A Comparative Study of Intrinsic and Extrinsic Work Values and Career Maturity for Minority College Students

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A COMPARATIVE STUDY OF INTRINSIC AND EXTRINSIC WORK VALUES AND CAREER MATURITY FOR MINORITY COLLEGE STUDENTS

Marvin Hall, Ed.D.
Western Michigan University, 1991

This study was conducted to investigate comparisons of intrinsic and extrinsic work values and career maturity for minority college students. Results of this study may enhance efforts to provide more effective career development programs for minority college students. The investigation compared participants in a personal and academic support services program (PASSP) by sex, and PASSP and non-PASSP participants by groups. The PASSP which consisted of business majors was based upon expectations and self-efficacy of the success of program participants.

The study consisted of forty participants, 20 females and 20 males. The volunteers included 10 males and 10 females who were in a personal and academic support services program and 10 males and 10 females who were also business majors but not in the program. The Work Values Inventory (WVI) (Super, 1968) and the Career Maturity Inventory (CMI) (Crites, 1978a) were used to measure intrinsic and extrinsic work values and career maturity of minority participants.

No significant differences at the .05 level of significance were found in intrinsic and extrinsic work values and career maturity by group or by sex of participants between the two groups. However, the intrinsic and extrinsic work values and career maturity scores within each group were similar, and the PASSP
participants had a higher degree of similarity than did non-PASSP participants' scores.
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A comparative study of intrinsic and extrinsic work values and career maturity for minority college students

Hall, Marvin, Ed.D.
Western Michigan University, 1991
ACKNOWLEDGEMENTS

I wish to express a special acknowledgement and sincere appreciation to my advisor and committee chairperson, Dr. Joseph Morris, for his assistance, direction, encouragement, and support throughout my course of study; and to my committee members, Dr. Robert Betz, Dr. Robert Brashear, and Dr. Earl Washington, for their advice, assistance, and guidance.

Last, but not least, my deepest appreciation, gratitude, and thanks are extended to my father, Grover Hall, and to my mother, Mary Hall, who instilled in me the true meaning of work ethics; and to Virginia (Chris) Hall, my wife who kept me in her prayers.

Marvin Hall
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CHAPTER I

INTRODUCTION

Career development has become increasingly important for administrators, faculty, and counseling center staffs at institutions of higher education across the country. University personnel and department heads have become more aware of the potential that career development programs throughout the country can have an impact on important career decision making skills for students. Advocates and supporters emphasize that career decision making is a continuous process. Consequently, different career development tasks can be designed and implemented for students in grades one through twelve as well as for post-secondary, college and university students. Studies have also shown that work values and career maturity have emerged as two of the most important factors in creating and measuring student success (Wallas & Gulkus, 1974).

Generally, the studies which investigated the differences in work values and career maturity have yielded inconsistent findings. For example, some studies have found no relationship between work values and career maturity for high school students. However, other researchers who have worked with college populations have found a relationship between work values and career maturity (Purcel, Nelson, Hetzman & Wheeler, 1972; Wallas & Gulkus, 1974).

Nonetheless, career maturity and work values are even more important for minority college students. The reasons are as follows: Over the past years, there has been an alarming decline of the quality of life among poor and black families, not withstanding the increasing rate of poverty among thousands of white,
Hispanic, and Native American families. The single reality of being poor and black seems to require a separate and focused analysis. A disproportionate number of black children are poor and in crisis which demands attention (Dewart, 1985).

Unemployment among black youth ranges between 46% to 52% nationwide (Levin-Espstein, 1986).

There is no greater problem affecting black children than poverty. Once born in poverty, it is presently close to impossible to escape (National Urban League, Inc., 1985). Other salient data denote the following statistics: (a) 86% of black youth live in poverty; (b) 50% of black youth drop out of high school; (c) 40% of black children are being raised in fatherless homes; and (Warfield, 1986) (d) 84% of black mothers, 25 years of age and under, are poor, and their babies are more likely to be born at low birth weight and therefore at a substantially higher risk of death and birth defects.

Black children are twice as likely as white children to live in inadequate housing. Depending upon home ownership or rental, 25% to 33% of black children live in older, crowded, or dilapidated housing. With low income, home ownership is becoming increasingly difficult (Warfield, 1986).

Black children are three times more likely as white children to be represented among children in foster homes, group homes and the juvenile justice system (Warfield, 1986).

Statement of the Problem

This study will investigate whether or not a relationship exists between the intrinsic and extrinsic work values and the career maturity of minority participants in a personal and academic support services program offered at a
state-supported public university. As a result, this study intends to point out how minority students, as a group and as individuals, perceive work values and career maturity; and, how collegiate programs can improve services for them.

**Purpose of this Study**

The purpose of this study is to investigate possible relationships between intrinsic and extrinsic work values and career maturity for minority college students enrolled as participants in a personal and academic supportive services program for business majors.

**Significance of the Study**

Studies have been conducted to ascertain the attrition and retention of minorities at the college level (Shelley, Bingham, & Walsh, 1986), but few investigations have been conducted to examine successful minority collegians. Therefore, by utilizing this study, it will add to the present research to further develop career programs to meet the needs of minority students, and enable colleges to monitor career change (Kammer, 1987; Poussaint & Atkinson, 1970).

**Limitations**

Subjects in this study were an intact group. However, other investigators have utilized intact groups without validating results (Borg & Gall, 1983; Drew 1980; Kerlinger, 1986). Also the subjects were small in numbers. There were twice as many business majors than non-business majors that were available for the study.
Theoretical Framework

It is expected that there will be few differences in intrinsic and extrinsic work values and career maturity for this study. It is believed that there may be more similarities if minority students are in environments that are conducive to making appropriate decisions about career choices. This condition will encourage them to exemplify positive attitudes toward their existence in college and self-efficacy and this will be self-fulfilling. The graduate students who are Non-participants in a personal and academic support services program are expected to know their vocational direction as compared to PASSP participants who are provided with encouragement and supportive services (Cooper & Good, 1983).

Assumptions of the Study

The study includes the following assumptions:

1. The evaluation of the effectiveness of career development among minorities is to assess their intrinsic and extrinsic work values and career maturity.

2. If minority students are given access to personal and academic support services with an expectation that they will succeed in their studies at the University, they will expect success from themselves.

Definition of Terms

Career maturity: The type of attitudes which are important in making decisions about career choices and coping with career developmental tasks at various life stages (Super & Overstreet, 1960).

Extrinsic values: Those outward needs whereby students are mostly
influenced by environment (Katz, 1963).

**Intrinsic values:** Inward needs that students grow with from birth and are lesser influenced by the environment (Katz, 1963).

**Self-concept:** How one experiences, develops, and understands his/her sense of self-image and frame of reference (Bandura, 1977).

**Self-efficacy:** The conviction that one can successfully execute the behavior required to produce certain outcomes (Bandura, 1977).

**Work values:** Outward expressions of needs with a frame of reference for exploring occupations (Katz, 1963; Super, 1970; Zytowski, 1970). The work values by definition would describe the ways which students relate to work (Dawis & Lofquist, 1984). Thus, work values are the qualities which students desire and seek in the activities they engage in (Herr & Cramer, 1972).

**Summary**

In the first chapter, the context and statement of the problem, purpose and significance of the study, limitations, theoretical framework and assumptions of the study, and the definition of terms were presented. In the following chapters, the literature is reviewed, the method is explained, and results and conclusions are discussed.
CHAPTER II

REVIEW OF RELATED LITERATURE

Career Development and Definitions

Miller (1974) noted that much of the literature on work values and career maturity has been less effective because it fails to include a definition of "career." Proponents often employ operational definitions which use the word as a synonym for "occupation." The need to define terms has been ignored in much of the career education program planning. For instance, the definition of career probably should consider the fact that a college student, during the course of a lifetime, will be exposed to a sequence and number of occupied positions as one moves from student to worker to retiree (Zunker, 1986).

Career development is important for all students, but has particular relevance for minorities. Career development has important implications for the kind of experience which will help students explore, establish, and maintain a positive outlook about career choices while they attend college. A clear definition of career would include and facilitate more effective ways to help career educators assist minority students in college to direct their energies toward mature and valuable decisions for their future (Thomas, 1986).

