.
3. ____ I feel very uncomfortable around other Black people.
4. ____ I believe that Black people should learn to think and experience life in ways which are similar to White people.

Sample items from *Racial Identity Attitudes Scale - Black Version* by Janet E. Helms. Copyright 1990 by Janet E. Helms. Published in Black and White Racial Identity: Theory, research and practice. Greenwood Press, New York, NY.

APPENDIX - E

MYERS-BRIGGS TYPE INDICATOR - Form G

by Katharine C. Briggs and Isabel Briggs Myers

There are no "right" and "wrong" answers to these questions. Your answers will help show how you like to look at things and how you like to go about deciding things. Knowing your own preferences and learning about other people's can help you understand where your special strenghts are, what kind of work you might enjoy, and how people with differnt preferences can relates to each other and be valuable to society.

Part I. Which answer comes closer to telling how you usually feel or act?

1. Do you prefer to
 - (A) arrange dates, parties, etc.. well in advance, or
 - (B) be free to do whatever looks like fun when the time comes?
2. Do you usually
 - (A) value sentiment more than logic, or
 - (B) value logic more than sentiment?

Part II: Which word in each pair appeals to you more?

1. (A) systematic
(B) casual
2. (A) quick
(B) careful

Part III: Which Answer comes closer to telling how you usually feel or act?

1. Are you
 - (A) easy to get to know, or
 - (B) hard to get to know?
2. When you start a big project that is due in a week, do you
 - (A) take time to list the separate things to be done and the order of doing them, or
 - (B) plunge in?

Sample items from the *Myers-Briggs Type Indicator - Form G* by Katharine C. Briggs and Isabel Briggs Myers. Copyright 1977 by Peter B. Myers and Katherine D. Myers. Published by Consulting Psychologists Press, Inc., Palo Alto, CA 94303. All rights reserved. Further reproduction is prohibited without Publisher's written consent.

MICHIGAN STATE UNIV. LIBR



3129301566076