

DOCUMENT RESUME

ED 472 372

CE 084 317

AUTHOR Bright, Tony Dale

TITLE The Differential Behavioral Work Styles of African American Students With and Without Learning Disabilities.

PUB DATE 2002-07-00

NOTE 241p.; Dissertation submitted to Michigan State University in partial fulfillment of the requirements for the degree of Doctor of Philosophy, Department of Counseling, Educational Psychology, and Special Education.

AVAILABLE FROM For full text: <http://www.msu.edu/~brightto/>.

PUB TYPE Dissertations/Theses - Doctoral Dissertations (041) -- Reports - Research (143)

EDRS PRICE EDRS Price MF01/PC10 Plus Postage.

DESCRIPTORS Adjustment (to Environment); Behavior; *Black Students; *Career Development; *Cognitive Style; Comparative Analysis; Definitions; High School Students; High Schools; Interpersonal Relationship; Interviews; Job Performance; *Learning Disabilities; Literature Reviews; *Parent Participation; Questionnaires; Racial Differences; Records (Forms); Self Concept; *Self Evaluation (Individuals); Socioeconomic Status; Student Attitudes; Student Surveys; Vocational Maturity; White Students; Work Attitudes; Work Environment

IDENTIFIERS African Americans; Behavior Analysis; *Career and Technical Education; Impact Studies

ABSTRACT

The impact of learning disabilities (LD) on behavioral work styles was examined by studying 32 African American high school students (with and without disabilities) enrolled in a career and technical education skills center. Also examined were the relationships between behavioral work styles and these two dependent variables: (1) student's perception of parental involvement in career-related activities and (2) students' socioeconomic status. The following data collection activities/instruments were used: a behavioral analysis assessment; a questionnaire examining student's perception of parental involvement (PPI) in career-related activities; an assessment of students' socioeconomic status (SES); interviews and classroom observations of eight randomly selected students; and a review of students' school records. The following were among the key findings: (1) a majority of the LD students (52%) were classified in the steadiness dimension (students feel less powerful than their environment) versus 33% of the non-LD students; (2) 24% of the LD students were classified in the dominance dimension (students feel more powerful than their environment), as opposed to 40% of non-LD students; (3) students classified in the dominance dimension had the highest PPI scores, whereas students classified in the steadiness dimension had the lowest PPI scores; and (4) 63% of students of low to low-middle SES were classified in the dominance dimension, whereas 54 percent of students of middle to high SES were classified in the dominance dimension. (Twenty-three tables/figures/charts are included. The following items are appended: definitions; consent letters; questionnaires; interview scenarios; behavioral dimension interpretation guide; case study review sheet; observation and interview data grid; data triangulation table; and case study outline. The bibliography lists 279 references.) (MN)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ABSTRACT

THE DIFFERENTIAL BEHAVIORAL WORK STYLES OF AFRICAN AMERICAN STUDENTS WITH AND WITHOUT LEARNING DISABILITIES

By

Tony Dale Bright

The purpose of this study was to examine behavioral work style differences of thirty-two African American high school students with and without learning disabilities attending a Career and Technical Education Skills Center. The study also sought to examine to relationships between behavioral work styles and two dependent variables (1) respondent's perceptions of parental involvement in career related activities and (2) socioeconomic status. A third objective was to examine consistencies between perceived and realized styles in a situated work context. Data collection methods included both quantitative and qualitative approaches. Quantitative sources included the I-Sight Behavioral Analysis Assessment and a Perceptions of Parental Involvement Questionnaire. Qualitative sources were comprised of one-on-one interviews and observations in a situated work context with eight randomly selected students. Finally, four case studies provided depth and understanding of consistencies between perceived and realized styles.

Quantitative results revealed both similarities and differences in behavioral work styles among respondents regarding predominant styles and distribution of styles. Notable relationships were found between behavioral work styles and the study's two dependent variables, student perceptions of parental involvement and socioeconomic status. Further, triangulation of data sources revealed a higher level of consistency by

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

T. Bright

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

BEST COPY AVAILABLE

CE 084317
ERIC
Full Text Provided by ERIC

learning disabled respondents (than their non-learning disabled counterparts) on perceived and realized styles. Since behavioral work styles has not been examined in the context of Career and Technical Education, the study provides the groundwork for future research on high school student's perceptions of behavioral strengths and limitations based on specific environmental constraints. Additionally, this study contributes to the scant literature on career development of African American student as well as literature on self-awareness of style that suggests individual who understand their style have a better chance of succeeding on the job (Herr & Cramer, 1997). Implications for educational research, Career and Technical Education Programs, and Special Education Transition are presented.

Copyright by
TONY DALE BRIGHT
2002

TABLE OF CONTENTS

	<u>PAGE</u>
LIST OF TABLES	xvi
LIST OF CHARTS	xvii
LIST OF FIGURES	xviii
CHAPTER 1: INTRODUCTION	
Demographic Population and Workforce Changes	1
Career Development	2
Problem Statement	3
Self-Awareness Interventions	4
Purpose of the Study	5
Research Questions	6
Overview of the Study	8
CHAPTER 2: REVIEW OF LITERATURE	9
<u>Vocational Education</u>	9
Vocational Education in a Historical Context	10
Career and Technical Education (CTE)	11
Characteristics of Students Participating in CTE	12
Relevancy of CTE Programs to African American Students	14
<u>African Americans</u>	15
Terminology	16
Rates of Career Development	16
Limited Knowledge of Career Interests and Skills	17
Career Maturity	18
Lower Occupational Expectations	19
Summary	21
<u>Familial Factors that Impede Career Development</u>	22
Parental Involvement	22
Poverty	25
Summary	28
<u>Learning Disabilities</u>	29
Defining Learning Disabilities	29
Transition to Employment	32
Employment Status	32
High School	33
Adult Outcomes	35

	<u>PAGE</u>
Summary	37
<u>Effective Programming</u>	38
State Level Evaluations	38
Individual Program Components	41
Instructional Strategies	41
Curriculum Quality Standards	42
Understanding Self	44
Awareness of Style	45
Style Types	46
Personality Style	46
Summary	48
<u>Behavioral Work Styles</u>	50
Defining Behavioral Work Style	50
Behavioral Work Style Origins	51
Hippocrates	51
Carl Jung	51
William Marston	51
John Geier	55
Need for Behavioral Work Styles in CTE Programs	58
CHAPTER 3: METHODS	61
Design of the Study	61
Study Characteristics	63
Setting	63
Participants	63
Data Collection and Procedures	66
Behavioral Analysis Assessment (<u>I-Sight</u>)	67
Questionnaire	69
Assessment and Questionnaire Procedures	70
Observations and Interviews	73
Observations	73
Interviews	74
Review of Student Records	75
Analysis of Data	77
Analysis of Research Question One and Two	77
Analysis of Research Question Three	78
Observations	78
Interviews	80
The Triangulation of Data	81
Analysis of Case Studies	81

	<u>PAGE</u>
Summary	83
CHAPTER 4: RESULTS	85
Research Question One	86
Research Question One (A)	87
Relationships Between Behavioral Work Styles, Groups and Respondent Variables	89
Research Question One (B)	90
Relationships Between Behavioral Work Styles, Groups and Respondent Variables	93
Summary Research Question One	94
Research Question Two	95
Research Question Two (A)	95
Relationships Between Behavioral Work Styles, Student Perceptions of Parental Involvement, and Respondent Variables	96
Research Question Two (B)	103
Relationships Between Behavioral Work Styles and SES	104
Summary Research Question Two	105
Research Question Three	106
Triangulation of Data	107
Criterion for Consistency Measurement	108
Consistencies Between Perceived and Realized Styles	109
Case Studies	110
Criterion for Case Selection	111
Case Study One: Susan	112
Susan's Perceptions of Parental Involvement	113
Susan's Perceived and Realized Styles	113
Case Study Two: Lagita	117
Lagita's Perceptions of Parental Involvement	118
Lagita's Perceived and Realized Styles	119
Case Study Three: Cary	122
Cary's Perceptions of Parental Involvement	123
Cary's Perceived and Realized Styles	124

	<u>PAGE</u>
Case Study Four: Lyle	127
Lyle's Perceptions of Parental Involvement	128
Lyle's Perceive and Realized Styles	128
Summary Research Question Three	133
 CHAPTER 5: CONCLUSIONS AND IMPLICATIONS	 135
Summary of Findings	
Research Question One (Summary)	135
Research Question One Conclusions/Discussion	137
Research Question Two (Summary)	141
Research Question Two Conclusions/Discussions	143
Research Question Three (Summary)	144
Recommendations and Implications	148
Educational Research	149
CTE and Special Education Transitional Programs	151
Limitations of the Study	153
A Final Thought	154
 APPENDICES	 156
APPENDIX A	
DEFINITION OF TERMS	157
APPENDIX B	
ADMINISTRATOR CONSENT LETTER	161
APPENDIX C	
PARENTAL CONSENT LETTER	165
APPENDIX D	
STUDENT CONSENT LETTER	168
APPENDIX E	
<u>I-SIGHT</u> BEHAVIORAL ANALYSIS INSTRUMENT	171

	<u>PAGE</u>
APPENDIX F STUDENT PERCEPTION OF PARENTAL INVOLVEMENT QUESTIONNAIRE	175
APPENDIX G HOLLINGSHEAD TWO-FACTOR INDEX OF SOCIAL STATUS	179
APPENDIX H BEHAVIORAL DIMENSION INTERPRETATION GUIDE	182
APPENDIX I INTERVIEW SCENARIOS	191
APPENDIX J CASE STUDY REVIEW SHEET	194
APPENDIX K OBSERVATION AND INTERVIEW DATA ANALYSIS GRID	199
APPENDIX L DATA TRIANGULATION TABLE	202
APPENDIX M CASE STUDY OUTLINE	205
BIBLIOGRAPHY	208

LIST OF TABLES

		<u>PAGE</u>
Table 1	John Geier's Four Dimensions of Behavior	57
Table 2	Student Information Table	65
Table 3	Date Sources by Research Questions	67
Table 4	Chi-Square Results for Behavioral Work Styles by LD and NLD Groups and Respondent Variables	89
Table 5	Chi-Square Results for Behavioral Work Styles by African American & Caucasian Groups (LD, NLD) and Respondent Variables	94
Table 6	4x2 ANOVA Results for Univariate F Test of the Dependent Variable PPI by Behavioral Work Styles and Group	97
Table 7	Means and Standard Deviations for PPI as a Function of Behavioral Work Styles	97
Table 8	Means and Standard Deviations for PPI as a Function of Behavioral Work Styles	98
Table 9	2x4x4 ANOVA Results for Univariate F Test of the Dependent Variable PPI by Parent's Education Level and the Interaction Effect	99
Table 10	Means and Standard Deviations for PPI as a function of Educational Level of Father	100
Table 11	Means and Standard Deviations for PPI as a Function of Educational Level of Mother	101
Table 12	Means and Standard Deviations for PPI as a Function of Group and Educational Level of Mother (Interaction Effect)	102
Table 13	Results of Chi-Square for Behavioral Work Styles by SES and Respondent Variables	104
Table 14	Perceived and Realized Behavioral Work Styles and Consistency Scores of the Eight Randomly Selected Students	109

LIST OF CHARTS

		<u>PAGE</u>
Chart 1	Behavioral work style dispersion by LD and NLD African American students	87
Chart 2	Dispersion of Behavioral Work Styles by Ethnicity and Group (LD)	91
Chart 3	Dispersion of Behavioral Work Styles by Ethnicity and Group (NLD)	91

LIST OF FIGURES

Figure 1	Types of Work-Based Learning	39
Figure 2	Exemplary CTE Program Example: Work-Based Learning	40
Figure 3	Exemplary CTE Program Example: Authentic Instruction	42
Figure 4	Exemplary CTE Program Example: Self-Awareness	45
Figure 5	William Marston's Dimensions of Behavior Model	54
Figure 6	The I-Sight Points to Remember Overhead	72

CHAPTER 1

INTRODUCTION

As we enter into a new century, racial and ethnic minorities comprise approximately twenty-eight percent of the U.S. population (U.S. Bureau of Census, 1998). According to census projections, over the next 10 years, Caucasians will contribute only one-quarter of the total U.S. population growth. Further, it is predicted that African-Americans, Asians, and Hispanics will outnumber Caucasians by the end of the 21st Century. Minorities now represent a larger share of the K-12 enrollment; one out of every three K-12 student is part of a minority group (Brown, 1995).

With this population growth comes major changes in the U.S. workforce. One change is the increasing cultural diversity of the human resources that comprise organizational systems. Wentling (2001) predicted that by the year 2005, fully one-third of all new workers will be members of a minority group, and an increasing number of African American youth in the 16-24 year-old group will enter the job market.

These changing demographic patterns represent tremendous employment opportunities for African Americans youth with specific vocational skills (Okocha, 1994). Unfortunately, many of these youth may be ill prepared to take advantage of these opportunities. If this trend continues, the employment rate of African Americans is unlikely to improve. The African American unemployment rate has remained at 15% since 1978; in other words, 2.5 times higher than Caucasians (Brown, 1995).

Vocational outcomes and occupational success of African Americans remain problematic. African Americans are more likely to be unemployed or employed in low-paying jobs than Caucasians. Historically, public schools have provided educational and

career interventions that prepare youth for productive occupational roles. More specifically, Lent, Hackett, and Brown (1998) have argued that if America is to remain competitive in the world economy, African American youth must have relevant career development prior to high school graduation.

Career Development

Career development in U.S. schools has been defined as the total constellation of psychological, sociological, and educational factors that combine to influence the nature and significance of work in the total life span of the individual (Maddy-Berstein, 2000). Based on federal guidelines, career development programs are an integral part of a state's total education system. Spanning from elementary to postsecondary education, it is one of the most widespread components schools use to address career transitional needs.

Programs are designed so that students obtain, organize, interpret, and evaluate information from academic and career-related activities at each grade level. Effective career development programs help ease the transitions from school to employment by helping students obtain skills in academic areas as well as translating career training into substantial educational, occupational, and economic opportunities (Michigan Department of Career Development, 2001). Additional benefits include, acquiring basic skills and attitudes for successful entry into the world of work and becoming more effective career managers, acknowledging strengths, and understanding differences (Lankard, 1992).

Career development programs go beyond basic academic and/or vocational guidance. Continuums of planned interrelated and interconnecting activities integrate academic subject matter and learning techniques into a student's educational plan. These

activities, in turn, help students make both educational and career choices. Specific categories of career development include (a) career awareness and exploration, (b) contextual learning, (c) work-based learning, (d) career pathways, and (e) educational development plans (for explanation of categories, see “Definitions of Terms” in Appendix A).

Problem Statement

Despite an increased awareness and concern for secondary student career development, research has suggested that significant numbers of school districts are failing to implement effectual career development programs for African American youth (Lent, Brown & Hackett, 1998). Schools have employed programs with “generic” designs aimed at meeting the needs of all segments of the population (Kerka, 1998). Many prevailing career development programs are based solely on research centered on white middle-class males; therefore, their applicability to African Americans has been called into question (National Center for Research on Vocational Education, 1996). As a result of this narrow focus, programs are not tailored to meet the unique needs of these students, who tend to (1) be career immature, (2) have little knowledge of their own career interests, (3) possess lower occupational expectations for themselves, and (4) be unemployed, underemployed, and employed part-time in greater numbers than their Caucasian counterparts (Smith, 1981; McNair & Brown, 1993; Fouad & Keeley, 1993; Wagner & Blackorby, 1996).

Research has indicated the presence of a learning disability (LD) exacerbates problems associated with career development (Levine & Nourse, 1998). This is

particularly relevant to the African American community because, of all minority groups, they have the highest representation in special education placement (Bondy, 1998).

Despite an increased emphasis placed on transitional issues of students with LD by the 1990 Individual's with Disability Education Act (IDEA), individuals with LD display lower rates of job stability, career immaturity, a greater difficulty assessing personal strengths and weaknesses, and lower levels of career outcome expectations than their nondisabled counterparts (Rojewski, 1996; Ochs & Rossler; 2001).

Cheatham (1990) argued that effective career programming includes interventions that help African American students gain self-knowledge essential to form work identity and career choice preferences. For this to transpire, however, school personnel must first understand the cultural specificity of values, attitudes, and beliefs related to work, and realize that program components based on majority population values are not necessarily applicable to African Americans.

Self-Awareness Interventions

According to Herr and Cramer (1996) self-awareness interventions assist students in understanding themselves, not only in terms of their talents, but also in terms of their interests, values, behaviors, and personality characteristics. The greater the self-understanding an individual has achieved, it is believed, the more likely realistic and satisfying career related decisions will be made. Career related self-knowledge interventions assist individuals in authenticating intellectual growth, gain perspectives about realistic careers, and make career decisions compatible with their strengths and limitations (Ohler, Levinson, & Hays, 1996).

One self-knowledge intervention proposed for career development programs is based on interpersonal styles (Marston, 1928). This is particularly relevant to African American students because interpersonal style is influenced by specific values, beliefs, gender, ethnicity, and family background. Cheatham (1990) has suggested that the “Afrocentric” perspective differs markedly from Caucasians. Behavioral Work Styles, an intervention focused on understanding an individual’s behavioral style situated in a work context, steers students toward modifying their behaviors based on environmental constraints. Students develop a deeper understanding of how they relate to others and different situations in workplace contexts. The intent of behavioral work styles is for students to recognize personal strengths and limitations, and to understand how individuals from various behavioral patterns relate to one another on the job. As a result, it is expected that students might gain an understanding of themselves and environments most conducive to their work style. Therefore, the rationale for this study was based on the need for African American youth to understand their behavioral work styles.

Purpose of the Study

The purpose of this study was to examine the behavioral work styles differences between two groups: African American high school students with learning disabilities (LD) and African American high school students without learning disabilities (NLD). This research was designed to provide insight into a topic that has not been explored in the framework of high school career development programs. Prior studies focusing on behavioral work styles have concentrated on the post graduation employment environment. It was hoped this investigation would provide foundational knowledge for

the individualization of career development programs for African Americans. Because this study explored new territory, it was imperative to determine if relationships existed between factors that have been shown to impede vocational outcomes of African American students. For this reason, respondent perceptions of parental involvement in career-related activities and socioeconomic status were examined in relation to student's behavioral work style. Finally, perceived behavioral work styles and realized styles were examined to determine if there were consistencies between student's belief of their personal style and observed behaviors.

Research Questions

Three research questions guided this study. The first question was: "What are the behavioral works styles of African American students with and without learning disabilities?" This question was divided into two sections:

Section A: Are there differences in behavioral work styles among African American high school students with and without LD?

Section B: Do the behavioral work styles of African American students with and without LD differ from the majority population?

The second question was: "Do relationships exist between behavioral work styles and familial factors, student perception of parental involvement and socioeconomic status?" To address this question, student perceptions of parental involvement based on how often specific parental driven career development activities occurred and the

importance placed on certain job characteristics was measured. The strength of association between levels of socioeconomic status and behavioral work styles was then examined. Specifically this question sought to answer the following:

- A. Do relationships exist between levels of student perceptions of parental involvement and behavioral work styles?
- B. Do relationships exist between level of socioeconomic status and behavioral work styles?

The third question explored in this study was: “Are the perceived styles consistent with the realized self in a situated work context?” This question sought to examine levels of consistency between perceived behavioral styles (student’s belief of their personal style) and realized behavioral style (observed behaviors). Stout (1982) emphasized the importance of an individual’s self-concept in relation to the work environment. Self-concept which is equivalent to one’s self perception, was described as,

“An organized, consistent, holistic set of ideas, attitudes and feelings about oneself and one’s relationship to others. It is perceptions of the characteristics of the “I” or “me” and the perception of the relationship of the “I” or “me” to others and to various aspects of life together with values placed on those perceptions” (pg. 47).

Stout (1982) stated that the use of self-perception in the work environment could help to avoid behaviors and attitudes that create threat and defensiveness that restrict the flow of information and interpersonal communication.

Overview of the Study

This study was designed to explore aspects of behavioral styles in African American high school students, with and without, learning disabilities. It was hoped this exploration would shed light on the potential benefits of behavioral work styles in high school career development contexts. Chapter Two provides a comprehensive review of the literature that helps establish a conceptual and theoretical framework for the study; this chapter presents research in six areas including (1) a brief synopsis of vocational education and Career and Technical Education (CTE), (2) career development of African Americans, (3) familial factors that often influence career development of African American youth, (4) employment status of youth and adults with learning disabilities, (5) research on effective career development programming for African American students, and (6) an overview of behavioral work styles. Chapter Three discusses the organizational features of the study, describes the research methodology and design, research setting, participants, and data collection and analysis procedures to address the research questions guiding the study. Results of the study are presented in Chapter Four along with an analysis and interpretation of these results, and four randomly selected cases that illuminate the data. Finally, in Chapter Five conclusions, implications, and limitations of the study are presented.

CHAPTER 2

REVIEW OF LITERATURE

Overview

This chapter establishes a conceptual and theoretical framework for the study of differential behavioral work styles of African American students with, and without, learning disabilities. The first section begins with a brief overview of vocational education and Career and Technical Education (CTE), which includes types of programs, students served, and relevancy of programs to minority students. The second section reviews literature on the career development of African Americans. This section is followed by an examination of familial factors that often influence career development of African American youth. The fourth section describes the characteristics of learning disabilities, employment status of youth with learning disabilities, and their adult outcomes. The fifth section reviews effective career development programming for African American students. The final section provides an overview of behavioral work styles and argues that behavioral work styles are needed for students in CTE programs.

Vocational Education

The literature review's first section briefly describes vocational education in a historical context. In the first portion, reform polices and subsequent changes are noted. Career and Technical Education (CTE) programs including program types and student characteristics are explained. In the final section, the relevancy of Career and Technical Education program components to minority students are highlighted.

Vocational Education in a Historical Context

Vocational education in the United States mirrors the complexity of society and its public education system in terms of diversity and scope. At the turn of the century the earliest vocational programs prepared students for the industrial age with practical skills for the nation's farms, factories, and homes. Focus in federal legislation changed over the years, but the general thrust of federal policy and funding at the high school level, for the past eighty years, has remained primarily to train students for job skills (Lynch, 2000). Initially, vocational education consisted of courses in specific labor market preparation (such as agriculture, health care, trade and industry) and a loose collection of general preparation coursework (such as basic skills and typing) (National Center for Education Statistics, 2000). During the last two decades, however, legislation at both the national and state levels has called for reform of vocational education programs. This reorganization was spurred by several concerns: (1) fears that American students were not being adequately prepared for the rapidly changing workplace, (2) declining program enrollments, and (3) a stigmatization of vocational education as a dumping-ground for special education and non-Caucasian students. Legislative reform efforts, such as the Carl D. Perkins Act and the 1994 School-to-Work Opportunities Act, have placed an emphasis upon broader career preparation designed to develop the academic, vocational, and technical skills of students (Maddy-Bernstein, 2000; Lynch, 2000; Gray, 2000; Lozada, 1999).

Reformed vocational education programs are characterized by a curriculum based on student mastery of rigorous industry standards, academic standards, and general employment competencies (Brotherton, 2000). In addition, programs are no longer based

on specific job skills but now focus on an understanding of all aspects of industry through the integration of academic, technical and vocational practices (Lynch, 2000; Brotherton, 2000). To reform the system, vocational education aspired to change philosophical underpinnings of vocational education; the nature and types of programs offered, and its target audience. Stranger (1997) argued, to improve the education and employment opportunities of all students, vocational education programs had to evolve at the same rate as the work around it. In 1998 members of the American Vocational Association took this philosophy to heart and voted to change the name of their professional organization to the Association of Career and Technical Education (ACTE). Today, in most American schools the reformed “vocational education” is called Career and Technical Education (CTE) (Lynch, 2000).

Career and Technical Education Programs

Like vocational education, Career and Technical Education (CTE) focuses on exposing students to a wide range of work and career possibilities (Gray, 2000). CTE’s goal is not to isolate or single out a group of students, but rather to create opportunities for all students to make more informed career choices. Program components include curricula with targeted outcomes and objectives developed in ways that ensure consistency between academic subjects and work-related experiences. Additionally, CTE, just like its predecessor, reaches down into elementary and middle school grades to allow students earlier and broader opportunities to learn about different careers. Kerka, (1998) suggested CTE’s goal is to foster more diversity and greater scope among

clientele groups, to ensure career exploration as a central theme in the earlier grades, and at the high school level, to prepare students for a wide range of career options.

Career and Technical Education programs are offered in 93% of the nation's 15,200 comprehensive high schools (Lynch, 2000). In addition to high school programs, secondary career and technical education is offered in approximately 1,200 career centers nationwide. Career Center participation requires students to attend a typical 2-3 hour block of time during the school day or evening for specialized training. Moreover, there are also approximately 250 U.S. career or specialty high schools, which prepare students for careers in a particular occupation or industry.

Career centers offer 11th and 12th grade students a variety of programs in which courses are structured around specific occupational areas. Programs are grounded in academics and workplace subject matter, specialized skills training, and clinical experiences (Rojewski, 2002). Depending upon the occupational focus, curricula are structured around classroom lectures and experiences as well as direct "hands-on" training directly with relevant employers. Upon program completion, students not only gain certification in specific skill areas but employment opportunities as well.

Characteristics of Students Participating in CTE

Almost all students take some form of CTE courses during their high school careers. In 1994, 97 percent of public high school students took at least one CTE course. It is noteworthy, however, to understand that there is a shift in the make-up of those enrolling in CTE courses. The National Center for Education Statistics on Vocational Education (2000) found that between 1982 and 1994 there was a general decline in the

participation of Caucasian and middle-class minority students in CTE programs. Conversely, enrollment of low-income and special education students increased. From 1990 to 1994 participation of low-income minority students remained constant, while special education students enrolled in 54 percent more CTE courses than any other student population. The report also noted that during a span of 12 years, the percentage of educationally disadvantaged African American student participating in vocational education remained constant whereas the participation rate of students with disabilities increased. This increase in participation of students with disabilities is “consistent with the emphasis of the 1990 Perkins Act on serving students with special needs” (p. 46).

Gordon (1999) suggested another explanation for this trend. He proffered because schools permit open enrollment of students with various abilities in CTE courses, low-income minorities and mildly disabled students, even those planning on attending college, place more value on attaining trade-specific skills than do more advantaged students (NCRVE, 1997). Rojewski and Sheng (1993) affirmed Gordon’s hypothesis by finding African Americans from lower socioeconomic backgrounds were consistently more positive regarding the relevance of vocational education than their lower socioeconomic Caucasian counterparts. African Americans believed CTE provided necessary job skills and employment outcomes. Similarly, Rosetti (1989) found that African American females had a more positive attitude toward the relevance of CTE than other participants (e.g., African American males and Caucasian males and females).

Relevancy of CTE Program Components to African American Students

Reform efforts such as the School to Work Opportunities Act in 1994 and the Carl D. Perkins Act call for *all* students to have “full access to the full range of programs” (School to Work Opportunities Act, 1994). Research, however, has concluded CTE programs do not adequately meet the needs of students from diverse backgrounds (Lent, Brown & Hackett, 1994; Bright & Jackson, 1998; NCRVE, 1996).

Some researchers argue that CTE generically designed programs fail to meet the unique needs of African American students (Naidoo, Bowman, & Gerstein, 1998; Osipow & Littlejohn, 1995). Instead of implementing programs that focus on researched-based minority interventions, many schools have implemented programs with standard designs, which supposedly meet the needs of *all* segments of the population. Lent et al (1998) posit that because of the inadequate design, many schools do not foster the career development needs of the majority of minority students. Bright and Jackson (1998) echoed this sentiment when they suggested that due to a dearth of effective program components, many CTE programs in the State of Michigan serving African American students are ineffective. Similarly, the National Center for Research on Vocational Education (NCRVE) (1996) underscored the deleterious affects of poorly planned CTE programs on minority students. Leong (1997) argued that racial/ethnic minority students are penalized and held back because CTE programs are developed without the benefit of research regarding career development theories of minority students.

Historically, most career development theories have been derived from research on Caucasian middle-class males. Recently the application of such research to African Americans has been called into question (Kerka, 1998; Fisher & Giggs, 1997) because

factors that predict the career development of Caucasian students may not be applicable predictors for minority students. Kerka (1998) argued that the tendency to generalize from majority groups to minorities has created a limited and misguided view of constructs that shape the career development of African American students. Leong (1997) argued there is nothing inherently wrong with many components of current career development theories when applied to European Americans, but when components are applied mindlessly and without cross-cultural validation and modification to culturally different students, problems arise. Critics of the major career development theories (Fitzgerald and Betz, 1995; Leong, 1995; Naidoo et al, 1998; Brown, Minton, & Jepsen, 1991) have identified several limitations concerning their applicability to African Americans. These limitations included: ignoring social realities that shape the lives of African Americans, failing to account for the affects of race and cultural variables, exaggerating the role of personality, and making invalid assumptions regarding the career choice of African Americans.