The literature reflects an outgoing debate about differences in values between the so-called establishment and the younger generation. Much of the concern has centered on life-style and the work role (Super, 1984). Additionally,
there have been some questions regarding the social work of one's work and/or educational program and the motivation to reformulate life goals. For this reason, career counselors must be able to recognize and be concerned with goals that are reformulated in the whole scheme of the career decision making process. One important function is to provide methods for clarifying values (Dillard, 1980).

One of the most comprehensive analyses of the value system of college students was made by Donald E. Super in 1968. He collected data on and wrote about the values of career counseling. The studies were conducted to discern the relationship between the needs of work values and vocational maturity at various stages in life. It is important to note that many of the values and career maturity decisions that were made by the college population are theoretically linked throughout life. Therefore, to study career patterns would probably necessitate the researcher to explore values (Wolf & Barry, 1965).

Work Values And Career Maturity

The principal references show that work values and career maturity decisions are developmental tasks because a child first learns values from important adults, especially parents. Later, school personnel and peers assume some of this teaching function. The peer group assumes a major function as the young person moves through adolescence. Furthermore, young people have to examine and modify their value system(s) in light of their experiences. Therefore, the process of value and career decisions becomes a developmental task for understanding the accuracy in career decisions and helps with the understanding of career development (Super, 1984).

Moreover, Super (1984), and Ginzberg, Ginsburg, Axelard, and Herma

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(1951), charged that the role of career programs is to assist college students with their work values and career maturity and to help students develop vocational choices. Therefore, the implications are that counselors and secondary education programs are operating in the dark in that many programs are guided by preconception and habit. Consequently, it would be difficult to specify how career guidance programs should be directed.

Motivation Defined in Terms of Needs

Motivation is defined in terms of needs, personality traits, values, interests, and ultimately decisions about one's career (Super & Overstreet 1960). To define each of these terms is not easy, for the definitions seem to separate at times while other times they often overlap. Concepts of values and maturity focus on nourishment, shelter, love and drive toward achieving something constructive (Zunker, 1986). Additionally, to find the need of minority students is to motivate them, because the basic needs of life aforementioned have to be understood and fulfilled before discussion and/or discovery of work values and career maturity of minority students occur. Therefore, it is important for college personnel to both understand and hopefully appreciate the black experience in America, for this serves as a technique that has been used to assist black youth with their career development (Dean, 1984b).

The most effective way to learn about the black experience is for college personnel to place themselves in situations that enable them to feel what it is like to be different. Attending social affairs sponsored by minority organizations is one way to understand how it feels to be a member of a minority group (McDavis, 1978).
Minorities and Career Development

The literature viewed work values and career maturity as being close to actual life (Kammer, 1987). Consequently, there have been several ways to assist minorities in expanding their awareness of the ever-increasing career options that are available for them.

The values of an individual (college student) and career decisions are the objectives sought in the needs of minorities, and the motivation serves as the bridge which is the goal of work values and career decisions. In other words, a given value and career maturity decision may be satisfied in both learning the social values that derive from love and the relationships among community service programs, home life, social work programs, and primary and secondary school programs (Thomas, 1986).

The variety and complexity of problems and needs of minorities challenge even the idea of career development (Vontress, 1971). There is a general and growing need among minorities for exposure to programs with role models that might enhance relationships to family, social responsibilities, and work values. Minorities experience prejudice, racism, and lack of exposure to support programs in college which limit educational and employment opportunities. Therefore, career development is affected (Vontress, 1979).

Additionally, review of the literature revealed the following areas that contribute to the lack of career development among minorities. Vontress (1979) postulates that the causes for discontent among black students are many. According to Vontress, some of the causes are as follows:

1. Impaired self-concept (influenced primarily by social interaction, segregated schools, and poor opportunities).
2. Parental disassociation (black students are often estranged from parents).

3. Loneliness and identity problems (fewer social opportunities).

4. Academic frustration and isolation (minorities experience difficulty in accepting white middle-class values which contributes to their lack of acceptance on college campuses).

5. Student-faculty relations (minorities have difficulty in approaching faculty members and involvement in campus activities).

6. Restricted access to the educational process as it may relate to occupational trends and job opportunities.

7. Few role models and mentor programs for support to minorities.

8. Minority ambivalence toward whites.

9. Dead-end jobs that provide little, if any, job security.

10. Because of high unemployment, blacks develop negative views about pre-vocational training programs.

The significance of this impaired self-concept is very important because many times self-concept not only develops through physical and mental growth, identification with working adults, general environment and experiences, but is also reflected through equal access to job opportunities and career choice(s) (Dillard, 1976; Super, 1984).

Furthermore, these characteristics may greatly inhibit the development of positive motivation toward the career decision process (Vontress, 1971). More recently, Vontress (1979) suggests that blacks are made to feel as outsiders in public schools. After 25 years of integration, blacks are treated differently than whites. More importantly, blacks continue to receive inferior educational
opportunities as compared with whites. He says to be effective with minorities, college counselors must be aware of different world views (the psychological orientation of thinking, behavior, and interpretation of events). Counselors must be cautioned to not impose their values on others.

In reviewing work values and career maturity, the literature search revealed the possible implications for future career guidance programs to develop and generate career development (Vontress, 1975). Those implications studied were not only done with high school students, but also with college students, particularly minority students. Career guidance programs may need to view work values as a developmental process and subsequently work toward increasing the need to design activities to increase a student's exposure to career choices. Moreover, career guidance programs should continue the investigation of factors designed to explain the vocational behavior of black youth (Baly, 1989).

Career Development Programs for Minorities

The Economic Opportunity Act (EOA) Evaluation of the EOA basic education program (1965), aided greatly in the development of progressive educational outlets for minorities. This EOA enabled black adolescent high-school juniors and seniors to receive summer instruction on college and university campuses. The Upward Bound Program is a good example. During high school, the Upward Bound Program offered placement in a college bound track, field laboratory experiences, specialized teaching, counseling and tutorial services in the summer and the academic year (Tobias, 1989).

Many secondary schools have developed and implemented career education curricula. High-tech and automotive industries, for example, have either
funded or directly assisted high schools in providing academic and practical experiences for black young adults. Many of these career educational experiences include paid internships (Tobias, 1989).

A variety of other public funded programs are designed to identify talented youth in high schools. Based upon aptitudes, career interests, and unexposed talents, this program attempts to find placement and financial assistance in colleges, universities, and career-based programs. Counseling and tutoring are also available (Tobias, 1989).

Another example is the Search for Education, Elevation and Knowledge (SEEK) program, founded in 1966 for blacks and Puerto Ricans (Dispenzieri & Kweller, 1969). SEEK has established a track record for producing outstanding scholars, professionals, and civil servants. Students reported that their program of study and support services assisted in preparing them well for graduation, postgraduate studies, and employment (Dispenzieri & Kweller, 1969).

However, many programs that were funded for minority participants have experienced cutbacks with funding from Capitol Hill in Washington, D.C. This has become a big problem to overcome. Yet, the bottom line in establishing any program to assist blacks seems to revolve around understanding the black family. More attention has to be focused on the problems of contemporary black families. Issues such as divorce and abortion rates, female-headed households, limited employment opportunities, and geographical shifts in the job market have affected all American families; but there is an urgent need to address the way problems relate to black families (Morris, 1987).

It is becoming increasingly clear that programs alone cannot solve many problems that blacks encounter. The programs discussed here represent only a
limited approach to the solution of the plight of black youth, who, in many ways, are in a worse condition, because of the dominant society, than they were two and one-half decades ago. A truly effective strategy must evolve from professionals who seek to understand the black family (Gibbs, 1989).

Self-Efficacy and/or Expectations

Lastly, the research literature states that to increase a student's exposure to career choices is to notice the work values and career motivation of that student (Ellerbe, 1975). In addition, there is present concern about administrator, counselor, and teacher efficacy beliefs. The relations between teacher expectations, behavior, and student performance have been and continue to be, active research areas (Cooper & Good, 1983). In other words, if minority students are expected to be successful in their pursuit of choosing the best career for themselves and one that is of interest, they will have a higher success rate when teacher expectations are high for them. Clark (1963) promoted the examination of teacher expectations by claiming that some ghetto children might be victims of low teacher expectations which eventually became self-fulfilling prophecies. Apparent empirical support for Clark's assertion was offered by Rosenthal and Jacobsen (in Cooper & Good, 1983). In addition, minorities tend to experience cultural isolation and lack exposure to career upward mobility mainly because they feel like outsiders on college campuses (Vontress, 1979).

Summary

Chapter II was divided into three main parts. In the first part of this chapter the literature looked at the need or definition and career development
implications. The second part of this chapter reviewed literature that focuses on failure and/or lack of motivation, values, and self-efficacy. The final section reviewed literature about career-decision and self-efficacy and/or expectations.

Basically, the investigator discovered that the importance of career development for minorities is to provide personal and academic support services that give them control over their lives. This control reflects the many choices and/or options available for them. By arranging learning situations that reflect career decision as a continuous process and utilizing work values and career maturity, this seems to encourage reinforcement decision making (Zunker, 1986).

Career aspirations among black students in college have been found to be equally high for both men and women (Gump & Rivers, 1975). However, many times those aspirations decrease because of limited career opportunities and low expectations from educational and training experiences (Mogull, 1978).
CHAPTER III

METHOD

The purpose of this chapter is to certify the Human Subjects Institutional Review Board's clearance for this research and to describe the participants, data collection procedures, instrumentation, and null hypotheses in the study. Also, this chapter describes the personal and academic support services program (PASSP) established to address the concerns of minority students. Because students were used in this study, the Human Subjects Institutional Review Board at Western Michigan University reviewed research procedures. No experimentation was to be performed on the participants and guidelines were developed to protect the confidentiality of the participants involved. Therefore, research was approved under the exempt category by the Human Subjects Institutional Review Board (See Appendix D).

Participants

There were 40 participants in this study, 20 females and 20 males at a mid-size state university. All participants were volunteers, of which 10 males and 10 females were from the personal and academic support services program and 10 males and 10 females were not in the program. The oldest respondent was 40 and the youngest respondent was 18 years old. Asians, Hispanics, Indians, and blacks were represented in this study. All of the students majored and/or minored in Business Education. The majority of the students were undergraduates. From a total of 40 participants, four were graduate students.
Data Collection Procedures

The Work Value Inventory (WVI) citation (Super, 1968) and the Career Maturity Inventory (CMI) citation (Crites, 1978a) were given to a total of 40 undergraduate/graduate minority students. All students completed the WVI and the CMI. The inventories were administered and required approximately one hour to complete. The personal and academic support services program students received tutoring, motivational talks by university staff and campus professors. Personal and academic support services program (PASSP) and non-personal and academic support services program (non-PASSP) subjects were given the WVI and the CMI to measure their intrinsic and extrinsic work values and career maturity values in relation to career decisions.

Descriptions of Personal and Academic Support Service Program

The (PASSP) was established to address the concerns of minority students pursuing business careers and to develop and implement programs that would encourage and support minority interest and participation in the field of business. Students follow a curriculum of business and liberal arts courses, followed by specialization in accounting, finance, marketing, and management. Students demonstrate a mastery of theory as well as an ability in a professional setting through a paid summer internship.

Students participating in the personal and academic support services program attend scheduled career enhancement programs weekly. Individual tutoring assistance is available during study sessions as well as other times through the University's Academic Resource Center. Local business people are invited on campus to make presentations and discuss issues of concern with
participants in the program.

In addition to the internship, each student is assigned both an internship mentor and an advisor from the College of Business. In-state students receive full-tuition scholarships (out-of-state students receive an award equal to in-state tuition). The director of the program monitors academic progress with individuals and/or groups in weekly meeting.

Instrumentation

**Work Values Inventory**

This inventory (Super, 1968) measures source of satisfaction which individuals seek from their work environment. Scores yield measures of altruism, esthetics, creativity, intellectual stimulation, independence, prestige, management, economic returns, security, surroundings, supervisory relations, value of relationships with associates, way of life, and variety (Super, 1970).

The WVI has been tested in a variety of forms in research since 1951. It is a 45-item inventory with 15 scales with a median test retest reliability which is .83. The WVI may be used with boys and girls in junior and senior high schools as with college and university students. The vocabulary has shown to be simple enough for seventh graders and is quite acceptable for undergraduate and graduate students (Super, 1970; Zytowski, 1970).

**Career Maturity Inventory**

This inventory (Crites, 1978a) is a 50-item inventory designed to assess the career choice attitude of students. The Attitude Scale elicits the feelings,
subjective reactions, and dispositions that the individual has toward making a career choice and entering the world of work (Crites, 1978a). The career maturity reliability is .71 (Crites, 1978a). Scoring consists of a total score and scores on the five subscales including, decisiveness, involvement, independence, and commitment. Scores yield measures of planning orientation, readiness for exploration, information, and decision making. The inventory is applicable to both sexes. Both cognitive and attitudinal scales are provided. (Career-maturity inventories have two basic purposes: (1) To measure an individual's career development, and (2) to evaluate the effectiveness of career-education programs).

Two types of reliabilities have been determined for the Attitude Scale: (1) Internal consistence coefficients, and (2) test-retest stability estimates (Crites, 1978a). The stability over extended periods of time should reflect individual differences in rate of career development. Some individuals mature in their career attitudes more rapidly than others during given stages in development, and consequently their rank order changes from one occasion to another.

Design

A comparative design utilizing F-test of comparisons was used for data analysis. The sub-scores from the WVI and the CMI were obtained to find total raw scores. After the raw scores were found, the mean intrinsic and extrinsic work value scores and the mean intrinsic and extrinsic CMI scores were obtained. Next, group tables were formed by listing the differences between the intrinsic and extrinsic scores. Then, a paired comparison of mean differences was used to find F-ratios and associated probability with an alpha level of .05. The individual and group analyses were found with a one way analysis of variance (ANOVA) using
the SPSSx program.

The Null Hypotheses

The 12 null hypotheses for the study are:

1. Significant differences will not exist in intrinsic work values of personal and academic support services program and non-personal and academic support services program participants as measured by the Work Values Inventory (WVI).

2. Significant differences will not exist in extrinsic work values of personal and academic support services program and non-personal and academic support services program subjects as measured by the WVI.

3. Significant differences will not exist in intrinsic career maturity of personal and academic support services program and non-personal and academic support services program subjects as measured by the Career Maturity Inventory (CMI).

4. Significant differences will not exist in extrinsic career maturity of personal and academic support services program and non-personal and academic support services program subjects as measured by the CMI.

5. Significant differences will not exist in intrinsic work values of female and male participants in a personal and academic support services program as measured by the WVI.

6. Significant differences will not exist in extrinsic work values of female and male participants in a personal and academic support services program as measured by the WVI.

7. Significant differences will not exist in intrinsic career maturity of female and male participants in a personal and academic support services program.
as measured by the CMI.

8. Significant differences will not exist in extrinsic career maturity of female and male participants in a personal and academic support services program as measured by the CMI.

9. Significant differences will not exist in intrinsic work values of females and males that are non-personal and academic support services program participants as measured by the WVI.

10. Significant differences will not exist in extrinsic work values of females and males that are non-personal and academic support services program participants as measured by the WVI.

11. Significant differences will not exist in intrinsic career maturity of females and males that are non-personal and academic support services program participants as measured by the CMI.

12. Significant differences will not exist in extrinsic career maturity of females and males that are non-personal and academic support services program participants as measured by the CMI.
CHAPTER IV

RESULTS

This study was designed to investigate possible comparisons that may exist between intrinsic and extrinsic work values and career maturity for undergraduate minorities in a personal and academic support services program as well as those in a non-personal and academic support services program. Also, results are presented by sex from participants in the personal and academic support services program as well as results from non-personal and academic support services program subjects. Regarding the above issues, the conceptualization is illustrated in Appendix F.