African Americans

The second section of the literature review explores the career development of African American students. First, terminology related to persons from minority backgrounds is defined. This section closes with a synthesis of research presented on the rate of career development of African Americans.

Terminology

When speaking of minorities, a number of diverse groups can be included: African Americans, Asian American, Mexican Americans, the poor, and persons with disabilities. According to Rojewski and Miller (1991) the term “ethnic” minority refers to individuals who identify with a common and distinctive history, culture or language that differs from the majority population. Specific components of culture include practices, values, goals, and attitudes shared by a group. Ethnic minorities may differ in cultural characteristics as diverse as eating habits, family patterns, standards of beauty, and economic activities. Yetman (1999) noted the term “ethnic” is often confused with the socially constructed term “race,” which is defined on the basis of physical characteristics such as hair texture and skin color. Ethnic minorities are considered a unique population, not because of their skin color, religious affiliation or cultural beliefs, but because of the lack of opportunities historically made available to them for preparation and actual transition from school to employment and adult life (Yetman, 1999). Currently, the largest ethnic minority in the United States, and the most researched, are African Americans (Bowman, 1993).

Rates of Career Development

A review of empirical investigations on the career development of African Americans revealed consistently slower rates of vocational development, as compared to Caucasian Americans (Smith, 1981; Brown, Minor, Jepsen, 1991; Abona & Novy 1991). Reasons cited for this difference were limited knowledge of career interests and skills, lack of career maturity, lower occupational expectations, and lack of positive work

and occupational experiences. An examination of these studies provides a starting point to understand the need for viable program interventions to help lower-socioeconomic African American's reach their potential.

Limited Knowledge of Career Interests and Skills

There are several factors related to career interests and skill development of African Americans. Because of fewer opportunities to gain work experience, many inner city African Americans have a limited knowledge of themselves and their career interests, values, and skills. Wentling and Wright (1999) supported this claim by suggesting that employers often opt not to hire African Americans because they are seen as poor risks whose attitudes towards work and others might be undesirable. Miller (1991) expands this view by arguing the absence of basic work knowledge and skills leaves African American youth unaware of the interpersonal skills, punctuality and dependability skills critical for success at work. This lack of experience may further limit their perceptions and knowledge of available job opportunities.

Watson and Stead (1990) noted African Americans tend to have tentative orientations toward work and lack exposure to educational opportunities and employment information that might assist their career development process. This was evidenced in a study conducted by Brown et al (1991) on American adults' perceptions of career planning. Results from a National Career Development Association (NCDA) survey revealed that African Americans were more likely than Caucasians to (a) want more occupational information, (b) need assistance with career information and decision making, (c) perceive job discrimination, (d) take the only job available, (e) expect to

leave their current job in the next year, and (f) recommend an increased focus on career development issues to improve career outcomes. The NCDA concluded the lack of knowledge of and exposure to occupational opportunities coupled with deficiencies in career planning signified a lack of career maturity for many African Americans. Fouad and Keeley (1993) confirmed these conclusions by stating that many low socioeconomic status African American youth are uncommitted to careers and lack vocational maturity. They recommended that more studies be conducted that explore the implications of maturity on careers.

Career Maturity

Career Maturity is conceptualized as an individual's readiness to make well-informed, age-appropriate career decisions in the face of existing societal opportunities and constraints (Naidoo, 1998). Career maturity is influenced by age, ethnicity, locus of control, and social economic status. The complex interaction of these factors affects one's readiness to succeed in mastering the tasks appropriate to various stages of career development. Often measured using majority populations as the norm, research indicated that Caucasians consistently score higher than African Americans on career maturity scales (Smith, 1976; Leong, 1995).

Rojewski (1994) found African Americans from low-income backgrounds score lower on career maturity measures, which he attributed to a lack of access to occupational information and employment opportunities, both influencing career choice. He proffered that although low-income individuals often have high career aspirations, the influence of

inadequate guidance and lack of career information, affects their “fit” with the career maturity model.

Similarly, McNair and Brown (1993) examined the occupational expectations and career maturity levels of African American and Caucasian 10th grade students. Results of this study indicated, on all areas of career maturity, Caucasian students scored higher, and low socioeconomic status had a negative impact on career aspirations of male students. The authors concluded that unless African American students gain the necessary skills and attitudes to pursue career goals, they would inevitably find themselves lowering their career aspirations and expectations.

In another study on career maturity, Westbrook (1991) investigated the validity of five Career Maturity Attitude Measures with a population of 322 urban high school students. Results indicated that compared to African Americans, Caucasian students were (1) more actively participating in the progress of making career choices, (2) less dependent on others in choice of occupation, and (3) more willing to compromise between needs and reality. Further, the results noted career immaturity was a potential barrier to perceive occupational expectations.

Lower Occupational Expectations

In direct contrast to the upwardly mobile occupations held by their Caucasian counterparts, many African Americans have been confined to those jobs considered “instrumental” that is, lower-level jobs that offer little or no opportunity for growth or monetary reward (Murry & Mosidi, 1993). These primarily blue-color jobs serve mainly as a means of making a living rather than as careers with a chance of advancement.

Swinton (1990) suggest that lower rank on the employment hierarchy places African Americans at a disadvantage not only economically, but also occupationally. She observed that only 37% of African American men compared to 62% of Caucasian men were employed in “good” jobs (i.e., managers, administrators, and sales occupations), whereas 45% of African American men and 24% of Caucasian men were employed in, “bad” jobs (laborers). This concentration in lower-level occupations could be a reflection of their perceived structure of opportunity. Ogbu (1978) noted that African American’s believe they face a job ceiling, inequality in treatment, and occupational rewards that are not comparable to their occupational level. The result of these perceptions is less effort toward career development and self-imposed limitations in terms of occupational choices.

There are conflicting findings regarding career aspirations of African American females. For example, Smith (1981) found that when compared to African American men and Caucasian female high school seniors, African American females showed higher educational and career aspirations. Likewise, results of a study conducted by Lewis (1977) on African American females age 16 to 19 revealed this group had strong-work oriented values. Most believed that being employed symbolized more than just a method of obtaining money. Eighty percent disagreed that a job was just a way to make money and the idea that it was better to find the easiest job that paid the most. Instead, work was viewed as a means of attaining prestige, self-esteem, and independence.

Conversely, Arbona and Novy (1991) noted that even when African American youth aspire to high-status, high-paying occupations, many are less likely to believe that the chances of obtaining such employment will occur. This diminishing belief may be the result of exposure to a limited range of jobs within their environments, particularly to

jobs with little opportunity for advancement or security. This fact was emphasized in research conducted by both Smith (1983) and Oakes (1994). They both suggested that African Americans who reside in inner-city areas may often be (a) exposed to a paucity of available job opportunities, (b) subjected to employment discrimination, and (c) feel hopeless about changing their occupation.

Summary

The preponderance of research presented indicated that many low-income African American youth have a slower rate of career development including limited knowledge of career interests and skills and career maturity than does the majority population.

However, there were conflicting findings in the area of occupational expectations of African American females. African American females possess more positive work oriented values and career aspirations than their male and Caucasian female counterparts. Career aspirations are an important part of the career development process because of the link between the career aspirations of youth and their ultimate occupational attainment.

To enhance career aspirations, African American students need assistance with career information, decision-making and increased focus on career development. A logical place to gain such insight seems to be CTE programs offered in the nation's schools. Research indicated that when many African American students leave school, they have not gained the knowledge and skills needed for productive engagement in the world of work. It is important to mention, however, that not all African American students leaving school do so with career immaturity or lack the skills needed to succeed in the world of work. This fact leads to speculation regarding other factors that

contribute to career development. Additional factors such as parental involvement and socioeconomic status have been found to play a *role* in the rate of career development.

Familial Factors that Impede Career Development

The third section of this literature review explores familial factors that have been shown to impede the career development of African American students. The first section explores the impact of parental involvement in the career development process of African American youth. Next, poverty is examined as another potential impediment to career development. It is important to note that lack of parental involvement and poverty has the potential to hinder the career development of all students, not just those from low-income African American heritages. Furthermore, despite these obstacles many African American youth succeed in school and employment (Luster & McAdoo, 1996).

While there are many deterrents in the facilitation of career development, a significant body of research focuses on the impact of parental involvement and poverty (Courtland, 1984; Mau, 2000; Wentling, 2001). These two factors influence career aspirations, career choice attitudes, and subsequent occupational attainment. Thus, an examination of their potential impact on career development of African American students is warranted.

Parental Involvement

Parents are the primary shapers of a child's motivation and values (Brown, 1999); they are in the most powerful position to convince children of the importance of education and work. Problems occur, however, when parents are not involved in the

facilitation of their child's career development process. Because of daily barriers faced by significant numbers of low-income African American families, a child's preparation for employment is often abdicated to school personnel (Dillard, 1980). The National Center for Research on Vocational Education (1997) noted that social and economic changes faced by minority families often constrain the time and effort parents can devote to the career development of their children; therefore, schools are often left with this task. Research indicated that educational and career development goals of African American students are among the most significant predictors of their eventual career attainment (Dillard, 1980; McNair & Brown, 1993). Because of the critical nature of these goals, researchers have turned toward determining the relative value and importance of family background and involvement in shaping career aspirations, choice, and maturity. However, there is a scarcity of research focusing on the role families play in preparing African American students for work.

Parental influence on career choice has been found in some communities to be greater among African American than Caucasian families. Lee (1984) investigated the relationship between the maturity of career choice attitudes and parental influence of those attitudes in 395 tenth grade African American and Caucasian students. The Career Maturity Inventory assessed career choice attitudes, while parental influence was measured by eliciting student perceptions of the degree parental influence had over their career development process. Results indicated parental influence had a greater impact on the career choice attitudes of African Americans than it did on Caucasians. Lee speculated that in rural communities, variables and their relationship to career choice attitudes may vary significantly according to ethnicity.

Along with exploring the influences of family on career attitudes, researchers have explored parental involvement from a school-based perspective. Wentling and Waight (1999) indicated school administrators believed lack of parental involvement was a barrier to the career development of African American students. They sought to identify school, work, and individual barriers that hindered the successful career development of African American youth. Open-ended telephone interviews focused on school and interpersonal barriers to career development. In the category of interpersonal barriers, two-thirds of the administrators cited a lack of parental involvement. They believed lack of parental involvement stemmed from: (1) a parent's belief that they had nothing to offer because of their lack of skills and training, (2) a home environment that lacked role models, and appropriate career related materials, and (3) the absence of family and friends who might provide employment and job information.

Other researchers have focused on the role of African American parents in the school success of children. In the only known longitudinal study conducted on African American students, Luster and McAdoo (1996) examined factors that contributed to low-income African American student's success in school and adulthood. Beginning at age 5 the authors studied one hundred twenty-three African American students for twenty-two years. Results indicated the most successful students (high school graduates) had mothers who were involved in school functions and extended families that stressed the stability and connectedness of home and school. Although graduates and nongraduates did not differ in family structure or parental education, parents of graduates were viewed as being authoritative and stressed the importance of high educational expectations. Furthermore, graduates were more likely than nongraduates to select parents as their most

influential role models. Graduates who received more support from their parent(s) came closer to realizing their academic and employment potential than nongraduates. The authors concluded that school and employment successes of participants could be attributed to parent's participation in school activities, strong reliance on the extended family, and the ability of parents to manage and cope with dual responsibilities of being the authoritarian and breadwinner. Luster and McAdoo also suggested that far too little is known about factors which contribute to the success of African American youth.

Poverty

Parental involvement is just one factor that has ramifications for the career development process of African Americans. A second factor, poverty, has also been shown to influence the progression of career development. Poverty has an unabated influence within many African American communities. Recent statistical data from the United States Bureau of Census (USBC) (2000) indicated that although the poverty rate of African Americans is at an all time low (22%), it is still three times that of Caucasian families (7.5%). Further, even though 79% of African Americans, age 20 and over, have completed high school; 11% of this group live in poverty, compared to 6% of Caucasians.

Several studies have found direct correlations between level of parental involvement and poverty (McAdoo, 1999; McNair & Brown, 1983; McKay & Miller, 1982). According to McAdoo (1999) the ability of contemporary African American families to meet their basic needs is directly related to their placement in the stratification hierarchy. She noted that poverty factors impinge on modes of family interaction, child-rearing practices, and emotional stability. This is especially true for families headed by

women as they often encounter higher emotional and financial difficulties. Because of these circumstances, parenting becomes more difficult. As Rank (1994) noted, these circumstances cause frustration for many African American parents. In an effort to describe the lives of welfare recipients, Rank interviewed African American women regarding parenting problems associated with poverty. Results indicated that like most parents, participants wanted what was best for their children; however their frustration came from not being able to provide it. Rank concluded that planning for the future is not something that many low-income families can easily do; whether the reference is the present or the future.

Poverty seeps into and debilitates every aspect of a child's life; it affects the whole individual including attitudes, behaviors, self-esteem and motivation (Harris, 1993). In a like manner, poverty is associated with problem behaviors at school and in the workplace. For example, hardships associated with poverty interfere with the ability to acquire educational credentials, development of positive work attitudes and behaviors required to succeed in the workplace. Schools attempting to assist lower socioeconomic African American students with career development planning and work adjustment frequently confront a Gordian knot: Much of what schools know of career development and behavior does not apply to situational and economical determinants that impinge upon African Americans (Dillard, 1980). What many educational institutions fail to comprehend is that an equal chance to make a realistic career choice and to gain occupational entry is contingent on certain situational determinants associated with economic variables (Singer & Saldaha, 2001).

Many research studies document poverty's deleterious role in the career development process of African American youth (Way & Rossmann, 1996; Smith, 1991). There is general agreement that the level of socioeconomic status is comprehensively related to levels of career aspirations, choice and maturity (Murry & Mosidi, 1993; Brown, 1993).

Family socioeconomic status is related to career choice patterns (Singer & Saldana, 2001; Holland, 1981). Socioeconomic differences are associated with differing levels of information about work, work experience, and occupational stereotypes, which, in turn, affects vocational interests. McKay and Miller (1982) found that elementary children from higher socioeconomic backgrounds chose white-collar and professional jobs as goals more often than children from lower socioeconomic backgrounds and their attitudes were firmly established by third grade. In addition, they found a positive relationship between socioeconomic levels and complexity of data manipulation in occupational choice. In other words, the way a person perceives social and economic mobility at a young age impacts future career choices.

In a related study, Singer and Saldana (2001), found relationships between student career aspirations, ethnicity, and socioeconomic status when compared to their parent's occupation. Participants included 110 African American and Caucasian 11th graders from low to high socioeconomic levels. Students were interviewed regarding personal career aspirations and parent occupations. Results indicated social status of a mother's occupation was strongly correlated with a student's job aspirations. Results further suggested career aspiration was dependent on level of socioeconomic status. Forty-five percent of African American students from lower socioeconomic homes showed lower

levels of personal career aspirations and low-level parental occupations. The authors concluded that social class and socioeconomic status is generally related to parental income. In sum, socioeconomic status is a powerful dimension in student differences, in many instances, overpowering other differences such as ethnicity or gender.

Summary

The current study considers the relationship between level of parental involvement and/or poverty on the career development of African American students; therefore, an examination of research on these factors was warranted. Parental involvement affects student's career maturity, attitudes, and employment aspirations (McKay & Miller, 1982; Courtland, 1984; Harris, 1993). Because of the critical nature of these components, research has turned toward determining the importance of family involvement in career development.

A lack of involvement by parents in the career development of their child may stem from (a) belief they have nothing to offer because of their lack of skills and training, (b) lack of guidelines and interests outside the immediate family, and (c) a lack of social support networks (Wentling & Weight, 1999; Way & Rossman, 1996). For these reasons, a child's preparation for employment is often abdicated solely to the school (Dillard, 1980). Conversely, Luster and McAdoo (1996) suggested that success of students could be attributed to highly involved parents, parents who were authoritarian influential roles models, as well as those who were able to handle dual responsibilities of guardian and breadwinner. Additionally, the authors noted that extended family members could be credited with student's success.

One reason for lack of parental involvement may stem from high levels of poverty in the African American community. Research indicated poverty causes a unique set of challenges to the career education of African American students. Harris (1993) suggested poverty affects career attitudes, behavior, and motivation, which are associated with problem behaviors in the work place. This presents a challenge for CTE programs because much of what is known about career development and behavior does not apply to situational and economic determinants that impinge on African American.

Learning Disabilities

The fourth section of this literature review examines research on students with learning disabilities (LD). The first section describes/explores federal definitions of LD. This section is followed by a description of career development transitional issues. Finally, research on employment experiences of students and adults with LD are examined.

Defining Learning Disabilities

Of all minority groups, African American students, particularly males, have the highest special education representation (Connor, 1999; MacMillian & Reschly, 1998; Bondy, 1998). A significant body of research exists on the career development of students with learning disabilities; however, research focusing on the career development of African American youth with learning disabilities has been given “scant attention in the theoretical literature” (Patton & McMahon, 1999, p.157). Instead, career development research has tended to focus on employment issues of African American

students with physical and emotional disabilities (Herr & Cramer, 1996). Therefore, this review focuses on the career development and employment issues of high school students and adults with learning disabilities.

The professional and research literature suggested that learning disabilities are persistent and pervasive throughout adulthood (Wagner & Blackorby, 1996; Schalock, Holl, Elliott & Ross, 1992). As a result, problems associated with adult outcomes, such as employment, are exacerbated. Wagner & Blackorby (1996) found individuals with LD show the highest rate of employment of all disability groups. They also display lower rates of job stability when compared to the general population; because many exhibit symptomatic traits (associated with LD) that impede employment stability and success. These traits include deficits in cognitive abilities, problematic personality and behaviors such as impulsivity and low tolerance for frustration, as well as an inability to handle problems in day-to-day social interactions and situations (Benz, Yovanoff, & Doren, 1996; Kerka, 1998).

Most definitions describe learning disabilities as a group of disorders that affect the ability to acquire and use listening, speaking, reading, writing, or math skills (Gerber & Reiff, 1994). In 1975, the Education for All Handicaps Children's Act (PL 94-142), now the Individuals with Disabilities Education Act (IDEA) of 1990 (PL 101-476) recognized learning disabilities (LD) as a handicapping condition.

The act defines learning disabilities as a:

“disorder in one or more of the basic psychological process involved in understanding or in using language, spoken or written, which may manifest itself in an imperfect ability to listen, think, speak, read, write, or to do mathematical calculations. The term includes such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. The term does not include children who have learning problems which are primarily the result of visual, hearing, motor handicaps, mental retardation, emotional disturbance, or environmental, cultural, or economic disadvantage.” (Section 5[b] 4)

Although the federal definition did not exclude the possibility that learning disabilities can occur in adulthood, the use of the word “children” appeared to restrict the condition of the group. Use of the word “children” was logical as the law pertained only to school-aged children (Rojewski, 1996).

In 1998 the National Joint Committee for Learning Disabilities (NJCLD) sought to clarify the definition of LD and reinforce the idea that LD could persist into adulthood. According to Hardman, Drew and Egan (1996), NJCLD expanded the definitions of learning disabilities:

“a general term that refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical abilities. These disorders are intrinsic to the individual, presumed to be due to central nervous system dysfunction, and may occur across the life span. Problems in self-regulatory behaviors, social perception, and social interaction may exist with learning disabilities but do not by themselves constitute a leaning disability. Although learning disabilities may occur concurrently with other handicapping conditions (for example, sensory impairment, mental retardation, serious emotional disturbance) or with extrinsic influences (such as cultural differences, insufficient or inappropriate instruction), they are not the result of those influences”. (p. 262)

Taken together, IDEA and NJCLD’s definition indicate LD may only affect certain learning processes, vary in severity, persist across a lifespan, and may have an

effect upon one or more areas of an individual's life including learning, social functioning, and employment.

Transition to Employment

Educational institutions have learned a great deal, over the past decade; about assisting students with LD to successfully transition to adult life. One measure of an effective transition is successful entry into the workplace. Increasing emphasis has been placed on career development issues, in particular, the transition of students with learning disabilities into post high school employment (Levine & Nourse, 1998; Dowdy, Carter, & Smith, 1990). The 1990 Individuals with Disabilities Education Act (IDEA) reinforced this emphasis by including a transitional services component in each student's Individualized Education Plan (IEP). This component, to be developed no later than the age of 16 (as early as 14), is designed to provide programs, activities, and services needed to successfully transition from school to adulthood and employment (Levinson & Ohler, 1998). Specifically, IDEA defined transition services as: "a coordinated set of activities for a student, designed within an outcome-oriented process, which promotes movement from school to post school activities, including post secondary education, vocational training, integrated employment, continuing education, adult services, independent living, and community services" (Section 626, PL 101-476).

Employment Status

Finding and retaining employment is a serious concern for many students and adults with LD. Siegel, Gaylor, and Ross (1991) argued employment of persons with

learning disabilities is one of the most pressing social problems in our society; the high rate of unemployment and underemployment for this group presage unacceptable social costs.

Research on the career development of individuals with LD has focused on pre and post-high school experiences. More specifically, some studies have focused on levels of career maturity of high school students (Bingham, 1980; Rojewski, 1996; Ochs & Roessler, 2001) and long-term follow-up studies on adult employment attainment (Levine & Nourse, 1998; Goldstein, Murray, & Edgar, 1998; Benz et al, 1995; Wagner et al, 1996). Research found in the next section suggests there is a direct link between the career maturity in high school students with LD and level of employment in adulthood.

High School

As noted earlier, career maturity has frequently been used to describe an individual's ability to make age-appropriate career choices. Holland (1985) suggested career maturity could be equated with psychological and developmental maturity in the sense that both are based on experience and knowledge about oneself and the environment. Since career maturity is a developmental process that begins early in life, it may be adversely affected by problems associated with LD (Levinson and Ohler, 1998).

In a study that examined occupational aspirations and career choice patterns of high school students with and without LD, Rojewski (1996) found that cognitive skills related to LD had an effect on career maturity levels. Students with LD experienced greater difficulty assessing personal strengths and weaknesses, selecting appropriate career goals, and were less knowledgeable about the world of work than their nondisabled

counterparts. Further, students with LD were unable to make sound career decisions compared to students without disabilities. Adolescents with LD were two times more likely to remain indecisive about career aspirations compared to nondisabled youth. Additionally, students with LD had a higher probability of relying on others, were less involved in the career decision-making process, and were less willing to negotiate between career needs and reality than their nondisabled peers.

Bingham (1980) noted similar findings. He examined the career maturity levels of male students with LD with male nondisabled students. The research protocol included administration of the attitude scale of the Competence Test of Career Maturity. This measure also served to assess students with LD's performance on the cognitive dimensions of career maturity. Findings indicated differences in career attitudes between groups and supported the hypothesis that LD influences affective dimensions of career behavior. The author noted that because students with LD view themselves and are viewed by others as ineffective, marginal, and unsuccessful, it is not surprising that students with LD incorporate these perceptions as potential workers.

Similarly, Bingham (1978) compared career attitudes of adolescent boys with LD with same-sex nondisabled peers. Results indicated that students with LD scored lower than their nondisabled peers on the Attitude Scale of the Career Maturity Inventory. Bingham concluded that students with LD are less mature to demands associated with career choice than their nondisabled peers and suggested students with LD require carefully planned experiences and activities to for career immaturity.

Taken together, these studies suggest that many students with LD are less career mature than their nondisabled counterparts. Students with LD displayed significantly

lower levels of career decision-making efficacy beliefs, career outcome expectations, intentions to engage in career exploratory activities, and levels of vocational identity than their nondisabled counterparts. Ochs and Rossler (2001) have suggested that both theoretically and empirically, career immaturity is indicative of a lack of clarity regarding one's goals and interests and is characterized by low confidence in one's ability to make career decisions and pursue career goals. The literature indicated students with LD are classified by their lack of career maturity. It is noteworthy to hear Rojewski's (1996) critique of the present CTE system, "vocational programming for students with LD is unlikely to improve without significant career development interventions" (p. 21).

Adult Outcomes

Longitudinal data collected over the past decade demonstrated that adults with LD are unemployed, underemployed, or employed part-time in greater numbers than their non-disabled counterparts (Wagner & Blackorby, 1996; Dowdy, Carter & Smith, 1990; Okolo & Sitlington, 1988). Conversely, other researchers (Spreen, 1986) have suggested that compared to actual attainment of employment, adults with LD fared as well as their non-disabled counterparts. However, further examination of results revealed employment was often part-time, unskilled, and at minimum wage.

Wagner and Blackorby (1996) evaluated adult outcomes of students across various categories of disabilities. They found adults with disabilities lagged behind the general population in the employment arena. However, participants with LD were likely to approach the employment rate of the general population in 70% of the cases. Although adults with disabilities were more likely to be poor, an increase in wages over time was

noted for all disability categories. Participants with LD were likely to arrive at an employment ceiling surpassed by their non-disabled counterparts. In light of these findings, the authors suggested that in shaping career development programs, interventions tailored to the individual needs of students with disabilities, such as self-knowledge, continued to be the most effective approach

Goldstein, Murray, and Edgar (1998) supported Wagner and Blackorby's (1996) results in a ten-year longitudinal study of high school graduates with and without LD. Results indicated that during the first two years after graduation, graduates with LD had significantly higher annual earnings and worked more hours per week than the nondisabled participants; however, during the fifth year after graduation, the trend reversed. In years nine and ten, nondisabled individuals earned considerably higher wages and work significantly more hours than individuals with LD. The authors concluded that during the first to four years after high school, students with learning disabilities tended to work while many nondisabled individuals attend post-secondary education. Further investigation revealed a higher rate of engagement in productive activities by nondisabled participants.

Benz, Yovanoff, and Doren (1996) examined the competitive employment of 422 students with LD five years after high school graduation. Data gathered from telephone interviews were compared with results of a previously conducted follow-along study on post high school experiences of nondisabled students. Results indicated that compared with males with LD and nondisabled adults, females with LD experienced substantial disadvantages in competitive employment outcomes. For instance, females with LD were less likely to be competitively employed two years out of school where as 71% of

males with LD were competitively employed one year out of school. However, a high percentage of males with LD were employed in lower level occupations with minimal advancement opportunities. Interestingly, students with LD who possessed high reading, writing or math skills were 2 to 3 times more likely to be employed than students with lower level skills.

Summary

The current study sought to examine differences in behavioral work styles of African American students with and without learning disabilities; therefore an examination of research on the transition to employment of individuals with LD was warranted. Finding and retaining employment is a serious concern for many individuals with LD. For example, research indicated individuals with LD were underemployed, unemployed, and employed part-time in greater numbers than their nondisabled peers (Wagner & Blackorby, 1996; Goldstein, et al, 1998). Lack of job stability and career attainment could stem from career immaturity, cognitive defects associated with LD, and nonparticipation in transitional planning (Ochs & Rossler, 2001; Levine & Nourse, 1998). Based on the information presented in this section, career development program changes are necessary. As Rojewski (1996) suggested, employment status for individuals with LD is unlikely to improve without significant curricular interventions in CTE programs.