Testing of Null Hypotheses

Twelve null hypotheses were tested in this study. The results of each hypothesis are presented below. The null hypothesis is stated first, then the acceptance or rejection of the hypothesis follows.

Hypothesis 1: Significant differences will not exist in intrinsic work values of personal and academic support services program and non-personal and academic support services program subjects as measured by the Work Values Inventory (WVI) (Super, 1968).

No significant mean difference(s) were found in intrinsic work values of personal and academic support services program and non-personal and academic support services program subjects as measured by the WVI tested at the .05 level of significance. The calculated means were 71.9 and 73.1 for personal and
academic support service program subjects respectively. Since the calculated $F$ is .17 and the critical $F = 4.41$ at .05 with 18 degrees of freedom, the null hypothesis is accepted. (See Table 1, Chapter V and Table 4, Appendix E).

Hypothesis 2: Significant differences will not exist in extrinsic work values of personal and academic support services program and non-personal and academic support services program subjects as measured by the WVI.

No significant mean differences were found in extrinsic work values of personal and academic support services program subjects as measured by the WVI tested at the .05 level of significance. The calculated means were 111.95 for personal and academic support services program subjects and 113.15 for non-personal and academic support services program subjects. Since the calculated $F$ is .13 and the critical $F = 4.41$ at .05 level with 18 degrees of freedom, the null hypothesis is accepted. (See Table 1, Chapter V and Table 5, Appendix E).

Hypothesis 3: Significant differences will not exist in intrinsic career maturity of personal and academic support services program and non-personal and academic support services program subjects as measured by the Career Maturity Inventory (CMI) (Crites, 1978a).

No significant mean differences were found in intrinsic career maturity of personal and academic support services program subjects and non-personal and academic support services program subjects as measured by the CMI tested at the .05 level of significance. The calculated means were 18.8 for personal and academic support services program subjects and 20.115 for non-academic support services program subjects. Since the calculated $F$ is 2.61 and the critical $F = 4.41$ at .05 level with 18 degrees of freedom, the null hypothesis is accepted. (See Table 1, Chapter V and Table 6, Appendix E).
Hypothesis 4: Significant differences will not exist in extrinsic career maturity of personal and academic support services program and non-personal and academic support services program subjects as measured by the CMI.

No significant mean differences were found in extrinsic career maturity of personal and academic support services program subjects and non-personal and academic support services program subjects as measured by the CMI tested at the .05 level of significance. The calculated means were 18.1 for personal and academic support services program subjects and 18.6 for non-academic support services program subjects. Since the calculated $F$ is .32 and the critical $F = 4.41$ at .05 level with 18 degrees of freedom, the null hypothesis is accepted. (See Table 1, Chapter V and Table 7, Appendix E).

The presentation of the above null hypotheses 1-4 indicates no significant differences in intrinsic and extrinsic work values and career maturity by group at the .05 level of significance.

Hypothesis 5: Significant differences will not exist in intrinsic work values of female and male subjects in a personal and academic support services program as measured by the WVI.

No significant mean differences were found in intrinsic work values of females and males in a personal and academic support services program as measured by the WVI tested at the .05 level of significance. The calculated means for females and males were 74.0 for personal and academic support services program subjects and 69.8 for non-academic support services program subjects. Since the calculated $F$ is 1.36 and the critical $F = 4.41$ at .05 level with 18 degrees of freedom, the null hypothesis is accepted. (See Table 2, Chapter V and Table 8, Appendix E).
Hypothesis 6: Significant differences will not exist in extrinsic work values for female and male subjects in a personal and academic support services program as measured by the WVI.

No significant mean differences were found in extrinsic work values of females and males in a personal and academic support services program as measured by the WVI tested at the .05 level of significance. The calculated means for females and males were 113.30 for personal and academic support services program subjects and 110.60 for non-academic support services program subjects. Since the calculated $F$ is .45 and the critical $F = 4.41$ at .05 level with 18 degrees of freedom, the null hypothesis is accepted. (See Table 2, Chapter V and Table 9, Appendix E).

Hypothesis 7: Significant differences will not exist in intrinsic career maturity of female and male subjects in a personal and academic support services program as measured by the CMI.

No significant mean differences were found in intrinsic career maturity of females and males in a personal and academic support services program as measured by the CMI tested at the .05 level of significance. The calculated means for females and males were 18.7 for personal and academic support services program subjects and 18.9 for non-academic support services program subjects. Since the calculated $F$ is .032 and the critical $F = 4.41$ at .05 level with 18 degrees of freedom, the null hypothesis is accepted. (See Table 2, Chapter V and Table 10, Appendix E).

Hypothesis 8: Significant differences will not exist in extrinsic career maturity of female and male subjects in a personal and academic support services program as measured by the CMI.
No significant mean differences were found in extrinsic career maturity of females and males in a personal and academic support services program as measured by the CMI tested at the .05 level of significance. The calculated means for females and males were 18.1 for personal and academic support services program subjects and 18.1 for non-academic support services program subjects. Since the calculated $F$ is .00 and the critical $F = 4.41$ at .05 level with 18 degrees of freedom, the null hypothesis is accepted. (See Table 2, Chapter V and Table 11, Appendix E).

The presentation of the above null hypotheses 5-8 indicates no significant differences in PASSP intrinsic and extrinsic work values and career maturity scores by sex at the .05 level of significance.

Hypothesis 9: Significant differences will not exist in intrinsic work values of females and males that are non-personal and academic support services program subjects as measured by the WVI.

No significant mean differences were found in intrinsic work values of females and males in a non-personal and academic support services program as measured by the WVI tested at the .05 level of significance. The calculated means for females and males were 70.7 for personal and academic support services program subjects and 75.5 for non-academic support services program subjects. Since the calculated $F$ is 1.16 and the critical $F = 4.41$ at .05 level with 18 degrees of freedom, the null hypothesis is accepted. (See Table 3, Chapter V and Table 12, Appendix E).

Hypothesis 10: Significant differences will not exist in extrinsic work values of females and males that are non-personal and academic support services program subjects as measured by the WVI.
No significant mean differences were found in extrinsic work values of females and males that are non-personal and academic support services program subjects as measured by the WVI tested at the .05 level of significance. The calculated means for females and males were 109.20 for personal and academic support services program subjects and 117.10 for non-academic support services program subjects. Since the calculated $F$ is 2.48 and the critical $F = 4.41$ at .05 level of significance with 18 degrees of freedom, the null hypothesis is accepted. (See Table 3, Chapter V and Table 13, Appendix E).

Hypothesis 11: Significant differences will not exist in intrinsic career maturity of females and males that non-personal and academic support services program subjects as measured by the CMI.

No significant mean differences were found in intrinsic career maturity of females and males that are non-personal and academic support services program subjects as measured by the CMI tested at the .05 level of significance. The calculated means for females and males were 20.90 for personal and academic support services program subjects and 19.40 for non-academic support services program subjects. Since the calculated $F$ is 1.43 and the critical $F = 4.41$ at .05 level of significance with 18 degrees of freedom, the null hypothesis is accepted. (See Table 3, Chapter V and Table 14, Appendix E).

Hypothesis 12: Significant differences will not exist in extrinsic career maturity of females and males that are non-personal and academic support services program subjects as measured by the CMI.

No significant mean differences were found in extrinsic career maturity of females and males that are non-personal and academic support services program subjects as measured by the CMI tested at the .05 level of significance. The
calculated means for females and males were 19.30 for personal and academic support services program subjects and 17.90 for non-academic support services program subjects. Since the calculated $F$ is 1.06 and the critical $F = 4.41$ at .05 level of significance with 18 degrees of freedom, the null hypothesis is accepted.

(See Table 3, Chapter V and Table 15, Appendix E).

The presentation of the above null hypotheses 9-12 indicates no significant differences in non-PASSP intrinsic and extrinsic work values and career maturity scores by sex at the .05 level of significance.

Summary

The first part of Chapter IV consisted of a conceptualization of the intrinsic and extrinsic Work Values and Career Maturity Inventories as used in the study. The results of the 12 hypotheses were then presented, each followed with a brief summary. The results indicated no significant differences at the .05 level of significance. A discussion and the implications for educators that work with minorities are presented in Chapter V.
Chapter V will consist of four sections. First, a brief summary of the first four chapters will be given. The next section will be a discussion of the results. The third section will be the conclusions of this investigation; and finally, implications for future research will be suggested.

Summary

An examination of the difference(s), if any, between intrinsic and extrinsic work values and career maturity for minority Business Education students was the focus of this research. This study was undertaken because the other studies conducted only reviewed the attrition and retention of minorities at the college level. However, more studies should be done to examine minorities that are successful. The personal and academic support services program (PASSP) represents a successful one for minorities. The potential benefits of obtaining results could be helpful to college and university personnel to further develop programs to meet the needs of minority students. These results will also support the understanding, if not the acceptance, of all cultures. An analysis of variance (ANOVA) was used for the purpose of obtaining information about the difference(s) between the intrinsic and extrinsic work values and career maturity as measured on the Work Values Inventory (Super, 1968) and Career Maturity
Inventory (Crites, 1978a).

A review of the literature was conducted in three main parts. The first area focused on the need for definition and career development. The second area focused on past and present research of maturation, values, and motivation. The third and final area focused on minority career development, self-efficacy and/or expectations.

Two instruments were administered individually and in small groups. The instruments used in this study were the Work Values Inventory (Super, 1968), which was a 45-item inventory with 15 scales designed to measure intrinsic and extrinsic work values and how it contributes and measures sources of satisfaction individuals seek from their work. The Career Maturity Inventory (Crites, 1978a) is a 50-item inventory with 5 scales designed to elicit the feelings individuals have toward making career choices upon entering the job market.

Scores from the inventories were tabulated by hand and analyzed using the analysis of variance (ANOVA) with the SPSSx (Norusis, 1983) program at Western Michigan University. The F test of comparisons was used for data analysis. Twelve hypotheses were tested and all were found to contain no significant difference(s) at the .05 level of significance.

Discussion of the Results

This section is divided into three subsections. The first subsection gives the results of the between group(s) study pertaining to intrinsic and extrinsic work values and career maturity for personal and academic support services program (PASSP) and non-personal and academic support services program (non-PASSP) participants (Hypotheses 1-4). Second, the within group study results by sex are
presented using intrinsic and extrinsic work values and career maturity of personal and academic support services program participants (Hypotheses 5-8). Third, the within group study results by sex are presented from intrinsic and extrinsic work values and career maturity of non-personal and academic support services program participants (Hypotheses 9-12).

Discussion of Results of PASSP and Non-PASSP Participants by Groups (Hypotheses 1-4)

The findings of this part of the study indicate that null hypotheses 1-4 show no significant differences in intrinsic and extrinsic work values and career maturity of PASSP and non-PASSP participants at the .05 level of significance. There are six categories that comprise intrinsic work values. They are achievement, altruism, creativity, esthetics, intellectual stimulation and management.

Discussion of Results of PASSP and Non-PASSP Intrinsic Work Values

Intrinsic work value data indicate that PASSP participants had a smaller amount of variation among intrinsic work values (x̄ = 71.90) than non-PASSP participants (x̄ = 73.10). The PASSP participants present a smaller variation for their intrinsic work values and are more similar than the non-PASSP participants, but there is no significance difference with an F ratio of .17 at the .05 level of significance. This could mean that the PASSP subjects are similar in their views about their career choice(s) and how they view present and future career goals. The PASSP participants had similar scores in the category of altruism. Altruism is an important value which enables PASSP participants to be supportive to each other in the completion of studies in their respective business programs. PASSP
participants participate in scheduled tutoring sessions to assist and enhance their academics. These data seem to support Vontress' (1977) finding that students who receive and give to each other develop positive self-images and a sense of identity. (See Table 1, line 1, Hypothesis 1).

Discussion of Results of PASSP and Non-PASSP Extrinsic Work Values

Extrinsic Work Value data indicate that PASSP participants had a smaller variation of extrinsic work values ($\bar{x} = 111.95$) than non-PASSP participants ($\bar{x} = 113.15$). Since the PASSP participants present a smaller variation in means, it would seem plausible to say that the PASSP participants present similar scores on the extrinsic work values, whereas the non-PASSP participants did not present as much similarity among the scores. But the difference(s) were not significant with an $F$ ratio of .13 at the .05 level of significance. This could mean that PASSP participants are more consistent and similar in their views about career choice(s).

There are nine categories that comprise extrinsic work values. They are: associates, economic returns, independence, prestige, security, supervisory relationships, surroundings, variety, and way of life. PASSP students have similar scores in the area of security. The result seems to be that PASSP students present the basic idea that work will provide them with the certainty of possessing a career even in hard times. It reflects, too, a degree of their interest(s) in receiving the rewards of work. These data are consistent with Super's (1970) finding that subjects who stress security in choosing a career often reach career goals (see Table 1, line 2, Hypothesis 2).
Table 1
A Composite Summary of Analysis of Variance Tables for PASSP and Non-PASSP Participants

<table>
<thead>
<tr>
<th>Lines</th>
<th>Variables</th>
<th>In Group</th>
<th>Out Group</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>WV₁</td>
<td>71.90</td>
<td>73.10</td>
<td>.17</td>
<td>.69 Hy₁</td>
</tr>
<tr>
<td>2</td>
<td>WV₂</td>
<td>111.95</td>
<td>113.15</td>
<td>.13</td>
<td>.73 Hy₂</td>
</tr>
<tr>
<td>3</td>
<td>CM₁</td>
<td>18.80</td>
<td>20.15</td>
<td>2.61</td>
<td>.11 Hy₃</td>
</tr>
<tr>
<td>4</td>
<td>CM₂</td>
<td>18.10</td>
<td>18.60</td>
<td>.32</td>
<td>.58 Hy₄</td>
</tr>
</tbody>
</table>

X = Mean  P = F (Probability)
Hy = Hypothesis  WV₁ = Intrinsic Work Value
In = PASSP Group  WV₂ = Extrinsic Work Value
Out = Non-PASSP Group  CM₁ = Intrinsic Career Maturity
F = F (Ratio)  CM₂ = Extrinsic Career Maturity

Note: Table 1 summarizes Hypotheses (1-4) exhibiting the differences of PASSP and Non-PASSP participants. PASSP and Non-PASSP participants do not differ significantly in any of the scores. They are the WV₁, WV₂, CM₁, and the CM₂.

Discussion of Results of PASSP and Non-PASSP Intrinsic Career Maturity

Intrinsic career maturity data indicate that PASSP participants had a smaller variation of mean intrinsic career maturity scores (x = 18.80) than non-
PASSP participant scores ($x = 20.15$). The PASSP students present a smaller variation in standard deviation. Therefore, PASSP students present similar scores on the intrinsic career maturity values, whereas the non-PASSP students present less similarity among the scores. The difference(s) were not significant at the .05 level of significance, but differences do exist. This could mean that PASSP subjects are somewhat consistent with similarity in their views about a career choice.

Intrinsic career maturity is comprised of five categories. The categories are: compromise, decisiveness, independence, involvement, and orientation. The PASSP participants had similar scores in the area of compromise. This result could mean that PASSP participants are available to receive and give information to University personnel about their needs and desires of career exploration. It seems that this view supports the findings of Super and Zytowski (1970) which states that having a good frame of reference is important in exploring occupational choice(s). Also, it further supports the findings of Dawis and Lofquist (1984) about describing the ways which individuals relate to work (See Table 1, line 3, Hypothesis 3).

Discussion of Results of PASSP and Non-PASSP Extrinsic Career Maturity

Extrinsic career maturity data indicate that PASSP participants had a smaller variation of extrinsic career maturity scores ($x = 18.10$) than non-PASSP participant scores ($x = 18.60$). The PASSP participants present a smaller variation in mean scores. Therefore, PASSP participants present similar scores for extrinsic career maturity values whereas the non-PASSP participants present
less similarity among scores. The difference(s) were not significant at the .05 level of significance, but differences do exist. This means that PASSP participants have similar views about career choice and career exploration.