Effective Programming

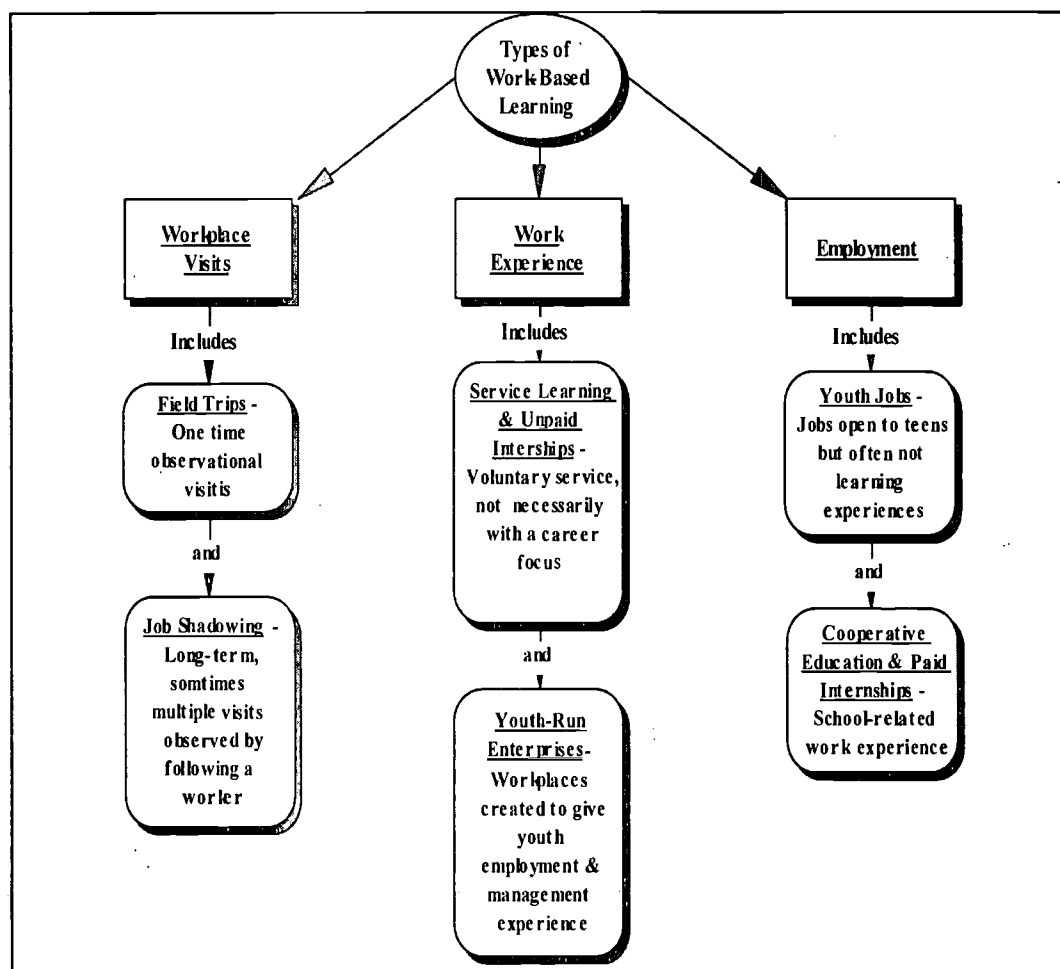
The fifth section reviews the need for effective career development programming for African American youth. First, state level evaluations on urban career development programming are examined. Next, current research on specific program components is explored. After this exploration, the need for interventions focusing on self-knowledge is presented. This final section discusses potential benefits of individual style awareness for African American youth in the career development process. Examples of four innovative and effective CTE programs serving minority students are also highlighted in this section.

State Level Evaluations

Several state level studies have focused on the need for effective career development programs for minority youth. In 1995, the State of Washington conducted a statewide evaluation on 10 school districts with large urban populations (Owens, 1995). Results indicated a need for more structured activities in connecting school and work-based opportunities for minority youth. An evaluation of Oregon's career development programs (Flannery, 1996) paralleled the Washington study. Results indicated that participants' ideal career development program provided work-based opportunities for all students, regardless of "what minority group they belong to" (p. 5). The author of the Oregon study concluded that effectiveness of programs serving minority students needed to consider the individual learning needs of each student. It was also suggested that to "fit" the individual career related needs of minority students, work-based learning activities should (1) take different forms and (2) fall along a continuum, ranging in intensity from exposure-to-the-workplace activities to full integration of academic and

CTE curriculum with work-site experiences. Hamilton and Hamilton (1997) categorized work-based learning into three main forms: workplace visits, work experiences, and employment (Figure 1). Additionally, described in Figure 2 are two examples of exemplary high school work-based learning programs that serve minority youth.

Figure 1 Types of Work-Based Learning (Hamilton & Hamilton, 1997)



BEST COPY AVAILABLE

Figure 2

**Program Example(s)
Work-Based Learning**

Harrisburg High School in Harrisburg, Pennsylvania offers minority students WBL opportunities at each grade level. Ninth graders explore career fields through field trips, tenth graders job shadow employers, eleventh graders begin cooperative education placements, and twelfth graders engage in paid cooperative education and internships. (Andrew & Dornsife, 1997).

At Las Cruces High School in Las Cruces, New Mexico, WBL activities extend beyond grade twelve to what administrators call "grade thirteen." Beginning in the 10th grade, students receive academic courses and employment training at a local community college, as well as, WBL experiences with local employers. At the program's completion, students receive a high school degree, an associate degree in Occupational Business, and 2,500 hours of structured paid work experience (Andrew & Dornsife, 1997).

In 1996, the National Center for Vocational Education (NCRVE) researched the types of experiences acquired by minority youth participating in programs linking education and work. The NCRVE report advocated tailoring (individualizing) career development curriculum and program design to minority student's needs. It stressed the usefulness of student insights for policy makers, school climate, and teaching. Likewise, Ochs and Roessler (2001) suggested the strength of individual career decision making is linked to being personally involved in one's career planning.

To assist minority youth career development, Mireles and Elizabeth (1994) suggested that school support staff become aware of student concerns when reevaluating career program design. They argued if reevaluation is to occur, support staff must become cognizant of student cultural backgrounds. Adding to this critique, Lakes (1996) suggested evaluations should focus on programs for specific groups, such as minority

youth, should first examine the link between effective program components and current research on those groups.

Individual Program Components

The majority of research conducted on components of career development programs for minority youth have focused on instructional strategies and curriculum development.

Instructional Strategies

Grubb (1995) suggested minority youth need instructional strategies that foster an appreciation for academic subjects and practical applications derived from school learning. Following this lead, NCRVE (1997) studied how instructional components might better foster and guide career aspirations of high school African American and Latino students. Results indicated that participants preferred authentic instruction and connecting experiences. Grubb (1995) has suggested authentic instruction connects real-world applications of subject matter with high-order thinking skills, which foster critical thinking and problem-solving strategies. The second instructional component, connecting experiences allows students to explore academic subjects in an authentic work context. Bowman (1993) contended instructional strategies that focus on the development of knowledge through learning applications tied to the world of work are the basis of effective career development programming. Figure 3 illustrates how one high school has structured its curriculum around authentic instruction and connecting activities for the benefit of minority youth.

Figure 3

Program Example
Authentic Instruction/Connecting Experiences

McKinley Penn Senior High an inner-city school located in Washington, D. C., provides low-income minority students with a contextual learning program that integrates English, social studies, and technology into a broadcast media authentic work context. Students enter the program in grade ten and engage in a yearlong survey course on print, photographic, film, and electronic media. Each week, three days of theory are supplemented by two days of hands-on training in video production. English skills, essays, research, vocabulary, and oral presentations are coupled with media analysis and communication skills. A radio producer instructs students twice a week on aspects of broadcasting such as public relations, creative writing, and video recording. Students write news scripts, edited and spliced tape and learn how to troubleshoot and repair video equipment. Outcomes of the program included a strong interdisciplinary TV broadcasting program that meets the technical and employability skill needs of students (Andrew & Dornsife, 1997).

Curriculum Quality Standards

A second focus of research on effective program components is the examination of curriculum quality standards. Andrew and Dornsife (1997) suggested a quality curriculum engages students in a variety of learning activities, is easily adaptable to learning styles, and encourages students to think and create in ways unique to their own preferences. Although similar to other educational curriculum, components of a CTE curriculum differ in their relevancy to and integration of vocational and academic subjects. Conversely, Dean (1997) argued because many minority youth enroll in CTE programs, the segregation of vocational and academic curriculum is akin to tracking. To avoid tracking, CTE programs must incorporate curricula that maximize progressive knowledge, real world representation, and build upon the student's previous knowledge (Watson & Stead, 1990). For this incorporation to be successful, Dean (1997) argued,

“curriculum changes must be based on sound educational and research literature about best educational practices” (p.20). Sanchez (1995) echoed this sentiment and reported curriculum that strengthens awareness, knowledge and skills, and recognizes common values and differential power is vital if schools are to provide culturally relevant, respectful, and affirming teaching environments.

Based upon this review of research on effective CTE program components, the need for more interventions designed for minority students is evident. However, there is scant research that examines the usefulness of components for minority students. Cheatham (1990) argued that many of the career development components proposed for minority youth, such as work-based learning and authentic instruction, are similar to those recommended for the general population. Cheatham advocated, instead interventions related to the awareness and knowledge of self in the context of work. Watson and Stead (1990) confirmed Cheatham’s recommendation, as they proffered, many minority students have a limited knowledge of themselves and their career values, interests, and skills. Jagger (1992) believed this lack of understanding is one reason many low-income minority youth consistently work in jobs unsuited to their abilities. He suggested students who lack an understanding of how personal characteristics relate to career choice make incongruent career choices. Based upon these perspectives, it can be persuasively argued that gaining an understanding of self in a career context, has profound implications for the facilitation of career development.

Understanding of Self

Super (1990) argued that learning about the world of work and one's self in relation to that world is essential if individuals are to make appropriate career and educational decisions. Building on this argument, Hackett and Lent (1992) posited that constructs and theoretical explanations of self in relation to career choice could be translated into interventions, which address the occupational needs of minorities. In this way, characteristics considered in making occupational choices, such as values, interests and skills could be applied to interventions that help identify job preferences. Individuals acting without knowledge of preferences do not have the option of choosing to act differently; this option comes with self-awareness (Chess & Thomas, 1991).

Consistent with the work of Hackett and Lent (1992), the self-knowledge perspective offered by Herr and Cramer (1997) examined motivational aspects of career interventions. Herr suggested the greater the awareness of self an individual possesses; the more motivated he/she is to seek positive outcomes. Relating this concept to career development, Herr postulated that self-awareness interventions assist youth in understanding themselves, not only in terms of their own talents, but also in terms of their personality and behavioral characteristics. Logically, the greater the self-understanding an individual has, the more likely realistic and satisfying career related decisions can be made. Although self-understanding does not guarantee good decision-making, a realistic picture of one's abilities, interests, and other pertinent characteristics may foster informed career decisions.

Based upon the benefits of self-knowledge interventions, one would postulate that a great deal of research exists on connection between self-knowledge and the career

development process; yet an extensive review of the topic yielded few studies. Because there are few studies that examined this topic, the researcher synthesized theory from psychology and education. Described in Figure 4 is an example of how one urban CTE skills center structures self-knowledge interventions around the individualized needs of students.

Figure 4

**Program Example
Self-Awareness**

The Dexter Careers Center located in Detroit, Michigan provides students from minority populations with opportunities that allow for a smooth transition from the school setting to the world of work. This is accomplished through inventive contextual learning experiences focusing on the individual needs of each student. One such experience, a school-sponsored and supervised practicum, provides transition planning for students. Two main goals of this planning are to assist students in developing self-awareness skills and work-based learning experiences. In addition to developing general and specific occupational skills, knowledge, and job attitudes, CTE programs offered by Dexter enhance self-esteem, confidence, and self-dependence. As a result, students graduate having an increase awareness of their own interests, abilities, and skills, but most importantly, a clearer idea of their future (MDCD, 1998).

Awareness of Style

Research on effective CTE programs has also focused on the concept of individual style. Gregorc (1982) recognized that every human being has universal qualities common to all others and yet each is unique; each person is unique and complex, yet predictable. These predictable patterns form our typical approach to life's tasks and make-up our style. Influenced by age, gender, socio-economic status, motivation or family background, many facets of individual and professional behavior are influenced by style (Jenkins, 1981). In general, these patterns are called personal styles.

When they affect learning, they are termed learning styles. If these patterns are reflected in teaching, they are called teaching styles.

Style Types

The concept of style in career development has tended to focus on the link between personality style and job satisfaction. There has been much debate in the career development arena regarding measurement of personality styles of African American youth. This debate centers on career inventories and the underlying structure of personality among various groups. Sue, Keefe, Enomoto, Durvasula, and Chao (1996) argued that if race and culture affect the basic building blocks of personality, inventories derived from European Americans should not be administered and interpreted in the same manner for ethnic minority groups. McCrae and Costa (1997) addressed this argument by presenting evidence of common structures among personality. Results of their study indicated the five-factor model, which portrays human styles in terms of five dimensions represented a human universal.

Personality Styles

Few studies exist which link personality style and the career development process of African Americans. Most of the work in this area has been provided by John Holland (1996). Holland's theory suggested that an individual's career choice is a reflection of their personality and behavioral styles. Holland's theory assumes job satisfaction, stability, and success occur when individual styles are purposefully matched with occupations that satisfy interests and abilities (Rojweski, 1999). Holland developed

six work personality style classifications: Realistic, Investigative, Artistic, Social, Enterprising, and Conventional with corresponding occupational categories determined by the degree of congruence between an individual and a particular occupation. An examination of the literature found two studies that investigated Holland's personality styles and the career development of African Americans. Both studies used comparative analysis to examine styles of specific groups.

Days and Rounds (1998) examined differences in the structure of Holland's personality styles across ethnic and racial groups. Their sample consisted of 49,450 college-bound students who completed the Revised Unisex Edition of the ACT Interest Inventory (UNIACT). Individual results from this inventory were organized according to six general types of career interests, which corresponded to Holland's personality styles. The diverse group of participants included African Americans, Asian Americans, Mexican Americans, Native Americans, and Caucasians. Multidimensional scaling yielded evidence that participants perceived the world of work in similar ways. The authors concluded that individuals from different ethnicities hold the same cognitive map of the work world when the structures of their preferences are examined. Deeper review of findings, however, showed that although the sample included a large percentage of ethnic minorities, the study consisted of successful students who planned to attend college. This fact calls into question the generalizability of finding to students from lower socioeconomic levels or the population of LD. Further, the results failed to explain the difference of personality styles in specific groups of participants. For example, what percentage of African American students aspired to Realistic or Social jobs as compared

to other groups? From this standpoint, the relation of Holland's personality type should be examined both within specific groups as well as between groups.

Holland's personality styles have also been examined in the context of students with and without LD. Cummings and Maddux, (1987) investigated whether students with LD had occupational interests and personality styles similar to those of their nondisabled counterparts. Holland's (1985) Self Directed Search Inventory was used to assess occupational interests and styles. Results indicated no evidence that students with and without LD are heterogeneous with respect to Holland's personality styles. The authors recommended that additional research was needed in areas of comparative expression of aspirations and interests. This recommendation affirmed Holland's (1985) notion of comparing expressed vocational aspiration and personality types with outcomes on occupational inventories. He suggested when personality styles and occupational interests are matched; individuals are likely to experience greater job stability and satisfaction. The authors suggested examining student's occupational aspirations to those obtained on interest inventories.

Summary

The majority of research on effective CTE program components for minority youth has focused on work-based learning opportunities and the contextual nature of instructional strategies and curriculum components. Cheatham (1990) argued these proposed components are similar to those recommended for the general population so their relevance to minority students has been called into question. He suggested that interventions focusing on knowledge of self in relation to the world of work are more

appropriate for students from minority backgrounds. It was noted that awareness of self in a career context could possibly encourage students to think in ways unique to their own preferences, enhance motivational aspects in career planning, and foster realistic career decision-making based on personality and behavior (Orr et al, 1999; Herr & Cramer, 1997). Much of the research on awareness of style in the career development process has focused on personality style; however, only two research studies on this topic were located that included African American or learning disabled student populations. Comparative analysis of both studies noted similarities in personality styles of students. The authors recommended examining expressed styles with style outcomes on occupational inventories as well as examining within and between group personality style differences.

Based upon the research presented in this chapter, it appears that awareness of style could be beneficial to African American students with and without LD in the career development process. As Jagger (1992) noted many of these students lack an understanding of how personality and behavior characteristics are related to career choice. Therefore, career related interventions that focus on personality and behavior have potential benefits for African American students. One such intervention, behavioral work styles, focuses on examining individual behavioral strengths and limitations in the context of work.

BEST COPY AVAILABLE

Behavioral Work Styles

The final section of this literature review explores the topic of behavioral work styles. In the first portion, behavioral work styles are defined. Next, historical and theoretical origins of behavioral work styles are reviewed. Following this review, characteristics of the four dimensions of behaviors are discussed. The final section explores the need for incorporating behavioral work styles in career development programs serving African American Youth.

Defining Behavioral Work Styles

Definitions of behavioral work styles are varied and often difficult to understand. Although behavioral work styles may be defined simply as the way people come to understand and perform their jobs (Jones, 1996), the dearth of literature available presents more complex variations of the theme. Tobias (1995) defined work styles as “behavioral bents on the job,” or “individual inborn strengths and preferences adapted to working and communicating in a chosen career” (p.43). Adding to this definition, Lim (1998) suggested behavioral work styles as personal traits and characteristics including behavioral and psychological patterns that influence how an individual operates, relates to people and addresses issues. Lim suggested behavioral work styles pre-dispose individuals to be good at doing certain types of work and not doing well at others. Feguson (1996) suggested behavior work styles do not analyze intelligence, values, skill, experiences, or education and training. Instead, work styles help individuals understand their behaviors situationally; in concert with the way they approach a given situation. Finally, William Marston (1928) described dimensions of behavior (behavioral work

style) as leading to an understanding of self and others in certain environments. Marston noted the individual could better understand him/herself and others by creating meaningful contexts. Furthermore, this understanding allows individuals to develop enhanced self-awareness and personal management competencies.

Behavioral Work Style Origins

Beginning with the innovative work of Greek historians, there has been a concerted interest in understanding dimensions of behavior and how individuals relate to one another and different environments. For example, behavioral research dating as far back as Hippocrates in 400 BC indicated that people have their own combination of behavioral dimensions (Page, 2001) Hippocrates identified four types of behaviors, that he linked to four types of climate and terrain. He believed these four quadrants affected behavior.

Building on Hippocrates's theory, Carl Jung (1923) developed eight personality types for explaining human behavior. These types were rooted in his work on the unconscious mind. He suggested individuals develop conscious behaviors based on their subconscious. In Jung's opinion people instinctively understood behavior in terms of these eight types. Further, he suggested individuals are predisposed to pay more attention to either the external world of objects or the inner world of ideas and feelings and thus, exhibited either extraversion or introversion behavioral characteristics. Jung's eight types underline a number of behavioral analysis instruments utilized in public schools.

Physiological psychologist William Marston (1928) sought a systematic way to understand human behavior. Where Jung's theory was rooted in biology, Marston's

theory explained emotional response as a reaction to other people, situations, and events. Until that time, work of this nature had been confined to the mentally ill or criminally insane. Marston, however, extended these ideas to cover the emotional responses of ordinary people. He maintained that one could understand how an individual would likely behave by relating how a person perceived him/herself in relation to the environment.

Marston's theoretical model can be more clearly understood by considering two factors that influence response to an environment: (1) an individual's favorable or unfavorable perceptions of the environment and (2) the individual's perception of power in terms of environmental influences (Marston, 1928). Favorable environments provide comfort and support for the individual; therefore he/she feels empowered within them. On the other hand, unfavorable environments are perceived as antagonistic to the individual; and consequently, he/she feels challenged. In either case, the individual responds positively or negatively on the emotional level. In addition, perceptions of power play a role in Marston's theory. Individuals respond to situations depending on how much power he/she feels in relation to the supportive or antagonistic forces perceived in the environment (Macha & Kamper, 1999). For example, if an individual perceives him/herself as more powerful, they will act on the environment to achieve success. If he/she feels less powerful he/she will accommodate to the environment. To allow for successful accommodation, individuals must remain flexible, so the influence on behavior may be changed or eliminated according to specific demands of the environment (Allport, 1937).

Environmental perceptions of power are also known as Locus of Control. An internal Locus of Control is manifested when an individual feels more powerful than the environment. An external Locus of Control results when the individual feels less powerful than the environment (Fournier & Pelletier, 1996). It is important to note that perceiving oneself as being less powerful than the environment is not the same as being weak. Instead, individuals with an external Locus of Control typically believe the more effective way to achieve their goals is by either being more cooperative or by following instructions and doing things correctly.

To measure his theory, Marston developed an analytical system that divided emotional responses into four dimensions. Using two limits as a base line, these four patterns of responses (dimensions) of the individual and the environment can be seen. Marston posited, at certain times, individuals show all four dimensions; but generally, one will be displayed consistently. The four patterns of responses (dimensions) are Dominant (D), Influence (I), Steadiness (S), and Conscientiousness (C).

- The Dominant response *acts on* environments perceived as *unfavorable* to the self.
- The Influence response *acts on* environments perceived as *favorable*.
- The Steadiness response *accommodates* to environments perceived as *favorable*.
- The Conscientiousness response *accommodates* to environments perceived as *unfavorable*.

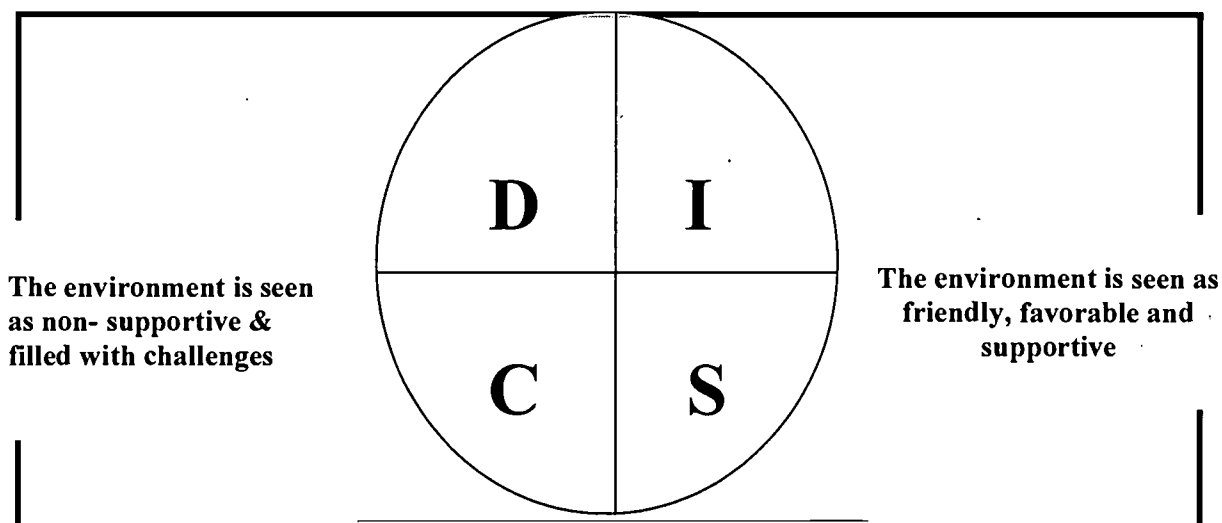
Figure 5 outlines Marston's Dimensions of behavior model. The vertical axis of the model is an individual's perception of himself/herself in the environment (i.e., more or less power than the environment). The horizontal axis represents how the environment is

perceived (i.e., favorable or unfavorable). Relating to how individuals perceive themselves in the environment (vertical axis), Marston identified two viewpoints: (a) *more powerful than the environment* (the D and I dimensions in the upper half of the model), or (b) *less powerful than the environment* (the S and C dimensions in the lower half of the model).

Figure 5 William Marston's Dimensions of Behavior Model

More Powerful Than The Environment

Believe goals can be best attained by taking control of or influencing the environment



Less Powerful Than The Environment

Believe goals can best be attained by following instructions and cooperating with others

**D – Dominance I – Influence C – Conscientiousness
S – Steadiness**

Marston suggested that through an awareness of environmental perceptions, an individual gains (1) a broader understanding of personal behaviors, and (2) a comprehensive view of differential behavioral patterns exhibited in certain environments. Additionally, individuals learn to recognize which environments feel more comfortable to them. To the extent possible, individuals seek to put themselves in these environments and avoid less comfortable ones (Meehl, 1991). Individuals also try to modify an uncomfortable environment actively (by trying to change them) or passively (by avoiding elements they dislike) to make it one in which they can succeed. For this reason, self-aware individuals understand they exhibit certain behaviors more often than others, because they have succeeded in finding or arranging opportunities to do so (Marston, 1928).

In 1983, John Geier operationalized Marston's model in work environments. His Situation Perception Analysis measurement was developed to investigate and understand individual behavioral responses related to self, job, and others. Geier theorized a complex web of intertwining perceptions that individuals must cope with before they adopt the expected behavior within a specific environment. Situation Perception Analysis provides the individual with an accurate perception of his/her behavior and self-expectation in work situations (Geier, 1989).

Geier developed his hypothesis of self-perception by combining Situation Perception Analysis and Marston's theory of the four behavioral dimensions. His goal was to identify and analyze the behavior style of "self" and "others" under favorable and unfavorable conditions. Geier divided the four behavioral dimensions into two categories, process and product oriented. Individuals with Dominant and

Conscientiousness behaviors are process oriented; they desire to shape the environment according to their view. Those individuals with Steadiness and Influence behaviors are product oriented; they tend to ask how and why questions. Behavioral tendencies and desired environments of the four dimensions of behavior are found in Table 1 (For a detailed display of behavioral dimension characteristics refer to Appendix H).

Using Marston's factor analysis, Geier clustered traits through factor analysis for each dimension of behavior. Traits that belonged together were called source traits; those internal behavioral characteristics that presumably direct behavior. Source traits can only be inferred from observed or reported behavior. Geier believed that source traits revealed an underlying unity that could be seen in surface traits; those behavioral categories we can see and label (Meehl, 1991). By reliably measuring surface traits, agreement can be reached regarding what behaviors are being exhibited. Source traits, particularly those linked to heritage may be relatively unchangeable. Surface traits on the other hand, lend themselves to modification by (a) selecting an environment which does not inhibit change by causing fear or defensiveness and/or (b) by selecting behaviors within one's behavioral repertoire which are more appropriate to the situation (Caspi & Bem, 1992). The dimensions of behavior described by Marston (1928) and Geier (1983) are surface traits. For the purpose of this study, Geier's description of Marston's four behavioral dimensions will be utilized to explore differences in behavioral work styles of African American high school students with and without learning disabilities.

Table 1

Four Dimensions of Behavior (Geier, 1989)

DOMINANCE	INFLUENCE
<p>Emphasis is on shaping the environment by overcoming opposition to accomplish results. <i>--Process Oriented Behaviors--</i></p>	<p>Emphasis is on shaping the environment by influencing or persuading others. <i>--Product Oriented Behaviors--</i></p>
<p>Behavioral Tendencies include:</p> <ol style="list-style-type: none"> 1. Getting immediate results 2. Causing action 3. Accepting challenges 4. Making quick decisions 5. Managing trouble <p>Desires Environments that/with:</p> <ol style="list-style-type: none"> 1. Include power and authority 2. Prestige and challenge 3. Opportunity for individual accomplishments 4. Freedom from controls and supervision 	<p>Behavioral Tendencies include:</p> <ol style="list-style-type: none"> 1. Ability to persuade others 2. Making a favorable impression 3. Generate enthusiasm 4. Desire to participate in a group 5. Compulsive talker <p>Desires Environments that/with:</p> <ol style="list-style-type: none"> 1. Include popularity 2. Social recognition 3. Public recognition of ability 4. Freedom from control and detail
CONSCIENTIOUSNESS	STEADINESS
<p>Emphasis is on working conscientiously within existing circumstances to ensure quality and accuracy. <i>--Process Oriented Behaviors--</i></p>	<p>Emphasis is on cooperating with others to carry out the task. <i>--Product Oriented Behaviors--</i></p>
<p>Behavioral Tendencies include:</p> <ol style="list-style-type: none"> 1. Seeking organization 2. Desire consistency 3. Diplomatic 4. Accurate 5. Use systematic approach to situations and activities. <p>Desires Environments that/with:</p> <ol style="list-style-type: none"> 1. Clearly defined performance objectives 2. Value Accuracy 3. Opportunities to demonstrate expertise 4. Allow for "why" questions 	<p>Behavioral Tendencies include:</p> <ol style="list-style-type: none"> 1. Performing in a consistent predictable manner 2. Patience 3. Develop specialized skills 4. Good listener 5. Calm excited people <p>Desires Environments that/with:</p> <ol style="list-style-type: none"> 1. Predictable routines 2. Credit for work accomplished 3. Seeks job that minimally infringes on home life. 4. Identification with the group

Need for Behavioral Work Styles in CTE Programs

U.S. school-based CTE programs are not adequately meeting the career development needs of most African American high school students (Lent, Brown & Hackett, 1994). Generally, CTE programs for African Americans are generically designed and based on research with middle-class Caucasian males; therefore, the relevance of such programs to African American youth is at best questionable (Kerka, 1998). Standardized CTE programs do not meet the unique needs of this group and; as a result, African American youth's career development suffers. These unmet needs are further compounded by the high percentage of African American youth with learning disabilities.

Many African American youth are different from their European American contemporaries in terms of workplace readiness. For instance, many lower socioeconomic status African American youth, with and without, LD are less "career mature," have lower outcomes expectations for future careers, and are unemployed, underemployed, or employed part-time in greater numbers than their Caucasian and nondisabled peers (Siegel et. al, 1991; Murry & Mosidi, 1993; Rojewski, 1996).

Because research and common sense have suggested that a cookie cutter approach to CTE does not work for African American youth, new and innovative strategies are needed to tailor educational programs to meet their unique needs. Behavioral work style analysis, based on the work of Marston (1928) and Geier (1989), could potentially help African American students more fully understand their niche in the world of work. Although understanding ones behavioral work style would benefit all students, African

American students, with and without LD, would uniquely benefit because many lack the self-awareness to fully understand themselves in work situations (Rojewski, 1996).

At the heart of behavioral work styles are individualized self-awareness interventions. These interventions go beyond simply obtaining skills needed to perform a job. Instead, they focus on understanding one's behavioral strengths and limitations as well as the adaptive behaviors needed in various environments, such as work. Russell (1994) suggested that understanding one's unique behaviors and how to modify them can maximize job effectiveness. As people come to understand themselves, they tend to accept and value their coworkers' behavioral styles. This is particularly important for African American students, because some lack the interpersonal skills needed to succeed in an employment setting (Wentling & Wright, 1999).

Low-income African American students (especially those with LD) tend to exhibit an external locus of control with regard to careers (Wood, Hillman, & Sawilowsky, 1996). Geier (1989) noted that individuals exhibiting an external locus of control feel less powerful than the environment (in this case, their job) and; as a result, do not succeed in their job. By understanding their behavior work styles students learn ways to modify their behaviors to accommodate the environment (job). Through accommodation of behaviors students either succeed in the job or decide the environment (job/career) is not conducive to their behavioral work style.

Behavioral work style analysis shows promise in helping students to modify their behaviors so that success can occur. Lent et. al (1994) have persuasively argued that if individuals believe in their ability to undertake an endeavor and have an expectancy of the outcomes, they will behave in a way that will help them achieve their goals. For

many years business and industry have supported employment behavior analysis to enhance work quality, job satisfaction, and productivity. By adding behavioral work style analysis to CTE programs, African American students may achieve greater self-awareness and an appreciation of their preferred work style, thereby providing them with the ability to tailor their Career and Technical Education to their unique style of work.

In the long term, behavioral work style analysis may provide African American youth with a tool to ameliorate the stresses associated with low socioeconomic status and lower levels of career related family involvement. Holland (1985) suggested that when individual personality style is matched with employment, greater success and job stability are obtained. The greater the self-understanding a person has the more likely realistic and satisfying career related decisions will be made. Adding the awareness of behavioral style into CTE programs for African American youth would provide for a more opportunities for career success.

As stated earlier the purpose of the present study was to determine behavioral work style differences between African American high school students, with and without, learning disabilities. A second objective was to determine if relationships existed with regard to student perceptions of level of parental involvement in career related activities, student socioeconomic status (SES), and behavioral work styles. A third objective investigated relationships between perceived and realized behavioral work styles. The next chapter describes the research approach used to explore these objectives.

CHAPTER 3

METHODS

This chapter describes the research approach used to carry out this study. In this chapter, methodology is divided into four main sections: (1) design of study, (2) characteristics (setting and participants), (3) data collection and procedures, and (4) analysis of data.

Design of the study

This exploratory study sought to determine behavioral work style (the dependent variable) differences between high school African American students with and without LD. A second objective was to determine if relationships existed with regard to two independent variables (1) student perceptions of level of parental involvement in career related activities and (2) student socioeconomic status (SES), and the dependent variable, behavioral work styles. The final objective investigated consistencies between perceived and realized behavioral work styles. Both quantitative and qualitative research methodologies were employed to explore these objectives.

Quantitative methods were used to explore research objectives one and two. Data sources included a behavioral analysis assessment and questionnaire. The quantitative paradigm suggested the researcher remain distant and independent of the phenomenon being researched. The assessment and questionnaire allowed the researcher to control for bias and provided positivistic objectivity (Creswell, 1994).

Research objective three, consistencies between perceived and realized styles, relied on qualitative strategies. Qualitative research is interpretive. As such, the biases, values and judgments of the researcher are explicit in the research report. Such openness is considered to be useful and positive (Locke, Spirduso and Silverman, 1987). Merriam (1988) noted qualitative research involves fieldwork, including observing or recording behaviors in a natural setting. She suggested the paradigm's descriptive nature helps the researcher process and understand the phenomenon being observed.

Research question three compared respondent's I-Sight results (self-report) with perceived styles from interviews and realized styles from classroom observations. It seemed reasonable to include classroom observations in the study because they allowed for insight into interpersonal behaviors and motives. Interviews added further depth because they allowed for descriptive behavioral tendencies to emerge through one-on-one interaction with informants. This examination of perceived and realized styles helped to triangulate findings. Greene, Caracelli and Graham (1989) described triangulation as peeling the layers of an onion, meaning methods are used to get to the core of a phenomenon. In addition, triangulation added to the trustworthiness and credibility of the study. Because the study's exploratory nature of inquiry is embedded in both paradigms, combining the two allowed for constant comparison of results and fresh perspectives to emerge (Creswell, 1994).

Finally, to add even greater depth, case studies were written for four students. Feagin, Orum, and Sjoberg (1991) suggested case studies are an ideal method when a holistic, in-depth investigation is needed. These case studies will incorporate the views

of the “actors” and describe the contexts of their lives, thereby providing an end product that is rich, literal, and complete (Merriam, 1988).

Study Characteristics

Setting

This study was conducted at a Career and Technical Skills Center located in a large, urban Midwest school district. Twenty-one area high schools send students to the center for training in specific skill areas for two to four hours daily; the remainder of the day students attend their home school. When this study was conducted, the center served over 2,100 students in grades 11 and 12. The student population was 40% European Americans, 35% African American, 15% Hispanic, 7% Asian, and 3% other. Specific skills training was offered in ten program areas such as Business Development and Leadership, Manufacturing and Engineering Sciences, Food Service Management, Building Maintenance, and Structured Technology.

This center was selected for three reasons. First, the vocational design provided ease in obtaining the study’s career-related content. Second, large concentrations of African American students attend this center. Third, in 1998 the Michigan Department of Career Development chose this center as one of the ten most innovative skill centers in the State based on program design and innovative curricula (MDCD, 1998).

Participants

This study drew on two groups from one population: Seventeen African American students with learning disabilities (LD) and 15 African American students without learning disabilities (NLD). As Table 2 indicates, gender breakdown for each

group included, 11 young men and six young women for the LD group and five young men and ten young women in the NLD group. Fifty-nine percent (n=10) of the LD group were juniors and 41% (n=7) were seniors. The NLD group consisted of 73% (n=11) juniors and 27% (n=4) seniors. All students ranged from 16 – 19 years of age and were from low to middle class socioeconomic status families. Forty-two percent (n=7) of LD respondents lived with their mother and father, twenty-nine percent (n=5) with mothers only, seventeen percent (n=2) with fathers only, six-percent (n=1) with parent and step-parent, and twelve-percent (n=2) with other relatives or guardians. Forty-percent (n=6) of NLD respondents lived with their mother and father, thirty-three percent (n=5) with mothers only, and seven-percent (n=1) lived with other relatives or guardians. Sixty-four percent of the LD group received free or reduced lunches compared to forty-six percent of the NLD group. African American students with LD were previously identified under state and federal guidelines for special education eligibility. The average amount of time students with LD had received special education services was 6.2 years.

Students were selected purposively. Purposive sampling is defined as selecting a sample based on researcher established selection criteria, which does not limit the ability to generalize findings past the research sample (Babbie, 1986). Students were selected based on four criteria: (1) African American heritage, (2) 11th or 12th grade level, (3) lower to middle class socioeconomic status and (4) special (LD) or regular education (NLD) classification.

One month prior to data collection, a letter explaining the researcher's intent, permission to use the center as a research site, and participant selection criteria was sent to a school administrator (Appendix B). Based on the stated criteria, the administrator

selected participants from two programs, Food Service Management (FSM) and Building Maintenance (BM); two classrooms from each program were selected. A total of 16 African American students from the FSM program participated. Of this group, eight were LD and eight were NLD. Sixteen African American students participated in the BM program; nine were LD and seven were NLD. These classrooms were chosen due to their large enrollment of African American students. Further, because of the inclusive arrangement of the center, students with and without LD were educated in the same classrooms. To ensure the rights of participants, letters describing the intent of research and requesting informed consent from parent/guardian were given to students (Appendix C).

Table 2 Student Information

Group 1 (LD)	Grade	Age	Ethnicity	Gender	Free/Reduced Lunch	Program	Years in Sped
1. Tom	11	17	A.A.	M	Yes	FSM	5
2. Lagita	12	18	A.A.	F	Yes	FSM	7
3. Peggy	11	16	A.A.	F	Yes	FSM	4
4. Cary	11	17	A.A.	M	Yes	FSM	6
5. Tom	11	17	A.A.	M	Yes	BM	7
6. Albert	12	19	A.A.	M	Yes	BM	9
7. Annett	11	18	A.A.	F	Yes	FSM	6
8. Tara	11	17	A.A.	F	Yes	BM	7
9. John	12	18	A.A.	M	Yes	FSM	7
10. Susan	12	19	A.A.	F	No	FSM	8
11. Dave	12	18	A.A.	M	No	BM	5
12. Lester	11	18	A.A.	M	No	BM	6
13. Val	11	17	A.A.	F	No	BM	8
14. Seth	11	16	A.A.	M	No	BM	7
15. Joe	12	19	A.A.	M	No	BM	6
16. Corey	12	18	A.A.	M	No	BM	4
17. Dan	11	17	A.A.	M	No	FSM	4
Group 2 (NLD)	Grade	Age	Ethnicity	Gender	Free/Reduced Lunch	Program	N/A
18. Lyle	11	17	A.A.	M	No	FSM	
19. Lori	11	16	A.A.	F	Yes	BM	
20. Beth	12	18	A.A.	F	Yes	FSM	
21. Dee	11	16	A.A.	F	Yes	FSM	
22. Chuck	11	18	A.A.	M	No	BM	

23. Sally	11	17	A.A.	F	No	BM	
24. Jackie	11	17	A.A.	F	Yes	FSM	
25. Mike	12	19	A.A.	M	No	BM	
26. Jessie	12	17	A.A.	M	No	FSM	
27. Kim	11	17	A.A.	F	No	BM	
28. Jim	11	16	A.A.	M	Yes	BM	
29. Erica	12	18	A.A.	F	Yes	BM	
30. Cher	11	17	A.A.	F	No	FSM	
31. Karen	11	17	A.A.	F	No	FSM	
32. Grace	11	18	A.A.	F	Yes	FSM	

* BM = Building Maintenance, FSM = Food Service Management

To ensure an adequate and timely response rate, students received consent letters approximately two weeks prior to the study. As an added incentive, students were informed that participation in this study would help them gain information about their behavioral work style. Upon return, letters were examined by the teacher and investigator for parent/guardian signatures. To ensure confidentiality, each student was assigned an identification number. This number was placed at the top right-hand corner of each letter as well as on additional documents obtained from students. Further, to denote group differences, a period was placed after the identification number of students with learning disabilities. Identification numbers along with student pseudonyms are documented on Table 2. This information was kept in the researcher's file and he was the only person with access.

Data Collection and Procedures

Data collection and research activities began the second week of May 2002 and lasted approximately two weeks. Several sources of data were sought to answer the research questions. Data sources included (a) a behavioral analysis assessment, (b) a questionnaire, (c) observations and field notes, (d) student interviews, and (e) a review of student's school records including, CA-60s and Individualized Educational Plans

(Table 3). A detailed description of data sources, which informed the three research questions, follows.

Table 3 Data Sources By Research Questions

Research Question	Data Sources
<u>Question 1</u> : What are the behavioral work styles of African American students with and without learning disabilities?	1. Behavioral Analysis Assessment (<u>I-Sight</u>)
<u>Question 2</u> : Do relationships exist between behavioral work styles and familial factors such as parent involvement and socioeconomic status?	1. Questionnaire regarding student perceptions of career related parental involvement. 2. <u>Hollingshead Two-Factor Index of Social Status</u> (included on questionnaire)
<u>Question 3</u> : Are perceived behavioral Work styles consistent with the realized self in a situated work context.	1. Classroom observations and field notes (videotaped) 2. Student interviews (audiotaped)

Behavioral Analysis Assessment

The I-Sight (Carlson Learning Company, 1996) a self-administered self-scored, and self-interpreted behavioral analysis assessment was used to determine student's behavioral work styles. Both the I-Sight and its adult counterpart, the Personal Profile System (PPS) (Carlson Learning Company, 1994) are based on William Marston's (1928) four dimensions of behavioral responses or modes of interacting with one's environment; based upon how the environment is perceived by the respondent. The I-Sight is designed to assist students in understanding their behavioral style, which includes specific behavioral strengths and limitations.

The four behavioral dimensions (work styles) identified on the I-Sight includes:

Dominance (Direct & Active) (D): Emphasis is on shaping the environment by overcoming opposition to accomplish results.

Influence (Interested & Lively) (I): Emphasis is on shaping the environment by bringing others into alliance to accomplish results.

Steadiness (Steady & Cooperative) (S): Emphasis is on cooperating with others to carry out a task.

Conscientiousness (Concerned & Correct) (C): Emphasis is on working with existing circumstances to promote quality in products or service.

These titles represent clusters of behaviors, grouped around the four dimensions. Although individuals exhibit behaviors of each dimension, a greater frequency (of behaviors) is projected in one dimension (Kragness & Rening, 1996). For a complete listing of dimension behavioral tendencies, including strengths and limitations, refer to Appendix E.

The I-Sight has four sections. The first section, a 40-item chart of behavioral tendencies, assesses student's similarities to the four dimensions. Tendencies are ranked on a four-point scale including, 4 = "Most like you," 3 = "Some what like you," 2 = "A little like you," and 1 = "Least like you" (Appendix E); summing the four columns of tendencies forms total scores for each scale. Students are instructed to identify meaningful scales by scores that exceed the corresponding median. For example, if the summed score in the first column is larger than 22, a "Dominance" work style is obtained. If scores exceed median in two scales, summed scores for the two scales are

subtracted from the median. The score exceeding the median by most points is the students predominant behavioral work style.

In the second and third sections, interpretation guides are presented that highlight specific behavioral tendencies of each dimension (Appendix E). Finally, in the fourth section students reflect on their assigned behavioral work style by answering six questions. The four dimensions are considered to have sufficient test-retest reliability to be useful. Scores are well distributed across the research sample (968 respondents age 12 to 21) and are normed to reflect the distribution obtained on each scale (Macha & Kamper, 1999). Internal consistency coefficient reliabilities range from .82 to .89 when adjusted to scale length (Krangness & Rening, 1996).

Questionnaire

To obtain the level of student perception(s) of parental involvement, a 12-item questionnaire (Appendix F) was used (Way & Rossman, 1996). The questionnaire's Likert-type design assessed student perceptions of parental involvement based on how often specific parental driven career development activities occurred and the importance placed on certain job characteristics. Occurrence and importance levels were ranked on a four-point scale which included, 4 = All the time, 3 = Sometimes, 2 = Hardly ever, and 1 = Never; the four points identified for Importance were 4 = Very important, 3 = Somewhat important, 2 = Somewhat unimportant, and 1 = Not important at all. A mean score is obtained by summing points (1 – 4) and dividing by the total number of questions (12). Types of career related involvement and importance are based on the work of Young and Friesen (1992) and include, (1) helping to acquire skills, (2)

acquisition of specific values and beliefs, (3) facilitating of human relationships, (4) enhancing character development, (5) increasing independent thinking and action, and (6) developing of personal responsibility. Reliability estimates for the scale have been above acceptable levels with most internal consistency scales ranging from .80 to .85 (Way & Rossman, 1996).

Also included on this questionnaire were three questions related to student's socioeconomic status. Using the Hollingshead Two-Factor Index of Social Status (HISS) (Hollingshead & Redlich, 1953) socioeconomic status was obtained (Appendix G). The HISS places families in one of five socioeconomic strata (5 = highest class, 1 = lowest) based on occupation and educational level of the parents or guardian. Both occupational and educational levels are ranked on 7-point scales. In the two-factor index, occupation is given a weight of 7 and education, a weight of 4. Socioeconomic level is obtained by computing the following:

$$(\text{Occupation score} \times 7) + (\text{Education score} \times 4)$$

Socioeconomic level is then obtained from a socioeconomic classification chart.

Assessment and Questionnaire Procedure

Instruments were administered in the four classrooms over a four-day period. A week prior, teachers were given reminder letters including date, time, and names of participating students who had returned parental permission letters. It is important to note that all students in the four classrooms were invited to participate in the behavioral analysis and questionnaire portion of the study. A total of 69 students completed the I-Sight and questionnaire. Ethnic breakdowns of students participating in this portion of

the study included 32 African American and 37 Caucasians. Of the total group, 34 were male and 35 were female. Of this group, 34 were students with learning disabilities (African Americans n = 17 and Caucasians n = 27). During administration of the instruments, students who did not return parental permission slips worked on another classroom activity.

Prior to administering instruments, consent signatures were obtained from students; consent forms were read aloud by the investigator (Appendix D). During this time, students were told they could stop their participation at any time without penalty. Next, student identification numbers were placed on the cover of each assessment. Instruments were administered in the following order (1) questionnaire, and (2) The I-Sight. Instructions and questions for both instruments were read aloud to students. If questions arose during administration, they were promptly answered. The questionnaire took approximately 15 minutes to complete, the I-Sight, 30 minutes. Prior to administering the I-Sight the investigator gave the following instructions/comments:

- 1) Open your booklet and find the section marked "Think about You."
- 2) Let's read the information and directions found in the column on the left edge of the paper. Some of these answers will be forced response. This means you will need to rank an answer even though it may not exactly describe you.
- 3) You are to rank order all of the statements and cannot leave any answers blank. You can only use the numbers 1, 2, 3, and 4 once for each set of phrases.

For a further explanation of the I-Sight, a “Points to Remember” overhead was read aloud to students (Figure 6).

Figure 6

POINTS TO REMEMBER

- ❖ I-Sight is not a test. It is not something you pass or fail.
- ❖ You will be asked to make choices. There are no better or poorer choices.
- ❖ Your results are going to be different from the results of others. That is normal. This is one of those times when different is just different.
- ❖ I-Sight is a *forced-choice instrument*; you must assign a 4, a 3, a 2, and a 1 for every set of phrases. It is normal to feel some level of uncertainty when ranking some of the phrases.
- ❖ When you are ranking the phrases, it is important that you **think of how you see yourself**...not how you think others see you, nor how others might want you to be, nor how you would like others to see you.
- ❖ Rank the phrases, thinking of how you see yourself when part of this group.
- ❖ Don't over-analyze when ranking the phrases. Usually, your first intuitive or instinctive response will be most valid. At the same time, don't hurry through the ranking process. Take time to give it your best effort.

Upon completion, protocols were reviewed for identification number, errors in following directions and self-scoring, and for accuracy in computing work style.

I-Sights and questionnaires of the thirty African American students selected for the study were separated from the other students and (1) divided by group (Group 1 = LD and Group 2 = NLD) and (2) by behavioral dimension category. To minimize the possibility of investigator bias with regard to classifying behaviors based on I-Sight results, an administrator randomly selected one student from both groups (four students from each LD group and four from the NLD group) in each dimension category. These

eight randomly selected students were observed and interviewed. Identification numbers of selected assessments were highlighted on the student information table (Table 2).

Observations and Interviews

The intent of observations and interviews was to examine consistencies between student's perceived and realized behavioral work style. As Fowler (1993) proffered, there are concerns with the use of an assessment as the only form of data collection. In question, is whether reported answers (e.g., reported or perceived style) and true values (e.g., realized style) are in accord. By closely examining perspectives through observations in a specific context and obtaining perceptions through interview data, the researcher begins to understand what is really occurring (Bogdan & Biklen, 1998).

Observations

To capture realized behavioral work styles, eight randomly selected students were observed individually in work-based contexts. Work-based learning contexts use actual work contexts to learn real-world applications (Gray, 2000; Bies, 1982). Students were observed in a skill-centered school activity where they were performing a specific skill, (e.g., auto body repair, brick laying, or cosmetology). Prior to videotaping, consent was obtained from the school administrator, parent, and student; two classroom observations were scheduled per day; observations lasted a total of four days. Teachers were informed of observations at least two days in advance. During observations, the researcher avoided capturing nonparticipating students on videotape by positioning the camera in such a manner that they did not appear on camera.

An ethnographic approach was used to observe students in which a detailed investigation of social interactions was documented (Gumperz, 1981). More specifically, the investigator observed students working individually, in a group situation, or in direct contact with the instructor. A running record of events was documented in field notes. The record detailed, in varying levels of specificity, events and activities as well as types of behaviors exhibited on a moment-by-moment basis (Mariage, 2001). Videotapes were labeled directly after taping (date, time, work-based learning context, and student identification number). Observations lasted for approximately one hour. Upon conclusion of the observation, ten to 15 minutes were spent talking with the instructor to confirm or disconfirm observations made by the investigator. Additional employer/instructor comments were documented in field notes.

Interviews

Interviews were used to capture a deeper understanding of perceived behavioral work styles. Each interview was audio taped and took approximately 20 minutes. During this time, two minutes were spent explaining interview procedures; the remainder probed responses from situational scenarios. A classroom, determined by the administrator, served as the interview setting.

To ground conversation in a familiar context, students were read five scenarios related to school, job, family and friends. Students were asked “how they would respond” or “what they would do” in these situations. Scenarios were designed to identify the four behavioral dimensions (Appendix H). The behavioral dimensions were operationally defined using information obtained from the behavioral dimension

interpretation guides of the Personal Profile System (PPS) (Carlson Learning Company, 1996) and the I-Sight “Being Yourself” curriculum (Macha & Kamper, 1999). From these, a new “Behavioral Interpretation Guide” was constructed that included examples of behavioral strengths and limitations, environmental preferences, specific tasks that promote effectiveness, typical emotional responses, and balanced and extreme behavioral characteristics exhibited on the job. The guide was reviewed for content validity by a representative from HPower & Associates, who was instrumental in developing the I-Sight “Being Yourself” curriculum benchmarks and standards. Furthermore, face validity was achieved by allowing the guide to be examined by the students’ classroom teacher.

To gain deeper insight into perceived behavioral work styles, additional questions were asked by investigator to further probe student responses. Scenarios and questions were reviewed for content and accuracy by a career development specialist from a Midwest land grant University’s Department of Educational Administration and a representative from HPower and Associates, authors of the I-Sight “Being Yourself” Curriculum Guide (Macha & Kamper, 1999). A list of interview scenarios is found in Appendix I.

Review of Student Records

Exploratory case studies were written for four of the eight randomly selected students. Creswell (1994) suggested the most rigorous method for selecting sample of cases was to randomly choose individuals using the participant identification table. Thus, two students from each group (LD and NLD) were selected at random by simply choosing four of the highlighted identification numbers from the student identification

rubric (Table 2). As stated earlier, identification numbers of the eight students randomly selected for observation and interviews were highlighted on the student identification rubric.

Because there is little research on behavioral work styles of high school students, this study examined individual behavioral characteristics of dimensions in the context of student life and school experiences. By doing this, the “why” and the “how” of exhibited student behaviors could be examined. As Yin (1989) reminded us the purpose of a case study is to investigate a contemporary phenomenon within a real-life context; when the boundaries between the phenomenon and context are not clearly evident; and in which multiple sources of data are used (i.e., documents, archival records, interviews, and observations). In this study, multiple data sources included the I-Sight, questionnaire on socioeconomic status and parental involvement, interviews, and observations. To gain even deeper insight into student life and school experiences, information was obtained from student school records. Specifically, CA-60s of NLD students and Individualized Education Plans of students with LD were reviewed for student for eight items: (1) GPA, (2) IQ, (3) free and reduced lunch information, (4) type of learning disability and amount of time spent in a special education classroom (for two students), (5) academic strengths and limitations, (6) career interests and goals, (7) past/current vocational experiences, and (8) behavioral problems (if any). This information, combined with the study’s additional data sources, were used to construct individual cases. A case study review sheet was developed to document the data (Appendix J).

Analysis of Data

Data were analyzed using several means. First, to classify behavioral work styles, a predetermined analytic assessment was used. Second, relationships between parental involvement, socioeconomic status, and behavioral work styles were analyzed by employing statistical measures. Third, to add richness and depth to the study, ethnographic observations and interviews were employed. This qualitative data were reviewed and coded for emergent behavioral patterns. Quantitative and qualitative measures served to triangulate conclusions regarding perceived and actual behavioral work styles. Finally, four individual cases were developed to add greater depth and insight.

Analysis of Research Questions One and Two

Data analysis for research questions one and two involved two phases. First, to examine difference in behavioral work styles between LD and NLD groups, a two by 4 chi-square analysis test of homogeneity was employed. A Chi-Square tests the distribution of nominal variables against the hypothesis that each category (e.g., four dimensions) has a specific proportion of cases in the population (LD & NLD) (Norusis, 1992). Specifically, this test calculated frequencies and relationships among the four behavioral dimensions within both groups. Next frequencies and relationships from each group were charted for interpretation. In research question two, an Analysis of Variance (ANOVA) was used to test the strength of relationships between student perceptions of parental involvement (PPI) and the four behavioral dimensions. This was accomplished using mean scores (ordinal variable) from the student perceptions of parental

involvement questionnaire and I-Sight behavioral dimensions (nominal variable) (Roundtree, 1981). Research question two also sought to test relationships between behavioral dimensions and respondent's socioeconomic levels (obtained from the HISS). Frequencies and relationships among behavioral dimensions, groups (LD, NLD), and the dependent variable, socioeconomic, were calculated using Chi-Square analysis. Results were charted for interpretation.

Analysis of Research Question Three

Research question three examined consistencies between students' perceived versus realized behavioral work style. As mentioned earlier, two methods were used to gather data, observations and interviews. Once observational data was collected, the researcher compared the observations and interviews with I-Sight classifications (perceived behavioral work style) on a data analysis grid.

Observations

To obtain a broad overview of data obtained from observations, four levels of analysis were employed. First, to ensure all behaviors were captured in field notes, videotapes from observations were reviewed a minimum of two times. During each viewing, field notes were compared to videotape footage. From this review, additional behaviors were noted in field notes.

Secondly, to capture behaviors exhibited from the four dimensions, a color-coding system was employed (Mariage, 2001). Strauss and Corbin (1990) noted that coding represents the operations by which data are broken down, conceptualized, and put back

together in new ways. Specifically, behaviors exhibited from each dimension were coded with a different color. Behaviors noted from the “Dominance” dimension were highlighted in blue, “Influence” in yellow, “Steadiness”, green, and “Conscientiousness” behaviors were coded in pink. To ensure accuracy in coding behaviors the investigator constructed interpretation guide was used as referenced (Appendix H). Reliability was measured by reviewing color-coded behaviors with the student’s teacher.

Thirdly, coded behaviors were placed on a grid under the heading of corresponding dimension (Appendix K). Student identification numbers were placed in the top right hand corner of the grid. This grid served as an organizational tool in which documented behaviors could be viewed in relation to the interpretation guide (Strauss & Corbin, 1990).

Finally, documented behaviors under each dimension were tallied. The dimension with the highest number of behaviors served as the student’s predominant behavioral work style. If a high number of behaviors were exhibited in two dimensions, data were reexamined and discussed with a career development consultant from the State’s Center for Career and Technical Education (MCCTE). Once agreement was achieved, the predominant behavior dimension was circled. The dimension with the second highest number of tallies served as the student’s secondary dimension. Further, to ensure reliability in coding, categorizing, and counting behaviors, interrelator reliability was achieved with a career development consultant from a Midwest land grant university reviewed data.

Interviews

A similar coding system was followed for interview data. First, raw data from each student interview tape was transcribed and examined for emerging themes and behaviors. To ensure behaviors were identified, transcriptions were reviewed a second and third time; additional comments were noted directly on transcriptions. These comments were used as cues for reexamining the transcript a final time. Additionally, behaviors were noted that illustrated recurring conceptions and concerns (Duffy, 1993). After this review, behaviors under each dimension were categorized using the same color-coding system as with observations. Once again, the investigator constructed behavioral dimension interpretation guide was referenced. Coded behaviors were then organized and placed on a grid under the corresponding dimensions (Appendix K). Student identification numbers were placed at the top right hand corner of each grid. Finally, the number of documented behaviors under each dimension was tallied. The dimension with the highest number of behaviors was determined as the student's predominant behavioral work style. If a high number of dimensions were exhibited in two dimensions, data were examined and discussed with a career development consultant from MCCTE. Once agreement was achieved, the predominant behavior dimension was circled. The dimension with the second highest number of tallies served as the student's secondary dimension. To ensure reliability in coding, categorizing, and counting behaviors, interrelator reliability was achieved with a career development consultant.