Extrinsic career maturity data of PASSP participants were similar to how they view career decisions in relationship to their environment. The environment could mostly determine where, how, and when subjects may work. The area that was more prevalent than others was orientation. This result may indicate that PASSP participants were well-grounded concerning decisions about their careers and that they learned much from their milieu with regards to coping with developmental stages of career exploration. The extrinsic score reflects similar findings by Zunker (1986) that the effectiveness of career education programs (environment) and curricula help individuals to identify their needs (See Table 1, line 4, Hypothesis 4).

Discussion of Results of PASSP Work Values and Career Maturity Value Scores by Sex (Hypotheses 5-8)

The findings of this study indicate that null hypotheses 5-8 show no significant differences in intrinsic and extrinsic work values and career maturity scores by sex for subjects at the .05 level of significance. There are six categories that comprise intrinsic work values. They are achievement, altruism, creativity, esthetics, intellectual stimulation, and management.

Discussion of Results of PASSP Intrinsic Work Values by Sex

Intrinsic work value data by sex indicate that females in the PASSP present a smaller amount of variation (\(x = 74.00\)) than males (\(x = 69.80\)). This
seems to suggest that females in the PASSP demonstrate work values that are less affected by the environment. The manner in which females relate to work are outward expressions of needs in exploring occupations and/or career choice(s), and are perceived and understood internally as their lifestyles relate to career choice(s).

The females scored higher in achievement and altruism. Altruism, as a work value or goal, enables them to contribute to the unselfish welfare of others. Achievement, as an intrinsic work value, gives one a feeling of accomplishment in doing a job well. Achievement appears to assess a task orientation and a desire for work with visible and tangible results. These results seem to support Gade and Peterson's (1977) finding that females tend to change over time toward making higher intrinsic work value scores than males (See Table 2, line 5, Hypothesis 5).

Discussion of Results of PASSP
Extrinsic Work Values by Sex

Extrinsic work value data by sex indicate that males ($x = 110.60$) in the PASSP present a smaller amount of variation than females ($x = 113.30$). This may indicate that males in the PASSP learn more from their environment. There are nine categories that comprise extrinsic work values. They are associates, economic returns, independence, prestige, security, supervisory relationships, surroundings, variety, and way of life. Work value (extrinsic scores) indicate that females' scores in the PASSP were more similar than their scores in security and supervisory relationships. The security provided males with the certainty of possessing a job even in hard times. Security is somewhat related to economic
Table 2
A Composite Summary of Analysis of Variance Tables for Male and Female PASSP Participants

<table>
<thead>
<tr>
<th>Hypothesis (5-6)</th>
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</thead>
</table>

<table>
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<th>Lines</th>
<th>Variables</th>
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<th>Out Group</th>
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</thead>
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<tr>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>5</td>
<td>WV\textsubscript{I}</td>
<td>74.00</td>
<td>69.80</td>
</tr>
<tr>
<td>6</td>
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<td>18.70</td>
<td>18.90</td>
</tr>
<tr>
<td>8</td>
<td>CM\textsubscript{E}</td>
<td>18.10</td>
<td>18.10</td>
</tr>
</tbody>
</table>

(F) = Female
(M) = Male
X = Mean
Hy = Hypothesis
F = F (Ratio)
P = F (Probability)
WV\textsubscript{I} = Intrinsic Work Value
WV\textsubscript{E} = Extrinsic Work Value
CM\textsubscript{I} = Intrinsic Career Maturity
CM\textsubscript{E} = Extrinsic Career Maturity

Note: Table 2 summarizes Hypotheses (5-8) exhibiting differences of females and males in the PASSP Program. They are the WV\textsubscript{I}, WV\textsubscript{E}, CM\textsubscript{I}, and the CM\textsubscript{E}.

returns, as expected, since maintaining a job entitles one to receive earnings. Both reflect their interest in receiving the rewards of a job. Supervisory relations denote the importance of a good relationship with the boss. This result seems to be consistent with Bolton's (1985) finding that in the traditional sex role, the expectation(s) of females value achievement higher than males. However, the
results are contrary to Bolton's (1985) findings that females value security to a lesser extent (See Table 2, line 6, Hypothesis 6).

Discussion of Results of PASSP Intrinsic Career Maturity by Sex

The intrinsic career maturity inventory is comprised of five categories. The categories are: compromise, decisiveness, independence, involvement, and orientation. The intrinsic career maturity indicate that females in the PASSP present a smaller amount of variation ($x = 18.70$) than males ($x = 18.90$). This may indicate that females at various stages of life demonstrate coping mechanisms toward career development. In other words, their attitudes change as they mature and this affects how they select careers. With a smaller amount of variation in means for females, this seems to indicate that females elicit feelings and attitudes of career selection and change at different stages of life.

It seems that the males in the PASSP have been given good direction toward making good career decisions, and they are willing to talk about existing differences with various personnel in the University system. This finding seems to be consistent with that in the study by Kammer (1987) that males exhibit greater maturity on the compromise category, as well as on the orientation category (See Table 2, line 7, Hypothesis 7).

Discussion of Results of PASSP Extrinsic Career Maturity Value by Sex

The extrinsic career maturity data by sex indicate that females and males in the PASSP present the same amount of variation ($x = 18.10$). This may indicate that females and males at various stages of their lives demonstrate good attitudes
toward career decision as it relates to their environment. The extrinsic areas that males scored particularly high on were again orientation and compromise. This seems to indicate that females and males in the PASSP are well acquainted with areas of interest(s) that they want to pursue and utilize outside information (career counseling) as an integral part of their career decision making (See Table 2, line 8, Hypothesis 8).

Discussion of Results of Non-PASSP Work Values and Career Maturity by Sex (Hypotheses 9-12)

The findings in this part of the study indicate that null hypotheses 9-12 showed no significant differences in intrinsic and extrinsic work values and career maturity scores by sex for non-PASSP participants at the .05 level of significance. There are six categories that comprise the intrinsic work values. They are: achievement, altruism, creativity, esthetics, intellectual stimulation, and management.

Discussion of Results of Non-PASSP Intrinsic Work Values by Sex

Intrinsic work value data by sex indicate that females ($x = 70.70$) and males ($x = 75.50$) respectively represent the amount of variation for non-PASSP participants. The scores show that non-PASSP females are less affected by the environment than males about making career choice(s).

The areas that females scored higher on were achievement and intellectual stimulation. This seems to indicate that the non-PASSP females associate achievement as a value which yields a feeling of accomplishment. This achievement, by definition, appears to assess task orientation and a desire for
work with visible and/or tangible results. The intellectual stimulation provides them with work which provides an opportunity for independent thinking and learning how and why things work. This seems to support Zunker's (1986) finding that students with similar scores in intellectual stimulation and achievement provide a starting point from which they are able to launch career exploration (See Table 3, line 9, Hypothesis 9).

Discussion of Results of Non-PASSP Extrinsic Work Values by Sex

Extrinsic work value data by sex is comprised of nine categories. The categories are: associates, economic returns, independence, prestige, security, supervisory relationships, surroundings, variety, and way of life. The high extrinsic scores indicate that females represent a smaller amount of variation (x = 109.20) than males (x = 117.10). This result seems to indicate that females elicit feelings and attitudes from the environment that are similar on extrinsic work values. The areas that were more prevalent were economic returns and surrounding.