The Triangulation of Data

A triangulation of data was employed to answer research question three (perceived and realized behavioral work styles). Specifically, the predominant and secondary (if applicable) behavioral work styles obtained from the three methods of data collection, the I-Sight, observations, and interviews were placed on a triangulation table for interpretation (Appendix L). Each dimension was placed under the corresponding method and subsequent exhibited behaviors listed underneath. This allowed perceived and realized dimensions of behaviors to be viewed in a comprehensive manner thereby allowing the researcher to interpret the relationship between perceived and actual behavioral work styles. If discrepancies existed between perceived and actual behavioral work styles, data were reexamined to determine if investigator error led to those discrepancies. Further, depending on final distribution of dimensions, students were grouped by the degree of consistency across methods. Differences among groups were then examined.

Analyzing the Case Studies

In qualitative analysis the case study approach is a detailed way of collecting, organizing, and analyzing data (Patton, 1990). The purpose is to gather comprehensive, systematic, and in-depth information about each case. In this study, the process of analyzing and constructing the four case studies involved three steps, (1) assembling the information (2) constructing a case record, and (3) writing a descriptive narrative (Patton, 1990).

To build cases, seven data sources were analyzed for each student: (1) the triangulation table (Appendix L), (2) characteristics of predominant behaviors (dimension interpretation guide) (Bright, 2002) (Appendix H), (3) parental questionnaire (Appendix F), (4) interview and observation behavioral grid (Appendix K), (5) interview transcriptions and observation field notes, (6) case study review sheet (Appendix J), and (7) the I-Sight (Appendix E). Before reviewing data sources, the researcher first sought familiarity with the student's perceived and realized behavioral work styles. This information was obtained from the triangulation table. The dimension interpretation guide was used to review behavioral strengths and limitations of the student's perceived and realized behavioral work styles. The familiarity of styles was imperative if a comprehensive review of data sources was to occur (Patton, 1990).

Using the dimension interpretation guide as a reference, the following data sources were reviewed chronologically: (1) I-Sight, (2) questionnaire, (3) interview transcript, (4) interview behavioral grid, (5) observation field notes, (6) observation behavioral grid, and (7) case study review sheet. The purpose of this review was to convert raw data into a descriptive outline (Yin, 1989). This conversion was accomplished in two steps. First, from this review, an outline of major headings was developed (Miles and Huberman, 1984). There were six major headings identified including, (1) perceived style(s), (2) realized style(s), (3) parental involvement, (4) socioeconomic status, (5) school, and (6) career/vocational (Appendix M). Information about disability was placed under the school heading. Next, data sources were reviewed again and specific information from each source was placed under the corresponding outline heading. The outline was reviewed for emerging patterns, similarities, or

contrasting information (Yin, 1989). New information was placed directly in margins of outline. Margin notes were used as cues for reexamining data sources (Duffy, 1993). Finally, the complexity of information on the outline was compared to the dimension interpretation guide. Again, notes were placed in the margin. Based on the outlined information, descriptive case studies were written. The researcher sought to paint a holistic picture of student's perceived and realized behavioral work styles in the context of home, school, and career.

Case study construct and internal validity was established using criteria outlined by Yin (1984). The degree of construct validity was increased by using the following: (1) multiple sources of evidence (e.g., I-Sight, observation field notes, and interview transcriptions) and (2) establishing a chain of evidence. Internal validity was increased by (1) explanation building, (2) pattern matching, and (3) peer examination, where cohorts were asked to review data collection measures, outline, and examine researchers interpretations.

Summary

Quantitative methodology was used in this study for 2 reasons: (1) to determine differential behavioral work styles of African American students with and without learning disabilities and (2) examine relationships between levels of parental involvement, socioeconomic status, and behavioral work styles. Conversely, in the qualitative approach, relationships between perceived and realized behavioral work styles were examined. Triangulating results from both quantitative and qualitative methods allowed for a comprehensive view of realized and idiosyncratic behavioral work styles.

Finally, case studies added further depth to the investigation by providing an end product that was rich, literal, and descriptive.

CHAPTER 4

RESULTS

This exploratory study sought to determine behavioral work style (the dependent variable) differences between high school African American students with and without LD. A second objective was to determine if relationships existed in regard to two independent variables (1) students perceptions of parental involvement and (2) student socioeconomic status (SES), and the dependent variable, behavioral work styles. The final objective investigated consistencies between perceived and realized behavioral work styles. To explore the first two objectives, quantitative methods including a behavioral analysis assessment and questionnaire were employed. Qualitative designs were used to investigate the third research objective. These methods included interviews and classroom observations with eight randomly selected students. A triangulation of data sources served to answer research objective three. Finally, to add even greater depth, case studies were written for four of the eight randomly selected students.

The purpose of this chapter is to present the results of the three research questions. The chapter begins with research question one which is divided into two sections. Research question two is also divided into two sections; research question three, two sections. A summary of findings is presented after each research question.

Research Question 1: What are the behavioral work styles of LD and NLD African American students?

To examine behavioral work styles of LD and NLD African American respondents (N = 32), research question one was divided into two sections. Section A describes classification of behavioral work style dimensions between LD (n = 17) and NLD (n = 15) African American respondents. Section B includes classification of behavioral work style dimensions between LD and NLD African American respondents and the majority population (i.e., LD and NLD Caucasian respondents, n = 37).

In each section, results are presented in two parts. First to be examined are frequencies and percentages of behavioral work styles. Part two presents relationships between behavioral work styles, groups, and the respondent variables, “Gender,” “Grade,” and “Program Area.” Frequencies, percentages, and relationships are provided to shed light on the interpretive process.

The two sections of Research Question one are as follows:

- A). Are there differences in behavioral work styles between LD and NLD African American students?
- B). Do the behavioral work styles of LD and NLD African American students differ from the majority population?

Question 1 (A): Are there differences in behavioral work styles between LD and NLD African American students?

Presented in this section are differences in LD and NLD respondents in terms of behavioral work styles. First, results from cross tabulations are shared, including frequencies and percentages of behavioral work style dimensions in and between the two groups. Depicted in Chart 1 is the dispersion of behavioral work styles of the two groups.

Chart 1

Behavioral Work Styles Classifications by Group (LD, NLD) (N = 32)



The majority (53%) of LD respondents (n = 9) were classified in the Steadiness dimension. Seven (41%) of the remaining LD respondents were classified as either Dominance (n = 4, 24%) or Conscientiousness (n = 3, 17%); one LD respondent was

classified in the Influence dimension. Alternatively, frequencies of behavioral work style classifications by NLD respondents were more dispersed. For example, six of the 15 (40%) were classified in the Dominance dimension, while five others (33%) were classified in the Steadiness dimension. Another three (20%) NLD respondents were classified in the Influence dimension; one NLD respondent was classified in the Conscientiousness dimension.

Overall, the majority of respondents in both groups were concentrated in the Steadiness and Dominance dimensions (LD, 77% and NLD, 73%). Interestingly, one group's highest classified dimension was the other group's second highest classified dimension. LD respondents were classified in the Steadiness dimension (this groups predominant classification) 20% more often than NLD respondent. Alternatively, NLD respondents were classified in the Dominance (this groups predominant classification) dimension 16% more often than LD respondents. In regards to the other two behavioral work styles, 10% more LD respondents were classified in the Conscientiousness dimension than their nondisabled counterparts. As for the Influence dimension, 14% more NLD respondents were classified in this dimension, the LD group's lowest classified dimension.

Based on the two highest classified dimensions Marston (1929) would suggest that a majority of the LD respondents (classified in the Steadiness dimension) believed goals could best be accomplished by cooperating with others. On the other hand, the high classification of the Dominance dimension in the NLD group would suggest that many believe their goals can best be accomplished by taking control of the environment based on their own views (Marston, 1929; Geier, 1989).

Relationships Between Behavioral Work Styles, Groups and Respondent Variables

Chi-Square analyses were employed to examine relationships between behavioral work styles and groups (LD & NLD), and behavioral work styles and groups when controlled for the respondent variables “Gender,” “Grade,” and “Program Area.” Results of the analysis revealed no statistically significance relationships ($p < .05$) between behavioral work styles and groups or behavioral work styles and groups when controlled for respondent variables. Results of analyses are presented in Table 4.

Table 4

Chi-Square Results for Behavioral Work Styles by Groups, and Respondent Variables

Respondent Variables (by group)	N	df	Value	p
Group (LD, NLD)	32	3	3.43	$p = .330$
<u>Gender</u>				
Male	16	3	5.91	$p = .116$
Female	16	3	1.37	$p = .712$
<u>Grade</u>				
11 th	22	3	1.46	$p = .688$
12 th	12	3	4.05	$p = .132$
<u>Program Area</u>				
BM	16	3	5.08	$p = .917$
FSM	16	3	6.81	$p = .078$

(BM = Building Maintenance, FSM – Food Service Management)

Question 1 (B): Do the behavioral work styles of LD and NLD African American students differ from the majority population?

Research question 1 (B) includes the 32 LD and NLD African American respondents, as well as, a comparison group of 37 Caucasian (C) LD and NLD respondents. The Caucasian respondents were administered the I-Sight at the same time as the African American respondents. Seventeen of the Caucasian respondents were previously identified under state and federal guidelines for special education eligibility under the classification of learning disabled (LD). The remaining 20 Caucasian respondents were non-learning disabled (NLD). With regard to gender, there were seven young men and ten young women in the LD group and 11 young men and nine young women comprising the NLD group. Sixty-five percent (n = 11) of the LD group were 11th graders and 35% (n = 6) were 12th graders. The NLD group consisted of 50% (n = 10) 11th graders and 50% (n = 10) 12th graders. All students ranged from 16 – 19 years of age; the mean age was 17.86.

Cross tabulations were employed to calculate frequencies and percentages of behavioral work styles between the African American and Caucasian respondents. Depicted in Charts 2 - 3 are behavioral work style dispersion of groups by ethnicity.

Chart 2

Dispersion of Behavioral Work Styles by Ethnicity and Group (LD)

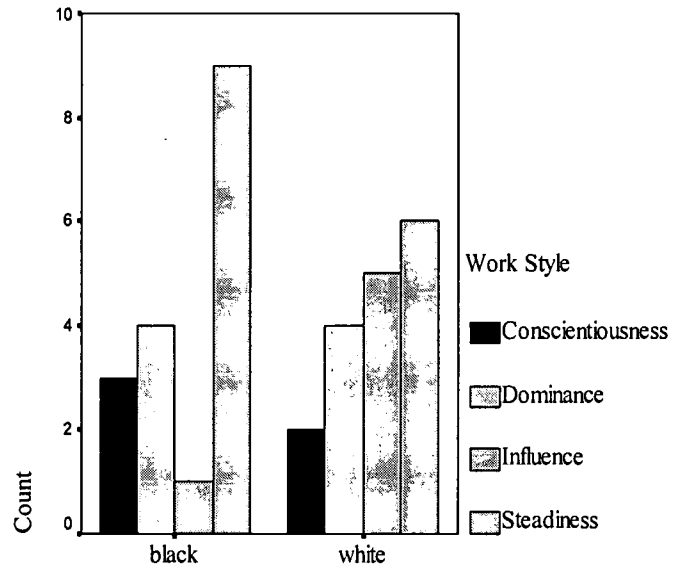
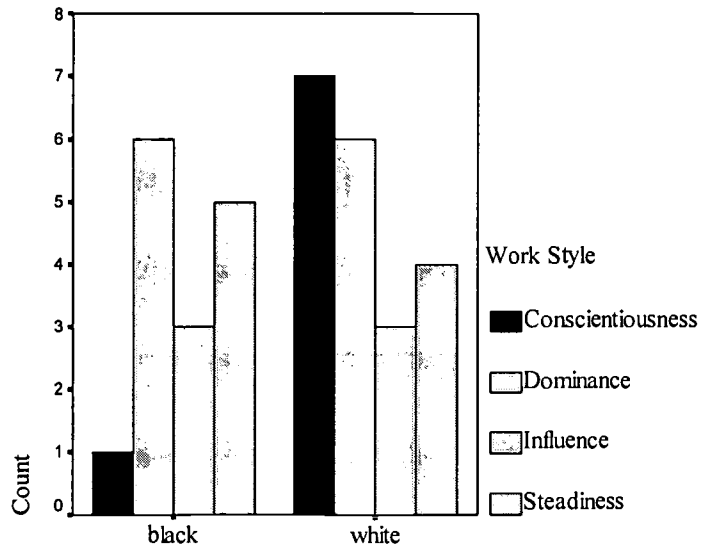


Chart 3

Dispersion of Behavioral Work Styles by Ethnicity and Group (NLD)



The dispersion of behavioral work styles among LD Caucasian respondents was broad; with no one work style being predominant among the group. Six (35%) respondents were classified as Steadiness, five (29%) in Influence, and four (24%) in the Dominance dimension. A similar (broad) dispersion of behavioral work styles was found in NLD Caucasian respondents; seven (35%) were classified as Conscientiousness and six (30%) as Dominance. The remaining dimensions for this group were five in Steadiness (20%) and three (20%) in the Influence dimension.

As stated earlier, nine of the African American LD respondents (53%) were classified in the Steadiness dimension. Seven of the remaining eight African American LD respondents (41%) were classified either in the Dominance (n=4, 24%) or Conscientiousness (n=3, 17%) dimensions. Six (40%) of the 15 African American NLD respondents were classified in the Dominance behavioral work style dimension, while five (33%) were classified as Steadiness. Another three NLD respondents (20%) were classified in the Influence dimension.

An examination of behavioral work style classifications by ethnicity only, revealed 75% of African American respondents were classified in either the Steadiness or Dominance dimension. The dispersion of behavioral work styles among Caucasian respondents was more evenly dispersed. Fifty-four percent of Caucasian respondents were classified in either the Steadiness or Dominance dimensions. The remaining Caucasian respondents were classified in either Conscientiousness (24%) or Influence (21%) dimensions. Although the dispersion of styles between the two groups (African Americans and Caucasians) differed, the two highest classified dimensions of both groups were Steadiness and Dominance.

An examination of behavioral work style dispersion by groups (LD, NLD) only (no ethnic) once again revealed the majority of both groups were classified in the Steadiness and Dominance dimensions (LD, 67% and NLD, 60%). The predominant behavioral work style of the LD group was Steadiness; the predominant for the NLD respondents was Dominance. Regarding the Conscientiousness and Influence dimensions, an additional 23% of NLD respondents were classified in Conscientiousness, while the dispersion of these two dimensions was equally divided in the LD group. It can be said then; ethnicity did not play a role in predominant and secondary behavioral work styles classifications of LD and NLD respondents.

Relationships Between Behavioral Work Styles, Groups and Respondent Variables

To examine relationships between behavioral work styles, and the variables “Ethnic” background (A. A., C) and “Group” (LD, NLD) a Chi-Square analysis was administered. A second Chi-Square analysis was conducted to examine relationships behavioral work styles, and the variables “Ethnic” (A.A., C), “Group” (LD, NLD), when controlled for the respondent variables “Gender,” “Grade,” and “Program Area.” Analysis of results revealed no statistically significance relationships ($p < .05$) between behavioral work styles and the variables “Ethnic” (A. A., C) and “Group” (LD, NLD). Similarly, no significant relationships were found between behavioral work styles, and the variables “Ethnic” (A. A., C), “Group” (LD, NLD), when controlled for the respondent variables “Gender,” “Grade,” and “Program Area.” In other words, the dispersion of behavioral work styles among these variables were evenly spread, with no one style being predominant. Results of analyses are presented in Table 5.

Table 5

Chi Square Analysis Results for Behavioral Work Styles
by Ethnic, Group, and Respond Variables (N = 69)

Respondent Variables	N	df	Value	p
Group	69	3	2.98	p = .395
Ethnic	69	3	3.58	p = .311
Gender	69	3	2.88	p = .411
Grade	69	3	3.40	p = .335
Program Area	69	3	1.52	p = .677

Summary Research Question 1

Research question one determined behavior work style differences of LD and NLD African American students. A secondary objective was to determine if differences existed between LD and NLD African American students and the majority population. Results indicated behavioral work style differences among LD and NLD African American students. The majority of LD respondents (52%) were classified in the Steadiness dimension and another 24% in the Dominance dimension. Conversely, 40% of the NLD respondents were classified in the Dominance dimension while another 33% were classified as Steadiness. No relationships existed between behavioral work styles and gender, grade, or program area.

Differences were also found between LD and NLD African American respondents and the majority population. For example, the dispersion of behavioral work styles of LD and NLD Caucasian respondents were more broadly distributed with no one dimension being the predominant. Also, no statistically significant relationships were found

between the behavioral work styles and the two groups when examined by gender, grade, or program area. In Chapter five, results from research question one will be discussed further and linked to the studies theoretical framework.

Research Question 2: Do relationships exist between LD and NLD African American student's behavioral work styles and the familial factors, student perception of parental involvement and socioeconomic status?

To examine relationships between the independent variable, behavioral work styles of LD and NLD respondents and the familial factors, student perceptions of parental involvement and socioeconomic status (dependent variables), research question two was divided into two parts. Section A describes relationships between behavioral work styles and student perceptions of parental involvement (PPI). Two Analysis of Variances (ANOVA) were employed to measure the strengths of relationships between behavioral work styles, PPI, and respondent variables. Section B explores relationships between behavioral work styles and socioeconomic status. Chi-Square tests were utilized to examine relationships between behavioral work styles, socioeconomic status, and respondent variables.

Research question 2 (A) Do relationships exist between behavioral work styles and student perceptions of parental involvement?

Through Question 2 (A) the researcher explored relationships between behavioral work style dimensions and student perceptions of parental involvement (PPI). To

determine if relationships existed, two Analysis of Variance (ANOVA) were conducted. In the first ANOVA (2x4) mean scores obtained from the student perceptions of parental involvement questionnaire, behavioral work style dimensions (four categories), and the variable, “Group” (LD & NLD) (two categories) were analyzed. Based upon statistically significant relationships obtained from the first ANOVA, a second ANOVA (4x2x4x4) was conducted. The second analysis included PPI mean scores, behavioral work style dimensions (four categories), and the variables of “Group” (two categories), and “Educational level of mother” (four categories) and “Educational level of father” (four categories) (i.e., 11th grade or less, high school graduate, some college, and college graduate).

Relationships Between Behavioral Work Styles, Student Perceptions of Parental Involvement and Respondent Variables

Results of the first ANOVA (4x2) (Table 6) revealed statistically significant relationships ($p < .05$). The first was between the dependent variable of PPI and the independent variable, behavioral work styles. The second significant relationship was found between PPI and the variable “Group.” There were no significant interaction effects.

Table 6

4x2 ANOVA Results for Univariate F Test of the Dependent Variable Student Perceptions of Parental Involvement by Behavioral Work Styles and Group (N = 32)

Variable (s)	F	df	Significance of F
Behavioral Work Styles	4.44	1	.046*
Group	5.10	3	.007*
Behavioral Work Styles *Group	1.51	3	.236

Note: * p<.05

To further examine relationships obtained in the ANOVA between PPI and behavioral work styles and PPI and the variable, "Group," means and standard deviations (SD) were calculated and are presented in Tables 7 and 8.

Table 7

Means and Standard Deviations for PPI as a Function of Behavioral Work Styles

Behavioral Work Style Dimension	MEAN	SD	N
Dominance	3.21	.398	10
Influence	3.03	.637	4
Conscientiousness	2.90	.779	4
Steadiness	2.50	.308	14

(PPI levels: 1 = lowest, 4 = highest)

The highest PPI mean score (3.21) was found among students in the Dominance dimension while lowest PPI mean (2.50) was found in the Steadiness dimension. In other words, respondents who were classified in the Dominance dimension perceived their parents as having high levels of parental involvement in career related activities; respondents classified in the Steadiness dimension, the lowest.

With respect to significances between PPI and the variable “Group,” NLD respondents had a higher PPI mean (3.01) than their LD counterparts (2.68) which means that NLD respondent’s perceptions of their parents involvement in career related interactions is higher than their disabled counterparts. Mean and standard deviations for this relationship are found in Table 8.

Table 8

Means and Standard Deviations for PPI as a Function of Behavioral Work Styles

Group (LD, NLD)	MEAN	SD	n
NLD African Americans Respondents	3.01	.590	15
LD African American Respondents	2.69	.437	17

(PPI levels: 1 = lowest, 4 = highest)

Based upon relationships found in the first ANOVA, a second Analysis of Variance was conducted. The second ANOVA (2x4x4), run between PPI, behavioral work styles, and the variables “Group,” “Educational level of mother” and “Educational level of father” revealed statistically significant relationships ($p < .05$) between PPI and “Educational level of father, and PPI and “Educational level of mother.” Furthermore, a

significant interaction effect was found between PPI, and the variables “Group” and “Educational level of mother.” Results of this ANOVA are found in Table 9.

Table 9

2x4x4 ANOVA Results for Univariate F Test of the Dependent Variable Perceptions of Parental Involvement by Parent’s Education Level and Interaction Effect

Variable (s)	F	df	Significance of F
Educational Level of Father	20.77	3	.016*
Educational Level of Mother	52.53	4	.004*
Group – Educational Level of Mother	47.53	1	.017*

Note: * $p < .05$

To further examine relationships obtained from the second ANOVA, means and standard deviations (SD) were calculated between PPI and the variables, “Educational level of father,” “Educational level of mother” and the interaction effect of “Group” and “Educational level of mother.” Tables 10 - 12 present means and standard deviations of PPI by each variable and the interaction effect.

With regard to PPI and the variable “Educational level of father,” the highest mean score was among respondents whose fathers were college educated (3.30). Interesting, the second highest PPI mean was found not in fathers with some college, but among fathers who graduated from high school (2.91). Respondents whose fathers had 11th grade or less educational level had the lowest PPI mean (2.38).

Table 10

Means and Standard Deviations for Perceptions of Parental Involvement
as a Function of Educational Level of Father

Educational Level of Father	MEAN	SD	n
College Degree	3.33	.358	5
High School Graduate	2.91	.602	12
Some College	2.83	.473	3
11 th Grade or Less	2.38	.479	4
Students with no father in the home			8

(PPI levels: 1 = lowest, 4 = highest)

As for relationships between PPI and “Educational level of mother,” (Table 11) respondents with the highest PPI mean were those whose mothers had a college (3.32) followed by mothers with some college (3.12). Respondents whose mothers graduated high school had the lowest PPI (2.59) meaning 38% of respondents whose mothers graduated from high school had the lowest perceptions of their parent’s involvement in career related activities.

Table 11

Means and Standard Deviations for Perceptions of Parental Involvement as a Function of Educational Level of Mother

Educational Level of Mother	MEAN	SD	n
College Degree	3.32	.511	7
Some College	3.12	.271	6
11 th Grade or Less	2.60	.698	4
High School Graduate	2.59	.211	12
Students with no mother in the home			3

With regard to the significant interaction effect between PPI and the variables “Group” and “Educational level of mothers,” LD respondents whose mothers had a college degree had the highest PPI mean (3.15); this was followed by mothers with some college (2.93). LD respondent’s who perceived their parent’s involvement as lowest had mothers whose formal education ended after high school (2.54). PPI means for NLD respondents followed a similar pattern. More specifically, NLD respondent with the highest PPI mean were those whose mothers graduated college (3.55), followed by respondent’s mothers with some college (3.30). NLD respondents with the lowest PPI mean were those whose mothers had an educational level of 11th grade or less (2.63). In other words, in both LD and NLD respondents, those with mother’s who graduated college felt their parent’s career related interactions with them were high. Those LD and NLD respondents whose mothers were high school dropouts felt their parent’s career related interactions were lowest. Depending on the educational level of mother, it can be

said that disability status (LD, NLD) did not play a role in respondent perceptions of parents career related involvement in career related activities. This data is presented in Table 12.

Table 12

Means and Standard Deviations for Perceptions of Parental Involvement as a Function of Group and Educational Level of Mother (Interaction Effect) (N = 32)

Group - Educational Level of Mother	MEAN	SD	N
AA LD (n = 17)			
College Degree	3.15	.526	4
Some College	2.93	.115	3
High School Graduate	2.54	7.87	7
11 th Grade or Less	2.50		1
Students with no mother in the home			2
AA NLD (n = 15)			
College Degree	3.55	.482	3
Some College	3.30	.265	3
High School Graduate	2.66	.321	5
11 th Grade or Less	2.63	.850	3
Students with no mother in the home			1

Research Question 2 (B): Do relationships exist between behavioral work styles socioeconomic levels?

This question sought to examine relationships between behavioral work styles and respondent's socioeconomic status (SES) obtained from the Hollingshead Two-Factor Index of Social Status (HISS) (Appendix G). As stated earlier, the HISS ranks families from one to five socioeconomic strata (levels) (5 = highest, 4 = high, 3 = middle, 2 = low-middle, and 1 = low) based on occupation and educational level of the parents or guardian. It is important to note there were no respondents in the highest SES level. For analytical purposes, the remaining four SES levels were divided into two categories. Respondents from low or lower – middle levels were placed in SES 1; those from middle or high SES levels were placed in the category, SES 2. Of the 32 respondents, 19 (59%) were classified in SES 1 (low or low-middle) while the remaining 13 (41%) were classified in SES 2 (middle or high). When SES categories were divided by the variable “Group” (LD, NLD), twelve (71%) of the LD respondents were categorized in SES 1, and thirteen (41%) in SES 2. As for NLD respondents, seven (47%) were in SES 1 and eight (53%) in SES 2.

To explore relationships between behavioral work styles and SES (2 categories) among the total group of respondents (N = 32) and by the variable “Group” (LD, n = 17 and NLD, n = 15) Chi-Square analysis were employed.

Relationships Between Behavioral Work Styles and SES Categories

Results of Chi-Square analysis revealed statistically significant relationships ($p < .05$) between behavioral work styles and SES categories. These results are presented in Table 13. Specifically, six-three percent of respondents in SES 1 ($n = 12$) were classified in the Steadiness behavioral work style dimension. Fifty-four percent ($n = 7$) of respondents in SES 2 were classified in the Dominance dimension. No statistically significant relationships were found between behavioral work styles, SES categories when controlled for the variable “Group” (LD, NLD).

An additional Chi-Square analysis revealed a significant relationship between behavioral work styles and male respondents in SES 1; seven (79%) were classified in the Steadiness dimension. No significant relationships were obtained between behavioral work styles, SES groups, and female respondents. Group did not play a role in explaining differences of PPI, behavioral work styles, or “Gender.”

Table 13

Results of Chi-Square for Behavioral Work Styles by SES and Respondent Variables

Variable (s)	N	df	Value	Significance Levels (p)
SES	32	3	7.90	($p < .048$)*
SES, Groups (LD, NLD)	17	3	5.90	LD ($p = .117$)
	15	3	3.75	NLD ($p = .290$)
SES, Groups (LD, NLD) and Gender (Male, Female)	16	1	.071	Males ($p < .049$)*
	16	1	3.88	Females ($p = .790$)

Note: * $p < .05$

Summary Research Question 2

Research question two determined if relationships existed between behavioral work styles and the two dependent variables, student perceptions of parental involvement (PPI) and SES levels. Results revealed statistically significant relationships between behavioral work styles and PPI. For instance, respondents classified in the Dominance dimension had the highest PPI; respondents in the Steadiness dimension had the lowest PPI scores. Another significant relationship was found between group (LD, NLD) and PPI; NLD respondents had higher PPI levels than LD respondents. No relationship was found between behavioral work styles, PPI, and group.

An additional analysis revealed statistically significant relationships between PPI and educational level of father and mother and an interaction effect between PPI, group, and educational level of mother. Respondents whose fathers were college educated had the highest PPI levels; respondents whose father's educational level was 11th grade or less had the lowest PPI levels. This same trend was found in PPI and mother's educational level as respondent's whose mother's were college educated had the highest PPI levels. Respondents whose mothers were high school graduates had the lowest PPI levels. In terms of the interaction effect between PPI, group (LD, NLD) and mother's educational level, LD respondents whose mother were high school graduates had the lowest PPI levels. NLD respondent's whose mother's educational level was 11th grade or less had the lowest PPI levels. Respondents in both groups (LD, NLD) whose mother's were college educated had the highest PPI levels.

Statistically significant relationships were also found between behavioral work styles and SES. Sixty-three percent of respondents in SES 1 (low to low-middle SES)

were classified in the Steadiness dimension; 54% of SES 2 (middle to high SES) respondents were classified in the Dominance dimension. Relationships were also found between behavioral work styles and the SES levels of male respondents as 79% of LD males in SES 1 were classified as Steadiness. No relationships were found among behavioral work styles, SES and female respondents. In Chapter five, results from research question two will be discussed further and be linked to the studies theoretical framework.

Research Question 3: Are perceived work styles consistent with the realized self in a situation work context?

Research question three examined consistencies among perceived and realized behavioral work styles. More specifically, the researcher compared perceived styles ascertained from one-on-one interviews and the I-Sight Behavioral Analysis Assessment with realized styles determined from classroom observations of respondents in a situated work environment. Eight respondents (four from each group) were randomly selected to participate in an interview and classroom observation. Each respondent's predominant behavioral work style from the three data sources was analyzed and compared with the other data sources. To triangulate conclusions, respondents were grouped by the degree of consistency across methods. Consistencies between perceived and realized styles were examined among and between groups. To add even greater depth, mini case studies were written for four students.

To explore consistencies of perceived and realized behavioral work styles, research question three is presented in three sections. The first section focuses on the triangulation of data sources, summarizes methods and analyses procedures, provides

criterion for consistency measurements, and presents the results of consistencies between perceived and realized styles. Section two describes the case study selection criterion, summarizes the methods and analysis procedures, and provides four case studies for greater depth. The final section presents a summary of results.

Triangulation of Data Sources

Interview and classroom observations were employed to ferret out perceived and realized behavioral work styles. Interviews allowed for descriptive behavioral tendencies to emerge through one-on-one interactions with the researcher. The eight interviews took place in the skill center's empty dining room in the back of the main kitchen. To ground conversation in a familiar context, respondents were read five scenarios related to school, job, family and friends (Appendix I). Respondents were asked "how they would respond" or "what they would do" in the situations. The interviews ended with the researcher probing responses regarding respondent's family, perceived academic strengths and limitations, vocational experiences, and future career plans.

The purpose of classroom observations was to capture realized behavioral styles in a work-based learning context. Depending on the program area, observations took place in the main kitchen of the skills center (FSM) or on different areas of the school grounds (BM). Respondents were observed working individually, in a group setting, or in direct contact with the teacher. The researcher kept a running record of events that documented specific behaviors exhibited during observations. Field notes were shared with the respondent's teacher to clarify any discrepancies.

Using an interpretation guide developed by the investigator (Appendix H), behavioral tendencies from interviews, observations and the I-Sight were reviewed, coded, and placed on a data triangulation grid (Appendix L). Predominant work styles of the three data sources were then charted for interpretation and comparison (Table?). Respondents were then grouped by the degree of inconsistency across methods. For a complete breakdown of data collection and analysis procedures see Chapter 2.

Criterion for Consistency Measurements

The degree of consistency between perceived and realized behavioral work styles was determined by tallying the number of discrepancies between the two perceived styles (i.e., I-Sight and Interview) and the realized styles (i.e., observation). Respondent's predominant dimension acquired on the I-Sight (perceived) was used as the standard against which the two data sources, representing the perceived and realized styles, were compared. The I-Sight is considered to be a reliable measure of comparison. The four dimensions are considered to have sufficient test-retest reliability to be useful. Scores are well distributed across the research sample (968 respondents, age 12 to 21) and are normed to reflect the distribution obtained on each scale (Macha & Kamper, 1999).

The criterion for measuring consistencies across data sources was as follows: If there were no discrepancies between the perceived and realized styles, respondents received a score of "0" and placed in the "consistent" category. If one discrepancy between perceived and realized styles existed, a score of "1" was given and the respondent was placed in the "somewhat consistent" category. If there were two discrepancies, respondents received a score of "2" and placed in the "inconsistent"

category. Table 14 lists LD and NLD respondent's perceived and realized behavioral work styles and inconsistency score by data collection measure. Consistencies among styles are presented first by overall group, followed by the two groups (LD, NLD).

Table 14

Perceived and Realized Behavioral Work Styles and Consistency Scores
of the Eight Randomly Selected Students

Group (LD)	I-Sight (Perceived)	Interview (Perceived)	Observation (Realized)	Inconsistency Score
1. Susan	Steadiness	Steadiness	Steadiness	0
2. Peggy	Conscientiousness	Conscientiousness	Conscientiousness	0
3. Lagita	Dominance	Dominance	Dominance	0
4. Cary	Steadiness	Dominance	Influence	2
Group (NLD)	I-Sight (Perceived)	Interview (Perceived)	Observation (Realized)	Inconsistency Score
1. Dee	Dominance	Steadiness	Dominance	1
2. Barb	Steadiness	Steadiness	Steadiness	0
3. Lyle	Influence	Steadiness	Influence	1
4. Beth	Conscientiousness	Dominance	Dominance	1

Consistencies Between Perceived and Realized Styles

Eighty-percent of respondent's were "consistent" or "somewhat consistent" in terms of perceived and realized work styles across the three measures. Fifty-percent were "consistent" across all the three data measures. In other words, there were no

discrepancies between perceived and realized styles. Seventy-five percent of all NLD were “somewhat consistent” across the three data measures; meaning that one perceived style was consistent with the realized style. Of these respondents, two were discrepant on the interview, the other on the I-Sight. One of the eight respondents, Cary, an LD male, was “inconsistent” across all three data measures. In other words, neither of his style perceptions were consistent with his realized style in a situated work context. When examining consistencies between perceived and realized styles by groups (LD, NLD) an interesting discovery was made. Compared to 25% of their NLD counterparts, 75% of the LD respondents were “consistent” across all three data sources. In other words, there were no discrepancies between perceived and realized behavioral work styles. The typicality of many individuals with LD being metacognitive of their self-style is somewhat uncharacteristic for this group (Vaidyna, 1999; Rojewski, 1996).

To further examine the typicality of perceived and realized behavioral work style consistencies among LD and NLD respondents, four exploratory case studies were written; three for LD and one for NLD.

Case Studies

The purpose of the case studies was to paint a holistic picture of students’ perceived and realized behavioral work styles in the context of home, school, and career. To gain an even deeper insight into the respondent’s school experiences, information was obtained from school records. Initially, the researcher sought to examine CA-60s and Individualized Education Plans but because of confidentiality concerns, access to school records was denied. The researcher was allowed to view secondary student folders that

included, absentee and behavioral information, GPA, and limited documents on special education services (e.g., amount of time student had received special education services and disability category). No information was obtained regarding standardized test scores, specific type of learning disability, past/current vocational experiences and career interests and goals. This information was instead sought from conversations with teachers and student interviews. Individual cases were constructed using this information coupled with data from case study review sheets (Appendix J). For a more thorough explanation of case study methods and analyses, see Chapter 2.

Criteria for Case Selection

Case studies were written for two “consistent” and one “inconsistent” LD respondent; one “somewhat consistent” NLD was selected. Susan a “consistent” LD respondent was chosen based upon her classification in the behavioral work style category of Steadiness; Lagita because of her low PPI and SES levels. The LD respondent (Susan) classified in the Steadiness dimension was chosen because overall this was the predominant dimension obtained by the majority of LD respondents. Lagita, the LD respondent with low PPI and SES levels was selected to explore the study’s two dependent variables in the context of dimension classifications. A case study was written for Cary, the “inconsistent” LD respondent, because of the variation among perceived and realized styles. The NLD respondent Lyle, was randomly selected from the three “somewhat consistent” respondents simply by choosing a highlighted name from Table 16. Cases are presented in the following order: Susan, Lagita, Cary (LD) and Lyle (NLD).

Case Study 1

Susan

Susan is an 18-year-old 12th grader enrolled in the Food Service Management program. Small in stature and unassuming in appearance and personality; she could easily be lost in a crowded room. Susan lives with her parents and two younger brothers in an upper-middle class suburban neighborhood just outside of town. Her father, a college graduate works as a supervisor at General Motors. Four years ago Susan's mother, also a college graduate, quit her job so she could raise Susan's twin brothers. Susan said, "my mom spends a lot of time with my brothers. They are small and take up a lot of her time. She doesn't even have time to help me with homework and sometimes I need a lot of help."

A review of Susan's school records revealed a GPA of 1.69. Comments from a teacher found on a school form read, "low reading levels hold her back" (Skill Center school records). A further examination of school records indicated that in 1997 Susan became eligible for special education services under the category Learning Disabled. Her teacher, Miss O'Neal said that her reading and writing skills were, "very low" and that she often "freezes when asked to read aloud" (teacher interview, 5/17/02).

Because of academic struggles, Susan said her parents "thought she should come to [enroll at] the trade school [skills center]. "My Mom and Dad, especially my Dad, told me that I needed to learn how to cook and the trade school [skills center] was a good place to learn how." When asked if she desired a career that required her to cook she said, "No, I want to be a lawyer when I get done with school but my parents don't think it is a good job for me." When asked about the type of people she enjoyed working with she

said, “I like people who are nice and don’t tell me I’m doing my job wrong. When probed further she said, “I like to help people but I don’t like working with bossy people.” This desire to help others is evident in Susan’s part-time job, caring for the elderly at a nursing home. Regarding her job Susan said, “I sit with the old people talking to them [and] helping them eat and go to the bathroom. “My Dad told me it would be a job for me and I like it [the job].”

Perceptions of Parental Involvement in Career Activities

Susan’s perceptions of her parent’s involvement in career related activities were higher than most of her LD contemporaries (3.5 or of 4). On the PPI questionnaire (Appendix F) she noted that her parents talk with her, “all the time,” about the importance of education in getting a job, the importance of skills and training, as well as deciding on a career. Conversely, she noted her parents “hardly ever” tried to make her feel good about herself and develop confidence in her abilities. Susan did feel her parents want her to make her own decisions about the kind of job she wants. According to Susan’s teacher, Miss O’Neal, Susan’s father is a very involved parent. She noted, “Her Dad is the kind of person who makes sure Susan is getting some type of work experience” (teacher interview, 5/17/02).

Perceived and Realized Styles

Susan’s behavioral work styles were consistent across the three data sources, meaning her perceived and realized styles were the same; on all three data sources she was classified in the Steadiness dimension. On the I-Sight, she perceived the following

behaviors as being “most like her,” listening patiently to others, letting others have what they want, being patient with others, and letting others lead. She also believed she went along with others and followed orders.

Results of Susan’s interview also revealed a predominant behavioral work style of Steadiness. This Steadiness was illustrated by her response when read the following scenario (Appendix I): “If you were in line for a movie that you really wanted to see and your friends insisted that you see another movie, what would you do?”

she responded,

“I guess it depends on the movie. If I my friends really wanted to see the other movie, I guess I would go with them. I don’t like seeing movies by myself. It would depend on how much they wanted to see the other movie. If the line was long for the movie I want to see, yeah I would see their movie.”

Susan’s Steadiness behavioral tendencies were also illustrated in her response to this scenario (Appendix I): “Your friend has asked you to go to the beach during spring break but your parent’s say you have to stay home and work around the house. How would you respond?” Without hesitation, Susan said,

“I would ask them why, but I would not argue. When my Mom and Dad tell me I can’t do something, they usually have a good reason for not letting me go. But I don’t argue with them [because] there is no use.”

The Steadiness dimension was further revealed in Susan’s response to this scenario (Appendix I): “If given a choice, which of the following would you choose in a group project: leader, researcher, writer, graph designer, or presenter?” Susan responded,

“They all seem hard. I’m not sure. I guess I would be the researcher. I think I am good at putting stuff together. Sometimes when I have to talk in front of my class I get nervous so I would not want to present to the class.”

In this same scenario she was also asked, “What would you do if a person in the group was not fully participating?” she said,

“I would leave that up to the leader. If the other person were sick, I guess we would do their work. A lot of people don’t do their stuff anyway.”

Susan’s behavioral tendencies exhibited during the interview were typical of Steadiness behaviors outlined by Mocho and Kamper (1999). They included, agreeable (does not create conflict and is accepting of others), easy going (go out of their way to help others), organized (takes time to do things step-by-step), and shy and reticent.

Steadiness was also Susan’s predominant realized style exhibited during the classroom observation. Because Susan was enrolled in the Food Service Management program, her observation took place in the main kitchen of the Skills center. Before class began, each student received their job details at a particular workstation. On the day of the observation, Susan, along with two other students, Karen and Jeff were given the task of making sandwiches and fruit salad for a banquet the following day. Before beginning their work tasks, students were to examine the cleanliness of their cutlery and workspace. While Karen and Jeff examined their area, Susan stood watching the other students. When I asked about not participating in the first activity she responded, “I don’t know, I should be helping them.” When cutting fruit, Susan was somewhat uninvolved during the entire process. Karen asked her why she was not helping and Susan replied, “the way you are doing it is not the way Miss O’Neal told us to do it” (observation video, 5/17/02). Karen ignored her response. When Susan finally began participating in the activity, she seemed quite nervous around the knives. When I asked Miss O’Neal about Susan’s fear, she replied,

“Susan gets very nervous when she has to work in a group of kids she doesn’t really know. She also gets worried someone will cut themselves with the knives. A lot of times, I have Susan work on tasks for me because I know she will always get things done” (observation video, 5/17/02).

As the observation continued, Susan began making sandwiches with Jeff. She seemed very willing to assist him with the task, almost going out of her way to ensure the sandwiches were perfect. When questioned by Jeff regarding the steps in wrapping the sandwiches in cellophane, Susan replied, “I’m not sure, what do you think we should do; maybe we should ask the teacher” (observation video, 5/17/02). When Miss O’Neal arrived at their workstation, she gave Susan and Jeff the correct procedure for wrapping sandwiches. When I questioned Miss O’Neal about this she said, “Susan always second guesses herself and never wants to make decisions on her own.”

At the conclusion of the interview, I asked Miss O’Neal to review the Dimension Interpretation Guide and identify Susan’s realized style. During my observation of Susan, I had identified many of the Steadiness tendencies. After her review, Miss O’Neal selected the Steadiness dimension as Susan’s predominant realized style. This judgment agreed with my classification of Susan’s behavioral work style dimension. Based upon observations and Miss O’Neal’s comments, Susan’s realized style during the observation fit into seven of the 12 behavioral tendencies outlined by Mocha and Kamper (1999) (Appendix H) for the Steadiness dimension. These behaviors included, uninvolved, methodical (does not rush to make decisions and sticks to things that work), fearful and worried, stable (dependable and can be relied upon), organized (taking time to do things in a step-by-step manner), low initiative (unwilling to make decisions), and self-sacrificing.

Case Study 2

Lagita

Lagita is an 18 year old 12th grader enrolled in the Food Service Management program. Short in height but confident in her abilities, Lagita was extremely strong willed and opinionated. According to Miss O'Neal, Lagita's teacher, at the age of six she was shot in the leg and now walks with a limp. Miss O'Neal said, "I don't know a great deal about why she was shot because she refuses to talk about it" (teacher interview, 5/17/02). The eldest of two children, Lagita, lives with her father, mother and younger brother in a public housing complex. Her parents, both high school dropouts, work as painters. According to Miss O'Neal, "Lagita's parents are very involved in the black family union but not in her schooling. They work a great deal and don't have a lot of time to devote to her or her little brother" (teacher interview, 5/17/02).

Lagita struggles with math and is a poor reader. When asked her favorite subject, she said, "English is my favorite subject because I am learning to write better." When further probed about careers in English she said, "I want to be an English teacher. I want to go to college in the south." Considering Lagita's 1.46 GPA, these aspirations might be quite high. In 1995, she became eligible for special education services under the category of Learning Disabled. School records indicated she was frequently absent and often skipped class. A further examination of school records revealed behavioral intervention documents with comments such as, "very confrontational with adults" and "student is mature but extremely vocal" (GASC Skills Center school records). Miss O'Neal believed Lagita's problems with authority figures "stem from her low academic achievements and her inability to take orders." She further proffered, "Lagita does not

have the best home situation so the attitude is a defense mechanism” (teacher interview, 5/17/02).

Lagita had only attended the Skill center for one year. She decided to enroll in the Food Service Management program because she was “interested in learning how to cook new and different kinds of food.” She also needed additional service hours as she had met all of her required course work. When queried about service hours, Lagita said, “I work as an aid for an English teacher. This lets me see what teachers do in the classroom besides teach. It lets me see if I really want to be a teacher.” When asked if being a teacher’s aid was considered work-based learning, Lagita was the only respondent who knew the definition of the term.

She said,

“I think I am getting some work-based learning experience but I don’t know if working with a teacher counts. At my job at the hockey stadium, some of the kids have to be graded by the boss. Because my job is only part of the year [seasonal] I cant do it.”

When asked about the type of people she preferred to work with, she said,

“I like people who do they [their] job and let me do mine. I don’t like those kinds [of people] who try to tell me what to do. I don’t like a boss who does not tell me what to do and then gets mad at me when I don’t do my work right. Most of the time my boss leaves me alone because she knows I do my job right.”

Perceptions of Parental Involvement in Career Activities

Lagita’s perception of her parents’ involvement in career related activities was low (1.5 out of 4). On the PPI questionnaire (Appendix F), she noted that her parents “hardly ever” talk with her about the importance of education in getting a job, the importance of skills and training, or tried to help her feel good about her abilities. She

further noted that her parents “sometime” talked with her about the kind of job she wanted and about deciding on a career. She felt her parents thought that obtaining a job that fit her interests and skills was “somewhat unimportant.”

Perceived and Realized Styles

Lagita’s behavioral work style dimension was consistent across all three data sources; she exhibited the Dominance dimension on both perceived and realized measures. On the I-Sight she perceived the following Dominance behaviors as being “most like her,” wanting to be in charge, not giving in, believing people see her as powerful, liking to take action, and arguing with others. In the comments section of the I-Sight (Appendix E), she wrote, “I am a little more direct than I thought I was.” In answering the question “What is one thing you could do to improve how you get along with people?” she wrote, “I need to keep some thoughts to myself.”

Results of Lagita’s interview also revealed a highly developed Dominance dimension. This behavioral work style was illustrated by her response to the following scenario: “If you were in line for a movie you really wanted to see and your friends insisted that you see another movie, what would you do?” she said,

“If they try to force me to go see the movie, then I won’t see it. My friends don’t make decisions for me. Everyone does not like the same kind of movie. Usually it is me telling them to see another movie.”

The Dominance dimension was also evidenced in her response to this scenario (Appendix I) “How would you respond if told by your employer to work extra hours for a sick employee?” she said,

“My job is very hectic sometimes. It would depend on if the person had called in sick a lot. You know if my boss knows I will work late for the person and I do

[work late] then maybe my boss would give me a better job. He knows I can work without him looking in on me all of the time. If I truly believe the person is sick then I would tell my boss I would work. If I found out the person was out playing and not sick, then I would say something to him. I would want him [sick employee] to tell me what was wrong.”

A further example of behaviors characteristic of the Dominance dimension were evidenced by her response when asked, “What would you do if you walked into your classroom and your teacher said “pop quiz in five minutes?” (Appendix I) Lagita said,

“I would just ask the teacher what it would be over so I could get a good grade. I would look over my notes and the book.”

When questioned how she would respond to other students if they were talking while she was trying to study, she said,

“I would ask the teacher...I would tell the teacher...no I would first tell them to be quite. If not, I would be excused so I could study in the hallway. You know if they got an attitude or something, then I would fuss them out.”

These behavioral characteristics were typical of the Dominance dimension as outlined by Mocha and Kamper (1999) (Appendix H). Dominance behavioral characteristics exhibited during the interview included, direct and straightforward (honest in expressing what she thought), a desire for freedom from controls and supervision, seeking opportunity for individual accomplishments, desiring direct answers, being quick tempered, independent and self sufficient.

Dominance was also Lagita’s predominant realized style exhibited during the classroom observation. Lagita’s observation took place in the main kitchen of the skills center. On this particular day Miss O’Neal had assigned her to the short order cooking area. Her duties included running the grill, preparing hamburgers (i.e., placing meat and condiments on the bun) and filling the condiment dispensers. Lagita was to work with three other students, Mike, Kara, and Ruth; two on the grill, two making hamburgers, and

one acting as a gofer. The condensed working space presented a problem for the four students. Friday, the day of Lagita's observation, was the busiest day for the short order cooking area. Each Friday, patrons are allowed to order take-out lunch. As the orders came in, the students became more confused. Lagita, who was running the grill, began telling the other students how to do their jobs. This did not fair well with her coworkers. For example, when Kara became confused about which condiments were to be placed on hamburgers and cheeseburgers, Lagita replied, "Ruth you need to help Kara figure out what her orders are, she don't know what she is doing" (observation video, 5/17/02). Lagita also informed Mike that he was "cooking the meat too long." Mike ignored Lagita and continued working. Giving him an angry glance, she quickly put her hand on Mike's and said, "This is how it you do it crazy." When Mike became angry, she in a somewhat stubborn manner, said, "you need to do this right man, people gotta [got to] eat this stuff." Throughout the observation, Lagita continued to watch the work of the other three students. When the teacher's aid, Sabrina, asked her to please let the other students do their work, Lagita said, "whatever, they are doing it wrong."

At the conclusion of the observation, Lagita approached me. She was inquisitive about seeing herself on the video camera. While she viewed herself on video, I asked Miss O'Neal about Lagita's behavior. She said, "Lagita is very competitive and enjoys being in a leadership role." She also said that she has to monitor "which group of students Lagita works with. If she is with a passive person, she tends to run over them." Miss O'Neal did go out of her way to tell me that Lagita was not always bossy. "Lagita has a kind heart but she likes to work. Enrollment in this program is good for her

because it lets her see how important working with people is” (teacher interview, 5/17/02).

Based upon the behaviors exhibited during observations, Lagita’s predominant realized style was classified as Dominance. Lagita’s behavioral tendencies fit into six of Dominance oriented behaviors as outlined by Mocha and Kamper (1999) (Appendix H). These Dominance behaviors included, being goal-oriented (knows what she wants and goes after it), exuding confidence (willing to handle things at the same time on their own), seeking results (when she agreed to do something, she took action right away), being decisive (willing to do what needs to be done, and does not get side-tracked), acting courageously (takes charge and the lead), and being straightforward (honest in expressing what she thought).

Case Study 3

Cary

Cary is an outgoing 17-year-old 11th grade male enrolled in the Building Maintenance program. Standing well over six foot, his two hundred fifty pound frame would seem daunting to the average person. Upon making his acquaintance however, the intimidation quickly dissipates. His outgoing personality has made it easy for him to make many friends. Where Cary flourishes socially; he lacks academically. Six years ago he was placed in special education under the category of Learning Disabled. According to school records and his teacher Mr. Trexler, Cary has a 2.30 GPA and performs below average in reading and writing (school records, teacher interview, 5/16/02). According to Mr. Trexler, “he can hold his on in a conversation but his reading and writing skills are that of a fourth grader.” Mr. Trexler also said Cary had a history of

behavioral problems. For example, on two different occasions, he referred Cary to the office for sexually harassing female students. A further exploration of school records revealed two suspensions and a parent conference (school records).

Cary is an only child and lives with his mother and grandfather in a lower-middle class neighborhood on the west side. His mother, a high school graduate, works in a local restaurant as a waitress. Because she is a single mother, Cary said, "She works long hours and weekends." Consequently, he said he was left alone most nights and weekends. During this unsupervised time, he said, "I was doing what I wanted to do and my Mom was worried that I might get into trouble." Because of this, Cary's grandfather moved into the family home. "Pop," as he is referred, works on the line at General Motors. Cary said that his grandfather has taught him a great deal about hard work "Although Pop never finished high school, he knows what it is to work and get the job done." It seems that Pop has had an influence on Cary's outlook on work. At his grandfather's request, Cary got a part time job washing dishes at a local restaurant.

Perceptions of Parental Involvement in Career Activities

Cary's perception of his mother and grandfather's involvement in career related activities was low (1.5 out of 4). On the PPI questionnaire (Appendix F) he noted that his mother and grandfather "hardly ever" talked with him about the importance of education in getting a job or the kind of job he wants in the future. He does believe his mother and grandfather feel he should have a high paying job with opportunities for promotion. When questioned about his plans after high school, he did not mention specific employment aspirations. Rather, he said, "after high school I guess I will go to college or

maybe I'll get some kind of job that pays the bills. I don't really know what I want to do." When asked about the type of people he would like to work with, he said, "I am easy to work with. It don't matter to me. I get along with anybody." After further probing, however, he said, "I don't like to work in a job where everybody tries to be my boss. The first [only] person who tells me what to do is my manager."

Perceived and Realized Behavioral Work Styles

Cary's behavioral work style classifications across the three data sources were inconsistent, meaning both perceived and realized styles were different. For example, on the I-Sight he was classified as Steadiness, the Interview, as Dominance, and results of the classroom observations revealed the Influence dimension. Based on the I-Sight's Steadiness classification, Cary's predominant behavioral work style dimension on the I-Sight was Steadiness Cary believed the behaviors "most like him" were: listening patiently to others, willing to follow orders, calm and easy going personality, liking to help others out, and understandings the feelings of others.

Results of Cary's interview revealed a perceived style of Dominance, which was inconsistent with the I-Sight perceived classification. This Dominance was illustrated by his response when read the following scenario (Appendix D): "How would you respond if asked by your employer to work extra hours for a sick employee?" He stated in a direct and straightforward manner,

"If I needed the money, then I would stay. If I don't need the money, then I sure don't see any reason to stay an extra two to three hours. The boss should call the person and tell them to get to work. If I know the person is not sick I would tell the boss and then talk to the person. I would take care of it then."

Similarly, this Dominance dimension was also illustrated when given the following scenario (Appendix D): “If given a choice, which of the following roles would you choose in a group project: leader, researcher, writer, graph designer, or presenter?” In this same scenario he was also asked, “What would you do if a person in the group was not fully participating?” he responded,

“I would want to be the leader cuz [because] I like taking control. If a person was not doing their part, I would put a bug in the person’s ear first. If they kept slipping, then I would tell the teacher the person should only get half credit.”

When probed further, he noted,

“If a person was late with their work, then I would try to do the work myself.”

These behavioral characteristics were typical of the Dominance dimension as outlined by Mocha and Kamper (1999) (Appendix H). Dominance behavioral tendencies exhibited during the interview included: Impatient, courageous (taking charge and the lead), direct and straightforward (honest in expressing what he thought, blunt, and harsh) and quick responses (did not take time to think about other’s needs, lack sensitivity). These behaviors were inconsistent with Cary’s I-Sight perceived dimension of Steadiness where the emphasis is on cooperating with others to carry out a task.

An additional inconsistency was found in Cary’s realized style obtained from an analysis of behaviors exhibited during the classroom observation. He exhibited behaviors classified predominately in the Influence dimension. On the day of the observation, Cary was fifteen minutes late to class. This behavior prompted a behavioral intervention by Mr. Trexler. When questioned about his tardiness, Cary enthusiastic responded, “I was talking to my boys about our basketball game over school” (observation video, 5/16/02). In response, his teacher reminded him that each day he must write down his work goals

and review them when he loses track of time. Mr. Trexler said that Cary often seeks popularity over his daily work goals. For example, on the day of the observation, Cary and another student, Thomas, were to empty the school trashcans. In total, fifteen trashcans were to be emptied over a one-hour period. During this time span, Cary emptied four trashcans while Thomas emptied 11. He spent the majority of his time talking to people in the hallway.

At one point I followed Cary to the school parking lot to get a shirt from his car. When I asked him about the consequences for not completing his work he said, "Thomas will work for me until I get back" (observation video, 5/16/02). When we arrived back in the building, he asked Thomas if he wanted to go to the cafeteria and get something to eat. When Thomas said, "we need to get this work done," Cary replied, "come on man, let's see who is in the hall" (observation video, 5/16/02). Thomas again, said they had to work. After emptying a few more trashcans, Cary's teacher arrived to review their work. Overhearing his teacher say the bathrooms needed mopping, Cary exclaimed, "let me do it" (observation video, 5/16/02). Mr. Trexler refused and once again reminded Cary of his daily work goals. Upon completion of the observation, I asked Mr. Trexler to identify Cary's predominant behavioral work style from the Dimension Interpretation Guide (Appendix). After reviewing behaviors of each dimension, Mr. Trexler pointed to the Influence dimension and said, "This pretty much sums the kid up" (observation video, 5/16/02).

Based upon behaviors exhibited during the observations coupled with Mr. Trexler's comments, Cary's realized behavioral work style in a work context fit into nine of the behavioral tendencies of the Influence dimension as outlined by Mocha and

Kamper (1999) (Appendix H). These behaviors included, out-going and full of energy, lack of time management skills, priorities out of order, compulsive talker, good sense of humor, volunteers for jobs, persuasive, and an exaggerator.

Case Study 4

Lyle

Lyle is a 17-year-old 11th grader enrolled in the Food Service Management program. With his five-foot-seven height and stocky physique, one might assume he was on the school wrestling team. “Pleasant, respectful, and timely” were three adjectives used by his teacher, Miss O’Neal, when describing his demeanor. She said, “Lyle is one of those kids that teachers wish all students were like. He comes to class prepared and works really hard. This work ethic was probably instilled by his family” (teacher interview 5/17/02). Lyle lives with his parents and younger brother in a middle-class neighborhood. His father, who has attended college, works as an Ambulance driver; his mother, a college graduate, is employed at General Motors. According to Miss O’Neal, Lyle’s parents “are very concerned about his transition to work.” She further elaborated, “Lyle has a severe stuttering problem and his Mother seems to think it could hurt his chances of getting a good job” (teacher interview, 5/17/02).