This result seems to indicate that the non-PASSP females value work which pays well and enables them to have the things they want. This value often referred to materialistic as the attachment of importance to earnings. This also seems to indicate that work is performed under pleasant physical conditions. The work tends to be done well but with emphasis placed not necessarily on the work but where the job is located. This result seems to be in agreement with Gade and Peterson's finding (1977) that females over time make higher scores than males (See Table 3, line 10, Hypothesis 10).
Table 3
A Composite Summary of Analysis of Variance Tables for Male and Female Non-PASSP Participants

<table>
<thead>
<tr>
<th>Lines</th>
<th>Variables</th>
<th>In Group</th>
<th>X</th>
<th>Out Group</th>
<th>X</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>WV_I</td>
<td>70.70</td>
<td>75.50</td>
<td>1.6</td>
<td>.29</td>
<td>Hy_9</td>
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<tr>
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<td>WV_E</td>
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<td>117.10</td>
<td>2.48</td>
<td>.13</td>
<td>Hy_{10}</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>CM_I</td>
<td>20.90</td>
<td>19.40</td>
<td>1.43</td>
<td>.25</td>
<td>Hy_{11}</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>CM_E</td>
<td>19.30</td>
<td>17.90</td>
<td>1.06</td>
<td>.32</td>
<td>Hy_{12}</td>
<td></td>
</tr>
</tbody>
</table>

(F) = Female
(M) = Male
X = Mean
Hy = Hypothesis
F = F (Ratio)
WV_I = Intrinsic Work Value
WV_E = Extrinsic Work Value
CM_I = Intrinsic Career Maturity
CM_E = Extrinsic Career Maturity

Note: Table 3 summarizes Hypotheses (9-12) exhibiting differences of females and males for Non-PASSP Participants. Females and males do not differ significantly in any of the scores. They are the WV_I, WV_E, CM_I, and the CM_E.

Discussions of Results of Non-PASSP Intrinsic Career Maturity by Sex

The Career Maturity Inventory (Crites, 1978a) is comprised of five categories. The categories are: compromise, decisiveness, independence,
involvement, and orientation. The intrinsic career maturity data indicate that the variations for females ($x = 20.90$) are larger than for males ($x = 19.40$). This result seems to indicate that the males have more similar intrinsic career maturity than females. However, this is contrary to the theory by Miller (1974) that women do score more alike on the intrinsic career maturity which measures the subjective reactions they show toward making a career choice and entering the world of work. The areas that the non-PASSP females and males scored high on were commitment and orientation. By definition this may indicate that both males and females are aware of career choices and what their interest(s) may be. It also means that they are determined to be successful in pursuing fields of interests (See Table 3, line 11, Hypothesis 11).

**Discussion of Results of Non-PASSP Extrinsic Career Maturity by Sex**

Extrinsic career maturity data by sex indicate that non-PASSP females present a larger variation ($x = 19.30$) than for males ($x = 17.90$). This finding may indicate that females at various stages of their lives relate to their environment. To them the environment could mostly determine where, how, and when participants may work. While it may not be important, the areas on the extrinsic career maturity were practically the same. The area that was more pronounced was orientation. This finding may represent the fact that the females possess good decision making and vocational maturity. It seems that this view supports the findings of Kammer (1987) that females are becoming more active in their career development (See Table 3, line 12, Hypothesis 12).
Conclusions

Three major areas were used to analyze the results and/or conclusions of this study. Each area contained four categories to be discussed. Based on these, the following conclusions are made.

Area 1: Intrinsic and Extrinsic Work Values and Career Maturity of PASSP and Non-PASSP Participants by Group

1. No significant differences were found in intrinsic work values of PASSP and non-PASSP participants as groups. However, intrinsic Work Values among PASSP participants were more similar than among non-PASSP participants.

2. No significant differences were found in extrinsic work values of PASSP and non-PASSP participants as groups. However, extrinsic work values among PASSP participants were more similar than among non-PASSP participants.

3. No significant differences were found in intrinsic career maturity values of PASSP and non-PASSP participants as groups. However, intrinsic career maturity values among PASSP subjects were more similar than among non-PASSP participants.

4. No significant differences were found in extrinsic career maturity values of PASSP and non-PASSP participants as groups. However, extrinsic career maturity values among PASSP participants were more similar than among non-PASSP participants.
Area 2: Intrinsic and Extrinsic Work Values and Career Maturity of PASSP Participants by Sex

5. No significant differences were found in intrinsic work values of PASSP female and male participants. However, intrinsic work values were more similar among PASSP females than among males.

6. No significant differences were found in extrinsic work values of PASSP female and male participants. However, extrinsic work values were more similar among PASSP females than among males.

7. No significant differences were found in intrinsic career maturity values of PASSP female and male participants. However, intrinsic career maturity values were more similar among PASSP males than among females.

8. No significant differences were found in extrinsic career maturity values of PASSP female and male participants. However, extrinsic career maturity values were more similar among PASSP males than among females.

Area 3: Intrinsic and Extrinsic Work Values and Career Maturity of Non-PASSP Participants by Sex

9. No significant differences were found in intrinsic work values of non-PASSP female and male participants. However, intrinsic work values were more similar among non-PASSP females than among males.

10. No significant differences were found in extrinsic work values of non-PASSP female and male participants. However, extrinsic work values were more similar among non-PASSP males than among females.

11. No significant differences were found in intrinsic career maturity values on non-PASSP female and male subjects. However, intrinsic career maturity values were more similar among non-PASSP females than among males.
12. No significant differences were found in extrinsic career maturity values of non-PASSP female and male participants. However, extrinsic career maturity values were more similar among non-PASSP males than among females.

Summary of Conclusions

This study was conducted to investigate intrinsic and extrinsic work values and career maturity for PASSP participants by sex, non-PASSP participants by sex, and PASSP and non-PASSP participants by group. In addressing these issues, this study reveals that intrinsic and extrinsic work values exhibit no differences between each other. The intrinsic and extrinsic work values and career maturity by sex and group were more similar. This supports the findings by Purcel et al. (1972), and Wallas and Gulkus (1974), that there is a relationship between work values and career maturity, particularly among older persons.

Implications for Future Research

Based on the above findings of this study and the review of related literature, the following steps are recommended to further generate career development programs and to further identify and understand career needs of minority students.

1. College personnel must be sensitive to individual and group differences in students' work values and career maturity values and the changes that occur over time with values. This seems to be very important because in this study, proponents of career development emphasize that career decision and exploration is a continuous process, and should be investigated and identified as often as necessary.
2. Not only do females and males possess similar and different work values, but they differ in the values that are related to career maturity. The findings in this study show more females with similar work values and career maturity scores. There may be a need to give similar inventories to decide if this happened by chance.

3. If students are expected to be successful in college/university programs, they will be more successful than unsuccessful. The PASSP is a prime example of this.

4. The dimensions of work value and career maturity developed by Donald Super support the concept that education and counseling can provide the stimulus for career development among minorities.

5. Just as the PASSP utilizes role models to enhance the growth of students, this can certainly serve as an example that is critical to show minorities role models throughout other college/university programs.

6. A follow-up study of the participants used in this analysis should be conducted at different points in academic careers to determine if work values and career maturity values have changed.

7. In order to continue to view career guidance as a developmental process, the need to design specific activities to increase minority interest(s) in the career decision process is important.

8. College and university personnel need to advocate and continue to present outreach programs to stimulate the thinking of all students.

9. An in-depth study could be done at similar institutions to investigate intrinsic and extrinsic work values and career maturity of minority students.

10. For exploratory purposes, the following computerized programs could
be utilized to allow minority students to independently learn how to explore and
discover possible areas of interest(s) for career choice(s) and/or career
development.

**Discover Computerized System---Discover** (Zunker, 1986) is designed for high school, college and older adult learners who may be unemployed, entering or re-entering formal education, entering or re-entering the job market, and making a possible career change. The general goals in career counseling as outlined by Crites (1978b) which can be accomplished in the **Discover System** are: (a) to assist individuals in making a career choice, (b) to assist the client in the acquisition of decision skills, and (c) to enhance the understanding of oneself and career fields (Zunker, 1986).

**Eureka Computerized System---Eureka** (Zunker, 1986) is designed to help individuals understand the relationship between skills and occupations. Individuals are asked to classify 72 different job skills into one of three categories: very satisfying skills, moderately satisfying skills, and somewhat satisfying skills. The intent is to help individuals identify skills to establish a basis for career planning and decision making (Zunker, 1986).