Based upon the researcher’s interaction with Lyle, his stuttering problem seems not to have hindered his career aspirations. When asked why he enrolled in the Food Service Management program he said, “I love to cook. It just comes naturally to me. I hope it will help me get a job in a restaurant at a big hotel in Chicago.” When probed further about his career aspirations he said, “after I graduate [from high school] I want to

get my degree in Hotel/Restaurant Management then I can get a job at a hotel and move up in the ranks.” Lyle also said he was worried about getting into college, “My grades aren’t that good. I have a part-time job and sometimes when I get off [of work] I don’t feel like studying.” A review of school records revealed a GPA of 2.33 and teacher comments, “hard worker but seems tired” (Skills Center school records). When asked about his job he said, “I work at the movie theatre as an usher, ticket taker, and make pop corn. Sometimes on the weekend, I don’t get off of work until real late. My Mom and Dad want me to work so they just tell me to try harder if I don’t do that good in school.”

Perceptions of Parent Involvement in Career Activities

Lyle’s perception of his parent’s involvement in career related activities was high (3.4 out of a possible 4.0). On the PPI questionnaire (Appendix F), he noted that his parents talk with him “all of the time” about the importance of education in getting a job, the importance of skills and training in getting a job, and the importance of hard work and doing his best. He further noted that his parents “sometimes” talked with him about deciding on a career and about the type of job he wants. He also thought his parents felt it was “very important” for him to obtain a job that fit his interests and skills. He indicated work similar to his parents was “not important at all.”

Perceived and Realized Styles

Lyle’s behavioral work style dimensions were “somewhat consistent” across the three data sources meaning there was a discrepancy between one of his perceived and realized style. On the I-Sight and observation Lyle was classified in the Influence

dimension, however, on the Interview, he was classified as Steadiness. He believed the following I-Sight Influence behaviors were “most like him,” fun to be with, well liked by others, lively personality, make new friends easily, people remember him, as well as finding it easy to meet strangers. As he described his strengths on the I-Sight (Appendix E) comments section, he wrote, “I tend to be open minded to other people’s thoughts.” In responding to the prompt, “Name one situation where you could use your strengths to accomplish something” he wrote, “talking to a person about making an important decision.” These perceived Influence behaviors were inconsistent with perceived behaviors exhibited during the interview.

Results of Lyle’s interview revealed a classification of Steadiness. This behavioral work style was illustrated by his response to the following scenario (Appendix D): “If you were in line for a movie you really wanted to see and your friends insisted that you see another movie, what would you do?” he said,

“If they were insistent that I see the movie, then I guess I would just go see their movie. I am the type of person that follows the rules. I would just go with my friends because I can always see the other movie later.”

The Steadiness dimension was also evidenced in his response to this scenario (Appendix I): “How would you respond if told by your employer to work extra hours for a sick employee?”

He said,

“Well this has actually happened to me before. I am the type of person that would actually stay until, you know, midnight. In the long run my boss would make it up by giving me some time off.”

When asked if he would say something to the employee if he discovered they were not sick, he said,

“As far as the person who called in sick.... me, yes I would say something to the person. Sometimes it’s hard for me to say stuff to people but if I had to work late, yep I would tell the person we are all counting on him at work and he should try to make it.”

Still another example of Steadiness behaviors was illustrated by Lyle’s response to this scenario (Appendix I): “If given a choice, which of the following roles would you choose in a group project: leader, researcher, writer, graph designer, or presenter?” In this same scenario he was asked, “What would you do if a person in the group was not fully participating?” He responded,

“I would be the person who types out the report. I don’t have any reason [just] this would be comforting to me. People would give me their work and I could make it sound good. As far as me talking to the person who was not doing their work.... Yes I would talk to them and say you know, this is an important part for us to work together and for you to help us with. We need to have your help to get a good score. I would probably not tell the teacher and give them a good score anyway...if they were my friend.”

These behavioral characteristics were typical of the Steadiness dimension as outlined by Mocha and Kamper (1999) (Appendix H). Steadiness behavioral tendencies exhibited during the interview included: methodical (does not rush to make decisions), organized (takes time to do things step-by-step), stable (dependable and can be relied upon), easy going (goes out of his way to get along with others), agreeable (does not create conflict or make waves), good listener (easy to talk to and has a calming influence on others) and loyal (becomes too protective of others, covers for others).

An inconsistency was found between Lyle’s interview and realized style obtained from an analysis of behaviors exhibited during his classroom observation. During classroom observations, Lyle exhibited behaviors classified predominately in the Influence dimension. Lyle’s classroom observation took place in the main kitchen of the

Skills center. Before he was assigned a work area, Lyle presented his time card to Miss O'Neal. To ensure students arrive to class on time, students must "clock in and out" with the teacher. During this time, hairnets are distributed, lab coats are inspected for cleanliness and daily kitchen tasks are assigned.

When Lyle approached Miss O'Neal, she questioned the cleanliness of his lab coat. She reminded him that one important Food Service competency was professional and clean attire. Lyle smiled and said, "yes ma'am" and then proceed to present a long humorous explanation regarding the condition of his lab coat. Lyle said, "Well you know I'm such a good cook I just had to eat everything I made yesterday." Miss O'Neal laughed, pointed to the fry station, and said, "you will be working with Cory and Jeremy today frying chicken fingers and French fried potatoes" (observation video, 5/17/02). Because working at the fry station required students to handle hot grease, Eric, a teacher's aid, supervised them.

The fry station was divided into three tasks, (1) emptying and restocking grease, (2) dropping food (chicken fingers and French fried potatoes), and (3) restocking the freezer. Over a period of two hours, students rotated to each task. Before the students began working, Eric gave them a choice regarding which task they would like to complete first; without hesitation Lyle said, "I want to cook the food." This made Jeremy angry as he responded by saying, "no man that is what I want to do first." Lyle said, "sure man but you know the grease is hot and it pops up and burns you." Eric told the boys they would both be allowed to cook the food, "therefore, Lyle cooks first" (observation video, 5/17/02). Lyle gave Jeremy a smile and said, "so sorry man."

As Lyle began cooking, the fry station became hot. He told Eric, “Man it is too hot over here. Do you think we could do something to help me not sweat so much?” Eric asked him what he thought he should do to control his perspiration. Lyle said, “well I guess I could not stand so close to the fryer.” Eric said, “and what else?” Lyle responded by saying, “only approach the fryer when putting food in or when the timer rings.” Lyle further suggested the fry area was “small enough for midgets” and should be made bigger (observation video, 5/17/02).

Lyle’s next task was to empty the grease containers. During this time he was to turn off the fryer, put gloves on, and remove the grease container from under the counter. While completing this task, however, Lyle attempted to converse with another student at the pastry station. When Eric prompted him to focus on the task-at-hand, Lyle smiled and said, “This ain’t no problem, I can do it” (observation video, 5/17/02). As a result of his careless behavior, a small amount of grease spilled on the floor. Lyle laughed and proceeded to get a mop and clean up the mess. Eric informed him that he “acted without thinking, which could end up getting someone hurt” (observation video, 5/17/02). In a humorous tone Lyle responded, “Sorry Eric, I’d hate for you to fall. I’ll watch what I’m doing.” When I questioned Eric about Lyle’s behavior he said, “Sometimes Lyle gets so caught up in the activity that he forgets the danger involved in the kitchen (observation video, 5/17/02). After five minutes, Lyle had not returned with the mop. I walked around the kitchen looking for him. I located him in the dishwashing room, laughing with three other students. When I asked what task he was working on now, he explained, “the girls did not know how to put the coffee cups in the dish washer; I was showing them how to do it” (observation video, 5/17/02). By the time Lyle returned to his station

and cleaned up the spilled grease, the interview was over. When I thanked him for participating he offered me a dessert and shook my hand.

At the conclusion of the interview, I asked Miss O'Neal to review the Dimension Interpretation Guide (Appendix H) and select which behavioral work style she thought Lyle exhibited most often. After a lengthy review, she said, "this was hard, but I would have to choose either Steadiness or Influence." When probed further regarding her choice of the two, she said, "of the two I would have to say he is more Influence because he loves to socialize and is full of energy. Like I said earlier, Lyle is a great kid and is easy to along with" (teacher interview, 5/17/02).

Based upon observation data and Miss O'Neal's comments, Lyle's realized style during the observation fit into seven of the eight behavioral tendencies outlined by Mocha and Kamper (1999) (Appendix H) for the Influence dimension. These behaviors included, enthusiastic (out-going and full of energy), good communicator (willing to speak up and easily expresses thoughts, feelings and opinions), involved (notice things that are going on around him and eager to participate), spontaneous (act without fully considering the consequences), persuasive (comes across as manipulative), and people-person (fun to be with).

Summary Research Question 3

Research question three determined if perceived behavioral work styles and the realized self in a situated work context were consistent. Predominant styles of the eight respondents (4 per group) were analyzed. Triangulation of the three data sources revealed that overall 80% of respondent's perceived and realized styles were "consistent"

or “somewhat consistent.” LD respondents were found to be more consistent than their NLD counterparts, 75% and 25% respectively.

To paint a holistic picture of respondent’s perceived and realized styles in the context of home, school, and career, case studies were written for four respondents; two “consistent” LD respondents, Susan and Lagita, one “inconsistent” LD respondent, Cary, and one “somewhat consistent” NLD respondent, Lyle. In Chapter five, results from consistency measures and case studies will be discussed further and be linked to the studies theoretical framework.

CHAPTER 5

CONCLUSIONS AND IMPLICATIONS

In Chapter Four, the findings of the study were presented. Chapter Five begins with a summary of the findings. This is followed by conclusions/discussions that are drawn from those findings. Next, implications for educational research and CTE programs (including special education transitional programs) are offered. In the final section of the chapter, limitations of the study are presented.

Summary of Findings

A summary of findings is presented below for each research question. Conclusions/discussions of these results are linked to the studies literature review and theoretical framework. Conclusions/discussions are followed by implications and limitations.

Research Question 1: What are the behavioral work styles of African American students with and without LD?

Research question one was divided into two sections. Section A ascertained differences in behavioral work styles between the two groups. Results revealed group differences in predominant styles and distribution of styles. The majority of LD respondents (77%) were classified either in the Steadiness and Dominance dimension; Steadiness being the highest classified dimension (53%). This trend continued, as the Steadiness and Dominance dimensions were also the two highest classifications of the

NLD group; 43% were classified in the Dominance dimension and 33% in Steadiness. In other words, between the two groups, the two highest classified dimensions were Steadiness and Dominance. Interestingly, the dispersion of the Steadiness and Dominance dimensions alternated between groups, meaning that one group's highest classified style was the other groups secondary style. This was also evidenced in the Conscientiousness and Influence dimensions, as one group's lowest classification was the others' third classified style. No relationships were found between the two groups in regards to behavioral work styles, gender, grade, or program area, meaning the dispersion of the four behavioral work styles among these variables was broad.

Section B determined behavioral work style differences between LD and NLD African American respondents and Caucasian LD and NLD respondents (majority population). Results revealed differences between LD and NLD African American respondents and the majority population in dispersion of behavioral work styles. For example, only the majority of one group, African American LD respondents, was classified in one dimension (Steadiness, 53%). The classification of the remaining groups were clustered around two dimensions; African American NLD (Dominance and Steadiness, 73%), Caucasian LD (Steadiness and Influence, 64%), and Caucasian NLD (Conscientiousness and Dominance, 65%). Additionally, when dispersions were examined by group only (LD, NLD), the highest classified dimensions were Steadiness and Dominance (LD, 68% and NLD, 60%). Steadiness was the predominant style of the LD group while Dominance was the highest classified style for NLD. No statistically significant relationships were found among behavioral work styles, gender, grade, and

program area, meaning the dispersion of the four dimensions of behavioral work styles among these variables was widely spread.

Conclusions/Discussion

The results of Research Question One (A) indicated the two largest classified dimensions in the LD and NLD groups were Steadiness and Dominance. The majority of LD respondents were classified in the Steadiness dimension. According to Marston (1929) and Geier (1989) individuals classified as Steadiness feel less powerful than the environment and believe that goals can best be accomplished by cooperating with others and following instruction. Those who feel less powerful than the environment are said to have an external locus of control, meaning they believe their success or failure is controlled by external circumstances; individuals with LD are much more likely to exhibit an external locus of control because they tend to blame failure on themselves and achievement on luck, which may lead to frustration and passivity (Short & Weissberg-Benchell, 1989). The classification of the majority of LD respondents into the Steadiness dimension, therefore, seems reasonable. For example, one typically thinks of LD students as exhibiting Steadiness oriented behaviors such as needing predicable routines and a slower paced environment, completing tasks in a step-by-step manner, identification within a group, being uninvolved and avoiding responsibility (Macha & Kamper, 1999).

These Steadiness behaviors are also apparent in the school-to-career transition of LD students. For example, Rojowski (1996) noted that individuals with LD had a greater difficulty assessing personal strengths and weaknesses, were uninvolved in their transitional process, had a higher probability of relying on others, and were indecisive

about career aspirations. One might speculate these Steadiness behaviors may be linked to high rates of career immaturity in the LD community. This belief was supported by Holland (1985) who found that individuals with LD had a lower level of career maturity than their nondisabled counterparts. He suggested that career immaturity could be equated with psychological and developmental maturity in the sense that both are based on experience and knowledge about one's environment. Cognitive problems associated with LD may impede an individual's ability to accommodate to one's environment; therefore, they may fail to gain the experience and needed knowledge to succeed. Geier (1989) suggested that environmental success requires flexibility and accommodation. For individuals with LD this flexibility is difficult; to accomplish their goals, then, they cooperate and follow orders, which is the hallmark of the Steadiness dimension.

In regard to the NLD group, the two most common behavioral work style dimensions were Dominance and Steadiness; with the Dominance dimension being the highest classified dimension (40%). According to Marston (1929) and Geier (1989) Dominance behavioral tendencies are exhibited because one feels more powerful than the environment. In other words, Dominance classified individuals feel the best way to accomplish goals is by taking control or to shape the environment according to their views. This need for environmental control is also known as internal locus of control. This was supported by McCombs (1991) who suggested individuals with an internal locus of control believe the best way to succeed is to control what happens around them. Based on the diverse characteristics of many respondents classified in the Dominance dimension (i.e., GPA, SES levels, home environments and past achievements/failures), the classification of this dimension seems reasonable. In other words, it could be

suggested their Dominance oriented behaviors were directly influenced by these characteristics. This is supported by Jenkins (1981) who suggested a person's style is influenced by characteristics such as SES, family background, and personal achievements. The classification of the Dominance dimension can be viewed two ways. For example, many of the respondents had below average GPAs and were from low to lower middle-class environments. Because of day-to-day and academic struggles, for these students to achieve success and overcome opposition they learned to act on their environment by taking control and shaping their surroundings according to their view. Because of this drive to overcome opposition, it is reasonable to suggest, they exhibit Dominance oriented behaviors. These Dominance oriented behaviors might include, taking charge, being strong-willed and decisive, impatient and quick-tempered, not being easily discouraged, and requiring and seeking an environment free from controls and supervision (Macha & Kamper, 1999).

In an employment situation, however, many of the Dominance behaviors might be viewed as problematic. This notion is supported by Kerka (1989) who noted that problematic behaviors such as impulsivity, low tolerance for frustration and an inability to handle day-to-day social interaction (which can be equated with Dominance oriented behaviors), are many reasons individuals do not succeed on the job. One might also view the classification of the Dominance behaviors differently. For instance, several of the respondents were from middle to high SES homes and were academically successful; therefore, they may have exhibited Dominance oriented behaviors such as being goal-oriented, confident, and courageous to achieve success. One might speculate these behaviors are the result of environmental influences such as home and church.

Research Question One (B) revealed differences in behavioral work style distribution of African American LD and NLD respondents and the majority population. Interestingly, the highest classified dimension of both LD African American and Caucasian respondents was Steadiness. This supports the finding of Short and Weissberg-Benchell (1989) that individuals with LD are much more likely to exhibit an external locus of control. One might speculate, then, that ethnicity did not play a role in the largest work style dimension of LD respondents. Moreover, one might question why the majority of LD respondents (African American and Caucasian) perceived themselves as exhibiting Steadiness oriented behaviors (i.e., best way to accomplish goals is through cooperation). Bingham (1980) suggested that because many individuals with LD are viewed by themselves and others as ineffective, therefore, they incorporate these perceptions into all aspects of their lives including home, school, and employment.

Although majorities of LD respondents were classified in the Steadiness dimension, styles were diverse among this group. For example, in regard to the second highest classified dimension of both LD groups, Caucasian LD respondents were classified in the Influence dimension, African American LD in the Dominance dimension. According to Marston (1929) and Geier (1989) individuals in both dimensions perceive themselves as more powerful than the environment. Whereas individuals in the Dominance dimension believe accomplishing goals requires control, those classified as Influence believe the best way to accomplish goals is to work with existing circumstances by influencing the environment. Although both groups perceived themselves as powerful, they believe they could attain goals in different ways.

When examining work style dispersion of groups (LD, NLD) only, the Steadiness and Dominance dimensions were predominant. Based on these results one could say that, in the present study, ethnicity did not play a role in behavioral work style classifications of African American students and the majority population. Additionally, it could be suggested that a higher number of African American and Caucasian LD respondents viewed themselves as less powerful than the environment and believed that cooperating with others was the best way to accomplish goals. Alternatively, a larger number of their NLD counterparts viewed themselves as more powerful than the environment and felt the need to shape the environment according to their view.

Research Question 2: Do relationships exist between LD and NLD African American student's behavioral work styles and the familial factors, student perception of parental involvement and socioeconomic status?

Research question three determined if relationships existed between behavioral work styles and the two dependent variables, perceptions of parental involvement (PPI) and socioeconomic status (SES). This research question was divided into two sections: (1) relationships between behavioral work styles and PPI and (2) relationships between behavioral work styles and SES. In regards to relationships between behavioral work styles and PPI, quantitative analysis revealed statistically significant relationships. More specifically, respondents classified in the Dominance dimension had the highest perceptions of their parent's involvement in career related activities; respondents in the Steadiness dimension had the lowest perceptions of their parent's involvement.

A second relationship surfaced between group (LD, NLD) and PPI; NLD respondents had higher PPI levels than LD respondents. In other words, NLD respondents believed their parents participated more in career related activities. No relationship was found between behavioral work styles, PPI, and group, meaning style classification did not influence PPI of LD and NLD respondents, meaning the dispersion of the four behavioral work styles among these variables was broadly spread.

An additional analysis revealed significant relationships between PPI and educational level of respondent's father and mother as well as an interaction effect between PPI, group, and educational level of mother. Respondents whose father's were college educated had the highest PPI levels; respondents whose father's educational level was 11th grade or less had the lowest PPI levels. This same trend was found in PPI and mother's educational level as respondent's whose mother's were college educated had the highest PPI levels. Respondents whose mothers were high school graduates had the lowest PPI levels. In terms of the interaction effect between PPI, group (LD, NLD) and mother's educational level, LD respondent's whose mother were high school graduates had the lowest PPI levels. NLD respondent's whose mother's educational level was 11th grade or less had the lowest PPI levels. Respondents in both groups (LD, NLD) whose mother's were college educated had the highest PPI levels.

When examining relationships between behavioral work styles and SES levels, statistically significant relationships were found. Sixty-three percent of respondents in SES 1 (low to low-middle SES) were classified in the Steadiness dimension; 54% of SES 2 (middle to high SES) respondents were classified in the Dominance dimension. A relationship was also found between behavioral work styles and SES levels of male

respondents as 79% of LD males in SES 1 were classified as Steadiness. In other words, a large number of African American LD males felt the best way to accomplish goals was to cooperate with others. No relationships were found among behavioral work styles, SES and female respondents. In other words, behavioral work styles of female respondents were more dispersed throughout SES groups.

Conclusions/Discussion

Based upon the findings in research question two, one could conclude that there is a direct connection between behavioral work styles and student perceptions of parental involvement and socioeconomic status. A closer examination of the findings revealed connection between behavioral work styles, groups, PPI, and levels of SES. For instance, the highest PPI means were found in the Dominance dimension, which was the NLD respondent's highest classified dimension. Moreover, a majority of respondents (54%) classified in the Dominance dimension were from middle to high SES backgrounds. This finding is supported by Luster and McAdoo (1999) who found that the most successful African American students had parents who were viewed as authoritative (dominant) and stressed importance of higher expectations. Results of this same study revealed that the most successful students had parents who were involved and extended families that stressed the stability and connectedness of home and school.

These connections between behavioral work styles, PPI, and SES were also evidenced in the LD group as the lowest PPI mean was found in the Steadiness Dimension; the highest classified dimension of LD respondents. Furthermore, a majority (63%) of respondents classified in the Steadiness dimension were from low to lower-

middle SES backgrounds. These findings are supported by McAdoo (1999), NCRVE (1997) and Rank (1994) as they suggested that lower placement in the stratification hierarchy impinge modes of family interactions and child rearing practices. In other words, because of daily pressures faced by many lower SES families, the time and effort parents can devote to the career development of their children is limited.

Research Question 3: Are the perceived behavioral work styles consistent with the realized self in a situated work context?

Research question three determined if perceived behavioral work styles and the realized self in a situated work context were consistent. Results of this research question are presented in concert with conclusions and discussions.

Triangulation of the three data sources revealed that overall 80% of respondent's perceived and realized styles were "consistent" or "somewhat consistent." Respondents attained a "consistent" code if there were no discrepancies between the perceived and realized styles; a "somewhat consistent" code was acquired if one discrepancy between perceived and realized styles existed. Interestingly, LD respondents were found to be more consistent across perceived and realized styles than their NLD counterparts (75% and 25% respectively). The typicality of individuals with LD being metacognitive of their self-style is what one might label as uncharacteristic. Generally speaking, individuals with LD have been shown to exhibit lower levels of psychological and developmental maturity; both of which are based on experience and knowledge about oneself in the environment. In addition, cognitive skills related to LD impede their

ability to assess personal strengths and weaknesses (Rojewski, 1996). The perceived and realized styles of the remaining NLD respondents were “somewhat consistent” across the three data measures. Cary, an LD respondent, was “inconsistent” across the three data sources, meaning his perceived and realized styles were discrepant.

Case studies were written for four of the eight randomly selected respondents; Susan and Lagita, two LD “consistent,” Cary, a LD “inconsistent,” and Lyle, a NLD “somewhat consistent.” The perceived and realized styles of Susan and Lagita were “consistent” across all three data measures. Susan’s was classified in the Steadiness dimension. According to Marston (1929), she viewed herself as less powerful than the environment and believed that goals could best be attained by following instruction and cooperating with others. It is noteworthy that a majority of LD respondents (52%) were classified in this dimension. Susan displayed classic characteristics of many individuals with LD. She relied heavily on others to assist her in completing work tasks, had difficulty selecting appropriate career goals, and had limited involvement in the career decision-making process. Her extremely involved parents assisted her in selecting skills and training options and a part-time job that best suited her behavioral tendencies. Her Steadiness consistency (between perceived and realized styles) could possibly be the result of her authoritarian father, her disability status, as well as the connectedness between home, school, and career.

The second “consistent” LD respondent, Lagita, came from a completely different background than Susan. Lagita’s perceived and realized styles were classified in the Dominance behavioral work style dimension. Both vocal and confrontational, her classification was an indication that she was felt more powerful than the environment and

believed that goals could be best be attained by taking control of or influencing the environment (Marston, 1928; Geier, 1989). During her interview and observation, she exhibited a powerful authoritarian stance and took a leadership role. In addition to authoritative behaviors, Lagita also exhibited Dominance behaviors such as independence, courageousness, and confidence.

Like Susan, Lagita displayed behaviors characteristic of individuals with LD. For example, her high career aspirations of being an attorney did not match her low academic abilities; this is a classic example of career immaturity. Because of Lagita's low perceptions of parental involvement, the unstable environment in which she lived, and the conflict between her high career aspirations and academic abilities, she developed an independent and vigorous will to achieve, which was evidenced in her consistency across the Dominance dimension.

Cary, the third LD respondent, was "inconsistent" across all three data measures. On the I-Sight Cary perceived himself as Steadiness. He felt less powerful than the environment and believed that goals were best attained by following instructions and cooperating with others. During his interview and classroom observation however, he exhibited behaviors from two other dimensions, Dominance and Influence respectively. Classification in these two dimensions signified that he felt more powerful than the environment and believed that goals could best be attained by taking control and influencing the environment (Marston, 1928; Geier, 1989). His low perception of parental involvement, independent spirit, coupled with his disability status, could have been reflected in his "inconsistent" style classification. On each measure it appeared as though he responded based upon how much power he felt. His disability status coupled

with his lack of guidance at home affected his ability to be flexible which, in turn, did not allow him to successfully accommodate each environment (i.e., data source). In other words his inconsistent style classification may possibly have been the result of his lack of flexibility to accommodate (Macha & Kamper, 1999). One might question his behavior in a situated work context versus an actual employment setting. His behaviors in a situated work context were not as controlled as would be in an actual employment setting. Consequences for not completing work tasks in an employment setting would be harsher than in a school situated work context; therefore he might have exhibited different behaviors.

The final case study explored the dimensions of NLD “somewhat consistent” respondent, Lyle. On the I-Sight and observation he was classified in the Influence dimension; on the interview as Steadiness. In other words, on the I-Sight and observation he felt more powerful than the environment and believed that goals could best be attained by working with existing circumstances. During the interview, he exhibited behaviors from the Influence dimension, which meant he felt less powerful than the environment and believed that cooperating with others was the best way to attain goals. I noticed that when around authority figures, Lyle exhibited Steadiness behaviors. For example, Miss O’Neal, his teacher, said that he was “pleasant, respectful, and timely.” These types of behaviors were also exhibited during the interview. One might speculate that Lyle’s exhibited style is dependent on the types of individuals with which he interacts (i.e., adults or other students). For example, when interviewing with me or interacting with teachers, he projected Steadiness behaviors. Influence behaviors were displayed during interactions with other students. His Steadiness behavior exhibited around adults might

be a result of the high level of involvement by his parents. This was evidenced in comments made by Miss O'Neal when she said, "Lyle is one of those kids that teachers wish all students were like. He comes to class prepared and works really hard. This work ethic was probably instilled by his family."

Based on the four case studies, it could be suggested that consistency levels are the result of a number of factors. As illustrated in the exploratory cases, these factors might include levels of parental involvement (authoritative or nonparticipational), environmental constraints (structured or unstructured home situation), disability status or perhaps a frustration from the lack of success. In other words, consistencies among styles are not solely based on one particular factor. One might postulate that an individual's behavioral style is a product of life experiences.

Recommendation/Implications

The study determined behavioral work style differences in African American LD and NLD high school students. A second objective was to determine relationships between behavioral work styles and familial factors of student perception of parental involvement (PPI) and socioeconomic status. The final objective was to examine consistencies between perceived and realized styles in a situated work context. Behavioral work styles had not previously been examined in the framework of high school career development programs. Prior studies focusing on this topic have concentrated on the post graduation employment environment; ultimately, it was hoped this investigation would provide foundational knowledge for the individualization of career development programs for African American students with and without LD. Furthermore, this study contributes to the scant body of research on African American

career development. The findings and conclusions drawn from this study have implications for educational researchers and CTE programs (including special education transition).

Educational Research

A number of recommendations for education research appear warranted. Prior to this study, research on behavioral work styles had not focused on the framework of CTE programs or on African American high school students; this investigation provides the groundwork for future educational research. Specifically, this research could be replicated for others who wish to use the I-Sight Behavioral Analysis Assessment with diverse student populations. As was illustrated in this study, the I-Sight appears to be an appropriate and accurate measure; data strongly suggests its potential utility. Based on the results it appears that most LD African American students were classified in the Steadiness dimension, while their NLD counterparts clustered in the Dominance and Steadiness dimensions. Thus, the I-Sight helps to determine behavioral work styles of diverse students (although this instrument should be validated with additional observations and survey instruments).

Because this study was exploratory in nature and had a small population, findings with regard to behavioral work style dispersion among LD and NLD students will need to be replicated with a larger population. In addition, it may be fruitful to examine if relationships exist between types of learning disabilities and behavioral work styles. In this way, one could determine if IQ and disability type were reflected in specific types of styles. Although this study found no relationships between gender and behavioral work

styles, its replication in multiple skill centers could determine the accuracy of this finding.

Further research on perceived and realized styles can yield deeper understandings of what additional school-aged groups know about their behavioral work styles. Specifically, additional use of the study's triangulated research design on similar groups can add to the generalizability of findings. These studies might target specific disability types, such as, emotional impairment, particular SES levels, or other ethnic groups. This range would yield further understandings of what school age students perceived as their predominant behavioral work style.