**SIGI-Plus Computerized System---SIGI-Plus** (Zunker, 1986) is designed to assist individuals who plan to enter two-year and four-year institutions with guidance information. The system is built around a humanistic philosophy emphasizing individual values as a major element of career guidance. Each individual is regarded as unique, requiring individualized support. Therefore, maximum effort is recommended to continue support for all students in making career choices (Zunker, 1986).
Appendix A

Cover Letter
TO: Participants who will participate in the research, "A Comparative Study of Intrinsic and Extrinsic Work Values and Career Maturity for Minority Undergraduate College Student"

FROM: Marvin Hall Ph.D.

DATE: May 11, 1990

SUBJECT: Cover Letter

I would like for you to participate in a research project that is being conducted by me, a doctoral candidate in the Counseling Education and Counseling Psychology Department of Western Michigan University. I will be the only person to see the results of the Work Values and Career Maturity inventories that you will be asked to complete. As the principal investigator, I can assure you that in reporting the data your identity will not be known. The categories will consist of number of inventory, participation level (university class), age, ethnic origin, and gender. Confidentiality will be used in every sense for your protection.

You may fill out the inventories if you choose or you may abstain with no penalty. Also, you may withdraw from this study at any time. You will not receive any compensation for your participation in the study. I do hope you agree to take part in this research.
Appendix B

Human Subjects Review Procedures
Date: May 14, 1990
To: Marvin Hall
From: Mary Anne Bunda, Chair

This letter will serve as confirmation that your research protocol, "A Comparative Study of Intrinsic and Extrinsic Work Values and Career Maturity for Minority Undergraduate College Students", has been approved under the exempt category of review by the HSIRB. The conditions and duration of this approval are specified in the Policies of Western Michigan University. You may now begin to implement the research as described in the approval application.

You must seek reapproval for any changes in this design. You must also seek reapproval if the project extends beyond the termination date.

The Board wishes you success in the pursuit of your research goals.

xc: J. Morris, CEC

HSIRB Project Number 90-04-12

Approval Termination May 14, 1991
Appendix C

Summary of Analysis of Variance for Differences in Intrinsic and Extrinsic Work Values and Career Maturity By Group(s) and Sex Tables
Table 4
Summary of Analysis of Variance for Differences In Intrinsic Work Values of Personal and Academic Support Services Program and Non-Personal and Academic Support Services Program Subjects

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>D.F.</th>
<th>Mean Squares</th>
<th>F Ratio</th>
<th>F Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>14.40</td>
<td>1</td>
<td>14.40</td>
<td>.17</td>
<td>.68</td>
</tr>
<tr>
<td>Within Groups</td>
<td>3151.60</td>
<td>38</td>
<td>82.94</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3166.00</td>
<td>39</td>
<td></td>
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Table 5

Summary of Analysis of Variance for Differences In Extrinsic Work Values of Personal and Academic Support Services Program and Non-Personal and Academic Support Services Program Subjects

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>D.F.</th>
<th>Mean Squares</th>
<th>F Ratio</th>
<th>F Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>14.40</td>
<td>1</td>
<td>14.40</td>
<td>.13</td>
<td>.72</td>
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<tr>
<td>Within Groups</td>
<td>4057.50</td>
<td>38</td>
<td>106.78</td>
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<td></td>
</tr>
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<td>Total</td>
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<td></td>
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</table>

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Table 6

Summary of Analysis of Variance for Differences In Intrinsic Career Maturity of Personal and Academic Support and Non-Personal Services Program and Academic Support Services Program Subjects

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>D.F.</th>
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<th>F Ratio</th>
<th>F Probability</th>
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<td>1</td>
<td>13.23</td>
<td>2.61</td>
<td>.11</td>
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<tr>
<td>Within Groups</td>
<td>265.75</td>
<td>38</td>
<td>6.99</td>
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</tr>
<tr>
<td>Total</td>
<td>283.98</td>
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<th>Mean Squares</th>
<th>F Ratio</th>
<th>F Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>2.50</td>
<td>1</td>
<td>2.50</td>
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<td>.58</td>
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<tr>
<td>Within Groups</td>
<td>300.60</td>
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<td>7.91</td>
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<td>Total</td>
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Table 8

Summary of Analysis of Variance for Differences in Intrinsic Work Values of Female and Male Personal and Academic Support Services Program Subjects

<table>
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<th>Source</th>
<th>Sum of Squares</th>
<th>D.F.</th>
<th>Mean Squares</th>
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<th>F Probability</th>
</tr>
</thead>
<tbody>
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<td>Between Groups</td>
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<td>88.20</td>
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<td>.36</td>
</tr>
<tr>
<td>Within Groups</td>
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<td>64.87</td>
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<tr>
<td>Total</td>
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</table>

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Table 9
Summary of Analysis of Variance for Differences in Extrinsic Work Values of Female and Male Personal and Academic Support Services Program Subjects

<table>
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<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>D.F.</th>
<th>Mean Squares</th>
<th>F Ratio</th>
<th>F Probability</th>
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</thead>
<tbody>
<tr>
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<td>36.45</td>
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<td>Within Groups</td>
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Table 10

Summary of Analysis of Variance for Differences In Intrinsic Career Maturity of Female and Male Personal and Academic Support Services Program Subjects

GROUP: 1

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
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<th>F Ratio</th>
<th>F Probability</th>
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<tr>
<td>Between</td>
<td>.20</td>
<td>1</td>
<td>.20</td>
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<td>.86</td>
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<tr>
<td>Groups</td>
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</tr>
<tr>
<td>Within</td>
<td>113.00</td>
<td>18</td>
<td>6.28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Groups</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Total</td>
<td>113.20</td>
<td>19</td>
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</table>

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Table 11
Summary of Analysis of Variance for Differences In Extrinsic Career Maturity of Female and Male Personal and Academic Support Services Program Subjects

GROUP: 1

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<thead>
<tr>
<th>Source</th>
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<th>F Ratio</th>
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</thead>
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<tr>
<td>Between Groups</td>
<td>.00</td>
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<td>.00</td>
<td>.00</td>
<td>1.0</td>
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<tr>
<td>Within Groups</td>
<td>123.80</td>
<td>18</td>
<td>6.88</td>
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<tr>
<td>Total</td>
<td>123.80</td>
<td>19</td>
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*Please Note: Means were identical*
<table>
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<tr>
<th>Source</th>
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<th>Mean Squares</th>
<th>F Ratio</th>
<th>Probability</th>
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</thead>
<tbody>
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<td>Between Groups</td>
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<td>115.20</td>
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<tr>
<td>Within Groups</td>
<td>1780.60</td>
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<td>98.92</td>
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<tr>
<td>Total</td>
<td>1895.80</td>
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Table 13
Summary of Analysis of Variance for Differences In Extrinsic Work Values of Female and Male Non-Personal and Academic Support Services Program Subjects

GROUP: 2

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</tr>
</thead>
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<td>312.05</td>
<td>2.48</td>
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</tr>
<tr>
<td>Within Groups</td>
<td>2262.50</td>
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<td>125.69</td>
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<tr>
<td>Total</td>
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Table 14
Summary of Analysis of Variance for Differences in Intrinsic Career Maturity of Female and Male Non-Personal and Academic Support Services Program Subjects

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<th>Source</th>
<th>Sum of Squares</th>
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<th>F Ratio</th>
<th>F Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
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<td>1</td>
<td>11.25</td>
<td>1.43</td>
<td>.25</td>
</tr>
<tr>
<td>Within Groups</td>
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<td>18</td>
<td>7.85</td>
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<tr>
<td>Total</td>
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Table 15

Summary of Analysis of Variance for Differences in Extrinsic Career Maturity of Female and Male Non-Personal and Academic Support Services Program Subjects

<table>
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<tr>
<th>Source</th>
<th>Sum of Squares</th>
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<th>Mean Squares</th>
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<td>1</td>
<td>9.80</td>
<td>1.06</td>
<td>.32</td>
</tr>
<tr>
<td>Within Groups</td>
<td>167.00</td>
<td>18</td>
<td>9.28</td>
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<td></td>
</tr>
<tr>
<td>Total</td>
<td>176.80</td>
<td>19</td>
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</table>
Appendix D

Conceptualization of the Study
Figure 1. Conceptualization of the Study.


University, Teachers College.