In regards to educational level of parents, further research could be conducted that examines relationships between student's behavioral work styles and educational level of parents. In particular, investigations could center on the prevalence of student style in each educational level of parent. A different study might examine similarities/differences between student and parent's behavioral work styles. These recommendations are offered because there appeared to be a link between behavioral work styles, and parent's educational level, parenting style, and involvement level in career related activities. This research might yield understandings regarding parental influence on their child's style. Furthermore, this study found, as had Luster and McAdoo (1996), that extended family play an important role in the school and employment success of African American youth. Considering this, when examining the behavioral styles of and parental involvement with African American students, the notion of parental influence must be extended to grandparents and other family members.

Career and Technical Education

This study has implications for Career and Technical Education Programs (including special education transition). As has been argued in the theoretical framework, all students do not exhibit the same behavioral work style; however the researcher found that LD students (both African American and Caucasians) were predominately classified in the Steadiness dimension. This fact has implications for tailoring transitional programs to individual student needs and for helping them understand their own behavioral work style, which could facilitate success on the job.

Based on conclusions drawn from this study, several interventions are recommended for CTE programs. First, using LD predominant style classification as an example, interventions could be developed that assist students in understanding the behaviors of their specific style. For LD students this is of particular importance because it would allow them to understand how their exhibited behavioral tendencies affect their school success, on the job performance, and peer relations. Furthermore, interventions could be developed that assist students to think outside their style. In this way, differences between styles could be explored. This might be accomplished by infusing workstyles into the curriculum through self-awareness interventions.

Prior to such interventions, CTE and Special Education teachers would need to first understand the concept of behavioral work styles and how self-understanding facilitates success on the job. This could be accomplished through teacher in-service. Topics for this in-service might include, style classifications, specific emphasis and behavioral tendencies of each style, and understanding how to teach student's with

specific styles. Research on distribution of styles in specific groups might also be highlighted.

Another recommendation for CTE programs is to assist students in understanding their personal styles in work-based learning programs; therefore, authenticating knowledge about individual work styles in a work environment. Specific behavioral interventions could be utilized that assist students in accommodating environments perceived as antagonistic. This, in turn, would allow them to understand how flexibility contributes to their success in these environments. This activity would especially be meaningful to LD students because they would learn how to choose certain environments conducive to their behavioral work style. Self-understanding of styles could therefore be used as a tool in exploratory/problem solving work-related activities.

Results of the study revealed that many LD students perceived their parents as being uninvolved in career related activities. Based on this finding, CTE programs might target these students and provide them with additional mentoring in career related activities. Mentoring might take the form of after-school programs targeting career aspirations, the addition of work-based learning opportunities in an environment conducive to their style, or job shadowing opportunities with an individual of similar ethnic background who is employed in a field of their interest. These activities could provide LD students with a realistic view of the fit between their interests, skills and abilities, resulting in heightened levels of career maturity.

Finally, the behavioral interpretation guide has potential utility not only for understanding the behavioral work styles of students in a career setting but for classroom behavioral management strategies as well. One might question if teachers would be more

tolerant of behaviors exhibited in a classroom setting if they understood the behavioral strengths and limitations of students personal behavioral work style. The behavioral interpretation guide might therefore has implications for behavioral management.

Limitations of the Study

Interpretation of this study's results and conclusions should be considered in the context of a few limitations. First, this study is limited due to the fact that data collection only took place in one CTE setting. Gaining perspectives of students from multiple skills centers would have allowed for generalizability of findings. Also, the study's small sample size made it difficult to accurately determine relationships between behavioral work styles and variables such as gender, grade and program area. One might question if the lack of statistically significant relationships found between behavioral work styles and these variables were a result of the small sample size.

An additional limitation was the classification of behavioral work styles dimensions on the I-Sight. The dimensions categorical design (i.e., nominal variable, four dimensions) limited the type of analysis procedures used. Although the researcher was able to determine relationships between behavioral work style dimensions and the dependent variable, student perceptions of parental involvement (PPI), the strength of these relationships (i.e., zero, positive, or negative) could not be calculated. Strengths of relationships could have been calculated if scaled measures were used (e.g., variables that can be counted or measured).

Another limitation of the study was the accuracy levels of the dependent variable, student perceptions of parental involvement (PPI). More specifically, levels of parental

involvement in career related activities were obtained from students who completed a 12-item Likert-type questionnaire (Appendix F). Because levels of parental involvement were obtained from the student's perception, one might question the accuracy of these perceptions. A more accurate measure of parental involvement could have been obtained by administering the questionnaire to parents.

Regarding the realized behavioral work style acquired from observations, is it possible that students would have exhibited different behavioral tendencies if observed in an actual employment setting. Perhaps student's work style classifications would have differed if observed in a context where behaviors were more contained or working in an environment with greater expectations.

The final limitation came from school district policy; the researcher was unable to review student Individualized Educational Plans. The intent was to review information on specific types of learning disabilities as well as academic strengths and limitations of the eight randomly selected students. Because the study focused on behavioral work styles of LD students, obtaining the type of LD and additional academic information may have added greater depth to individual case studies.

A Final Thought

This dissertation focused on determining behavioral work style differences of African American students with and without LD. It is hoped the results of this study will provide insight into a topic that has not been explored in the context of Career and Technical Education. As research has suggested, significant number of school districts are failing to implement effectual career development programs for African American

youth (Lent, Brown, & Hackett, 1989). An intent of this study was to shed light on a self-knowledge intervention that could possibly assist schools in their quest to accurately facilitate the career development of African American students. Behavioral Work Styles Analysis allows students to acquire self-understanding in the context of school and work, thereby gaining knowledge essential to form work identity and environmental preferences. By examining style differences, educational programs, materials and experiences can be designed to foster self-understanding of individual styles in a work environment. As a result, CTE programs can be designed around the individual needs of each student rather than on the White middle-class male perspective.

APPENDICES

167

156

APPENDIX A

Definition of Terms

Definition of Terms

African American: United States residents and citizens who have an African biological and cultural heritage and identity. This term is used synonymously and interchangeably with *Black* or *Black American* (Bank & McGee Banks, 1993)

Behavioral Work Style: In this study, behavioral work styles refer to four dimensions of behavioral responses in the I-Sight Behavioral Analysis Instrument.

Career: The individuals work and leisure that take place over a lifetime (Sharf, 1997).

Career Awareness: The inventory of knowledge, values, preferences, and self-concept that an individual draws on in the course of making career related choices. Introduced at the elementary level, career awareness provides the foundational platform needed for students to make informed educational and career choices later in life (Wise, Charner, and Randour, 1978).

Career Choice: Applies to decisions that individuals make at any point in their career about particular work or leisure activities that they choose to pursue at that time (Sharf, 1997).

Career Development: the total constellation of psychological, sociological, and educational factors that combine to influence the nature and significance of work in the total life span of the individual (Maddy-Berstein, 2000).

Career Intervention: An activity or program intended to facilitate career development (Fretz, 1981).

Career Maturity: An individual's readiness to make well-informed, age-appropriate career decisions in the face of existing societal opportunities and constraints; influenced by age, ethnicity, locus of control, and socioeconomic status (Naidoo, 1998).

Career Pathways: Career Pathways are curricular models used for career decision making and workplace preparation. Divided into six broad groupings of careers, pathways share similar characteristics, and academic and employment requirements that entail common interests, strengths, and competencies. In each pathway, academics are structures around a central occupational theme while the industrial focus is determined by local employment opportunities (MDCD, 2001).

Caucasian: Of or relating to the white race of humankind as classified according to physical features (Merriam-Wester's Collegiate Dictionary online: <http://www.m-w.com>).

“Conscientiousness” Behavioral Dimension: Emphasis is on working with existing circumstances to promote quality in products or service (Geier, 1989).

Contextual Learning: An instructional method and assessment approach that combines academics and career related contents. Rooted in a constructivist approach to teaching and learning, this learning centered approach assumes the mind seeks meaning in context, that is, in relation to the student’s current environment, and does so by searching for relationships that make sense and appear useful (MDCD, 2001).

Dimensions of Behavior: One of four behaviors that lead to an understanding of how one responds to environments (Marston, 1928)

“Dominance” Behavioral Dimension: Emphasis is on shaping the environment by overcoming opposition to accomplish results (Geier, 1989).

Educational Development Plan: (EDP) An individualized written description of a student’s career development process. The purpose of an EDP is to provide students with a periodically updated and on-going record of career planning, which untimely will guide them in taking effective steps toward entering their chosen career (Dubois, 2000).

Ethnic Minority: Individuals who identify with a common and distinctive history, culture or language that differs from the majority population (Rojewski, 1991).

Inclusion: Emerging terminology describing the education of students with disabilities side by side with their nondisabled peers and friends in general education classes (Hardman, Drew, & Egan, 1996).

Individualize Education Plan: (IEP) Provision in IDEA that requires students with disabilities to receive an educational program based on multidisciplinary assessment and designed to meet their needs. The law required that a program be developed and implemented that takes into account the student’s present level of performance; annual goals; short-term instructional objectives; related services; percent of time in general education; timeline for special education services; and an annual evaluation (Hardman, Drew, & Egan, 1996)

“Influence” Behavioral Dimension: Emphasis is on shaping the environment by bringing others into alliance to accomplish results (Geier, 1989).

IQ: (Intelligence quotient) Score obtained from an intelligence test that provides a measure of mental ability in relation to age (Hardman, Drew, & Egan, 1996).

Learning Disability: “A general term that refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical abilities. These disorders are intrinsic to the individual, presumed to be due to central nervous system dysfunction, and may occur across the life span. Problems in self-regulatory behaviors, social perception, and social interaction may exist with learning disabilities but do not by themselves

constitute a leaning disability. Although learning disabilities may occur concurrently with other handicapping conditions (for example, sensory impairment, mental retardation, serious emotional disturbance) or with extrinsic influences (such as cultural differences, insufficient or inappropriate instruction), they are not the result of those influences” (Hardman, Drew and Egan, 1996, p. 262).

Poverty: The state of one who lacks a usual or socially accepted amount of money or material possessions (Merriam-Wester’s Collegiate Dictionary online: <http://www.m-w.com>).

Race: Refers to the attempt by physical anthropologists to divide human groups according to their physical traits and characteristics (Yetman, 1999).

Self-Perception: “An organized, consistent, holistic set of ideas, attitudes and feelings about oneself and one’s relationship to others. It is perceptions of the characteristics of the “I” or “me” and the perception of the relationship of the “I” or “me” to others and to various aspects of life together with values placed on those perceptions.” (Stout, 1982, pg. 47).

“Steadiness” Behavioral Dimension: Emphasis is on cooperating with others to carry out a task (Geier, 1989).

Special Education: As defined in the Individuals with Disabilities Act, the term means specially designed instruction provided to meets students with disabilities in all settings, including workplace and training centers (Hardman, Drew, & Egan, 1996).

Style: The way an individual receives, separates and analyzes information to carry out a specific type of behavior, or the way a person chooses to apply knowledge, skills, and judgments to real-world situations (Bies, 1983).

Socioeconomic Status: (SES) Level of social status usually defined by amount of household income and educational level (Harris, 1993)

Work: An activity or behavior performed by an individual to preserve his or her quality of life. Specific behavioral elements characterize work (1) work is a human behavior that can be understood and carried out by an individual, (2) can be broken down into specific procedures and techniques, (3) is seldom accomplished in isolation and is therefore dependent upon interpersonal behaviors, (4) has no rigid parameters regarding length of time require to complete a task, or time of day to accomplish the task, and (5) work is influenced by external forces and conditions (Bies, 1983).

Work-Based Learning: The coordination of planned programs of work experiences and academic skills. This component uses workplaces to structure learning experiences that contribute to the intellectual, social, academic, and career development of students. Through participation, students develop attitudes, knowledge, skills, habits, and associations from both work and school experiences, and are able to connect learning to real-life work activities ((Gray, 2000; Flack, 1997; MDCD, 2001).

APPENDIX B

Administrative Consent Letter

Request to Conduct Research

“Differential Behavioral Work Styles of African American Students with and without Learning Disabilities”

Date

Dear Administrator:

I am a doctoral student in the College of Education at Michigan State University. I am conducting dissertation research that examines different behavioral work styles of African American students with, and without, learning disabilities. Behavioral work styles are simply defined as the way people come to understand and perform their jobs. The purpose of this letter is to request your permission to conduct my research study at the Genesee Area Skills Center (GASC). I selected your center because of the innovative approach taken in program design and the diverse population of students served.

This study will consist of thirty African American students including fifteen with learning disabilities and fifteen without. The study has three objectives: 1) to examine behavioral work styles of the two groups, 2) to determine if relationships exist between behavioral work styles and level of parental involvement, and 3) to investigate relationships between perceived and realized behavioral work styles and in a work context.

Participating students will be asked to complete a behavioral analysis assessment to determine their behavioral work style. A questionnaire will be used to examine student perceptions of parental involvement in their career development process. The assessment and questionnaire will take approximately one hour out of class time. I will provide a complete explanation of these items to students and I am available to explain them in more detail to you. Furthermore, I will randomly select eight students from the initial group for an interview and classroom observation. Interviews will be audiotaped, and take approximately thirty minutes out of class time. During this time, I will read students five scenarios and ask them how they would respond if placed in those situations.

Classroom observations will be videotaped and last for one hour. The purpose of classroom observations is to document student behaviors in a work context. Since your facility is vocationally oriented, it will provide an opportune setting to capture student work behavior. Student request to discontinue audio and video taping will be honored immediately. During classroom observations, I will avoid capturing nonparticipating students on videotapes by positioning the camera in such a manner that they do not appear on camera. Further, audio and video tapes will be reviewed exclusively by me and be stored in a locked filing cabinet in my home. At the studies completion, tapes will remain in the locked cabinet. Moreover, result obtained from assessment, questionnaire,

interviews and classroom observations will be used to examine differences in behavioral work styles. Data collection will take approximately two weeks.

Because research on behavioral work styles in a public school setting is relatively new, the potential benefits from this study could be substantial. Information obtained from examination of behavioral work styles could have implications for students in gaining and maintaining employment, schools in curriculum design, and employers with training and team development. There are no serious risks expected for participating students. It is possible that students could feel nervous or uncomfortable during interviews but I am an experienced interviewer and will work to lessen any stress.

Each student will be informed of the research intent and will be required to sign a consent form before participation. Additionally, all students will require the consent of their parent or guardian to participate. To ensure students understand their rights, I will read consent forms aloud to them and answer any questions that might arise. Every effort will be made to protect the confidentiality of students and their privacy will be protected to the maximum extent of the law. All information obtained will be kept in strict confidence. To ensure confidentiality, student names will be coded with an identification number on all data collection measures. I will be the only person able to associate data with individual subjects. Reports of research findings will not permit the association of particular subjects with specific responses or findings; pseudonyms will replace real names in all reports. Students may refuse to answer any questions or stop their participation at any time without penalty or loss of benefits to which they are entitled. If a student withdraws or is withdrawn from this study, their assessment, questionnaire, and tapes from interview and observation will be destroyed and not used in any form of data analysis.

As we discussed earlier, I am requesting your assistance in selecting students to participate. Students should be selected based on the following criteria:

- 1) Thirty (30) students of African American heritage, including 15 with learning disabilities and 15 without learning disabilities.
- 2) 11th or 12th grade level

Finally, I need your permission to conduct the study at your facility. If you will allow me to conduct this research study at the Genesee Area Skills Center, please sign and date the attached consent form. If you have questions regarding this study, or the selection criteria, I can be reached by phone at (517) 482-5151 or via email at brightto@msu.edu. If you have questions regarding the rights of human subjects, please contact Dr. Ashir Kumar at (517) 355-2180.

Administrative Consent to Use Facility for Research Study

“Differential Behavioral Work Styles of African American Students with and without Learning Disabilities”

I have read the above statements and voluntarily grant consent for the Genesee Area Skills Center to be used in the research study. I am free to withdraw my consent and discontinue participation at anytime without penalty.

Signature _____ Date _____

Consent to Audiotape and Videotape Students for Research Purposes

I have read the above statements and voluntarily consent for students to be audiotaped and videotaped at the Genesee Area Skills Center for purpose of this research. The audio and video tapes will be use by the researcher to determine if relationships exist between perceived and realized behavioral work styles. **A signed consent form from parents and students must be obtained before students can be audiotaped and/or videotaped.** Parents and students can discontinue participation at any time without penalty.

Signature _____ Date _____

APPENDIX C

Parental Consent Letter

176

165

Parent/Guardian Consent Letter

“Differential Behavioral Work Styles of
African American LD and NLD School Students.”

April 10, 2002

Dear Parent/Guardian:

I am a doctoral student in the College of Education at Michigan State University. I am conducting research that examines different work behaviors of high school students. I am inviting your child to participate in this study. Work Behaviors are simply defined as the way people come to understand and perform their jobs. There is little research about work behaviors among high school students. Through this research, I hope to tell people about how work behaviors can inform vocational programs in our public schools.

My research involves a group of students attending the Genesee Area Skills Center. I first plan to obtain student work behaviors by asking them to complete a behavioral analysis assessment. During this time, students will also complete a questionnaire about ways parents help them with career decisions. The assessment and questionnaire will be given in the student's classroom. A small number of students will then be randomly selected to be observed and interviewed. Classroom observations will be videotaped and will last for one hour. During this time, I will observe students working on a class project. Interviews will be audiotaped and take approximately 30 minutes out of class time. Students will be read five scenarios and asked how they would respond if placed in those situations. Upon student request, audio and video recorders will be turned off immediately. I will use information from the assessment, questionnaire, and interview and classroom observation to study differences in work behavior of high school students. I will be the only person reviewing the audio and video tapes. The tapes will be locked in a file cabinet at my home. When the study is finished, the tapes will remain in the locked cabinet and be destroyed after one year.

There are no serious risks expected for students participating in this study. Every effort will be made to protect student confidentiality and privacy to the maximum extent of the law. All information obtained will be kept in strict confidence and student identity will only be known to me. In any research reports, pseudonyms will replace student's real names. Additionally, student names will be coded with an identification number on all documents. Students may refuse to answer any questions or stop their participation at any time without penalty or loss of benefits to which they are entitled. If a student withdraws or is withdrawn from the study, their assessment, questionnaire, interview and observation tapes will be destroyed and not used in any form of analysis.

Parent/Guardian Consent for Child Participation

“Differential Behavioral Work Styles of African American LD and NLD School Students.”

Since my work involves minors, parent/guardian permission is necessary. If you will allow your child to participate, please sign and date this consent form. Please have your child return the signed permission slip to their teacher by **Thursday April 18th**. I may be contacted if you have any questions about this study. I can be reached at Michigan State University at (517) 353-4403. If you have questions regarding the rights of human subjects, please contact Dr. Ashir Kumar at (517) 355-3180.

Sincerely,

Tony Bright

Your signature below indicates your voluntarily consent for you child to participate in this study. You are free to withdraw your consent and discontinue their participation at any time without penalty.

Signature _____ Date _____

Consent to Audiotape and Videotape Students for Research Purposes

I have read the above statements and consent for my child to be audiotaped and videotaped at the Genesee Area Skills Center for purpose of this research. The audio and video tapes will be use by the researcher to study different work behavior of high school students. Parents and students can discontinue participation at any time without penalty. Upon student or parent request, video and audio equipment will be turned off immediately.

Signature _____ Date _____

APPENDIX D

Student Consent Form

Student Consent to Participate in Research Study

“Differential Behavioral Work Styles of African American LD and NLD High School Students.”

(To be read aloud to students) You have been invited to participate in a research study that your parent/guardian has agreed to. The purpose of this study is to examine different types of work behavior among high school students.

To better understand work behavior, students will be asked to complete an assessment call the I-Sight. Students will also be asked to complete a short questionnaire about ways parents help them think about career decisions. The I-Sight and questionnaire will take approximately one hour to complete. A group of students will complete the I-Sight and questionnaire together in a classroom. I will explain and read the assessment and questionnaire to all students and answer any question they might have. To find out additional information on work behaviors, some students will be selected at random for an interview and classroom observation. Interviews will take approximately 30 minutes and be audiotaped. I will interview students in a classroom selected by the school administrator. Students will be read five situations and asked how they would behave if place in those situations. Classroom observations will last for one hour and be videotaped. During this time, I will observe students working on a class project. Again, not all students will be selected for an interview and classroom observation. I will use results from the I-Sight, questionnaire, interviews and observations to study differences in work behavior of high school students. My research might be used by schools to develop better vocational programs for students.

There are no serious risks expected for student participants. Pseudonyms (fake names) will replace real names in any report of research; student’s identity will be known to me but will be kept confidential. Further, students may refuse to answer any questions or stop their participation at any time without penalty. Those students chosen to be observed and interviewed may ask for the video or tape recorder to be turned off at any time. Additionally, if a student withdraws or is withdrawn from this study, their assessment, questionnaire, and interview and classroom tapes will be destroyed.

I may be contacted if students have any questions about the study. I can be reached at Michigan State University at (517) 353-4403. If students have questions about the rights of human subjects, please contact Dr. Ashir Kumar at (517) 355-3180. If you are willing to voluntarily agree to participate in this study, please sign and date the consent form on the next page.

Sincerely,

Tony Bright

Student Consent to Participate in Research Study

“Differential Behavioral Work Styles of
African American LD and NLD High School Students.”

The study has been explained and students have been informed of the potential benefits and possible risks of participation. By signing below, I voluntarily agree to participate in the study.

Signature _____ Date _____

.....
I have read the above statements and by signing below, I voluntarily agree to be audiotaped and videotaped at the Genesee Area Skills Center for purpose of this research. The audio and video tapes will be use by the researcher to determine if there are relationships between different types of work behaviors of high school students. Students may stop their participation at any time without penalty.

Signature _____ Date _____

APPENDIX E

I-Sight Behavioral Analysis Assessment



I-Sight®



THINK ABOUT YOU

Example: 4 2 1 3

I-Sight® is not a test. It will help you understand yourself, develop your strengths, and get along better with others. You cannot pass or fail. There are no right or wrong answers.

Directions:

Reading from left to right, rank the phrases across each row from 4 to 1.

4 = MOST like you

3 = SOMEWHAT like you

2 = A LITTLE like you

1 = LEAST like you

Look at the example at the top of the page, then rank the ten groups of phrases. GO →

Counting:

Reading down each of the four columns of phrases, add your numbers and write the total in the space below the arrow. After you have totaled all the columns and written in each score, follow the directions in each total box. GO →

1	<input type="checkbox"/> want to be in charge	<input type="checkbox"/> fun to be with	<input type="checkbox"/> listen patiently to others	<input type="checkbox"/> do things right the first time
2	<input type="checkbox"/> don't like to give in	<input type="checkbox"/> well liked by others	<input type="checkbox"/> willing to follow orders	<input type="checkbox"/> like to plan ahead
3	<input type="checkbox"/> people see me as powerful	<input type="checkbox"/> lively personality	<input type="checkbox"/> calm and easy going	<input type="checkbox"/> like to do things accurately
4	<input type="checkbox"/> want to win	<input type="checkbox"/> happy and carefree	<input type="checkbox"/> willing to go along with others	<input type="checkbox"/> want things to be exact
5	<input type="checkbox"/> like to take action	<input type="checkbox"/> like to meet people	<input type="checkbox"/> think of others before I decide	<input type="checkbox"/> try to do my best
6	<input type="checkbox"/> act in a forceful way	<input type="checkbox"/> make new friends easily	<input type="checkbox"/> let others have what they want	<input type="checkbox"/> want to do things well
7	<input type="checkbox"/> do what I want	<input type="checkbox"/> start conversations easily	<input type="checkbox"/> like to help others out	<input type="checkbox"/> like doing things the right way
8	<input type="checkbox"/> will be the first to act	<input type="checkbox"/> outgoing personality	<input type="checkbox"/> understand others' feelings	<input type="checkbox"/> like to know the rules
9	<input type="checkbox"/> hard to tell others what to do	<input type="checkbox"/> people remember me	<input type="checkbox"/> patient with others	<input type="checkbox"/> like being precise
10	<input type="checkbox"/> argue with others	<input type="checkbox"/> find it easy to meet strangers	<input type="checkbox"/> let others lead	<input type="checkbox"/> think things through

↓

If your score is LARGER THAN 22, write a D in the box above.

↓

If your score is LARGER THAN 29, write an I in the box above.

↓

If your score is LARGER THAN 24, write an S in the box above.

↓

If your score is LARGER THAN 25, write a C in the box above.



HOW YOU TEND TO BEHAVE

Directions:

Now that you have discovered your preferred dimension of behavior (D, i, S, or C), circle the letter or letters on this page at the right. Read the list of statements under your letter(s) to see how you might behave and what you might prefer. Put a check mark by the statements that you feel are true for you. Cross out any statements that do not fit you. **GO** →

D Direct & Active

- Like to solve problems and to get quick results
- Tend to question the rules
- Like direct answers, variety, and independence
- Like being in charge of your life
- Know what you want and you go after it
- Like to test yourself with new challenges

i Interested & Lively

- Like to persuade others and talk people into things
- Tend to be open and talk about thoughts and feelings
- Like to work with people rather than alone
- Enjoy telling stories and entertaining people
- Get enthusiastic about things
- Don't like dealing with little details

S Steady & Cooperative

- Like to have things organized and to have things stay the same
- Tend to be patient and a good listener
- Like to participate in a group rather than leading it, and like listening
- Like being with people who get along
- Enjoy helping people
- Can be counted on to get the job done

C Concerned & Correct

- Like to meet high personal standards
- Tend to think a lot about things before deciding
- Like to have clear rules and assignments
- Enjoy figuring things out
- Don't like it when people question your work
- Like working with people who are organized and good at doing things



HOW TO GET ALONG BETTER WITH OTHERS

Directions:

Review the statements for each of the other dimensions of behavior above to better understand other people.

Remember, just as some of the statements didn't seem to fit you, other people might feel that some of their statements don't fit them either.

Discover how to get along with others better by reading the statements to the right. **GO** →

If your preferred dimension of behavior is **D**, remember that others may want:

- time to weigh pros and cons
- an explanation of your decisions
- to be more friendly and open
- to be more careful

If your preferred dimension of behavior is **i**, remember that others may want:

- facts and short answers
- to be more organized
- to have a quieter environment

If your preferred dimension of behavior is **S**, remember that others may want:

- to make decisions quickly
- to know your needs and wants
- to challenge how things are done

If your preferred dimension of behavior is **C**, remember that others may want:

- to be direct
- to talk openly about what bothers you
- to have you clearly explain your rules and what you expect



THINK MORE ABOUT IT

Name: _____

Now that you have read about yourself and other people, think about what you have learned.

1. What did you learn about yourself?

2. Do you agree with what you read about yourself?

3. Name two things you think are your strengths.

4. Could you recognize anyone you know when you read the other dimensions?

5. Name one situation where you could use your strengths to accomplish something.

6. What is one thing you could do to improve how you get along with someone you know?

BEST COPY AVAILABLE

APPENDIX F

Student Perceptions of Parental Involvement Questionnaire

Number _____

Student Questionnaire on Parental Involvement

This questionnaire is about you and your parents or guardian. A guardian is someone you live with other than your parents. I will read each question aloud to you. After each question is read, you will be given four or five possible answers. **Circle** the answer you feel best describes your parents or guardian. Remember you do not have to answer any of the questions you choose not to. Please **do not** write your name on this paper.

First, please tell me some information about you.

1. What is your gender? Male Female

2. What grade are you in? _____

3. How old are you? _____

4. What is your race? (**Check only one**)

African American (Black)

Caucasian (White)

Native American (Indian)

Asian

Latino

Other _____

5. Who do you live with MOST of the time in your family? (Circle only one)

a. Mother and Father

b. Mother only

c. Father only

d. Parent and step-parent

e. Other relatives or guardian

6. What is the highest level of education completed in your family?
(Describe those you live with MOST of the time) Notice there are two parts to this question, one on the male adults and one on the female adults in your family.

Father, Male stepparent or Male guardian

- A. 11th grade or less
- B. High school graduate
- C. Some college
- D. College degree (4 years)
- E. Graduate Degree

Mother, Female stepparent, or Female guardian

- A. 11th grade or less
- B. High school graduate
- C. Some college
- D. College degree (4 years)
- E. Graduate Degree

7. What is the occupation (job) of the parents or other adults **you live with**?
(Only fill in the blank for the people you live with) If they do not work, place the word “unemployed” in the blank.

Father _____

Mother _____

Other _____

	<u>Never</u>	<u>Hardly Ever</u>	<u>Sometimes</u>	<u>All the Time</u>
8. My parent/guardian talks with me about the importance of education in getting a job.....	1	2	3	4
9. My parent/guardian talks with me about the importance of skills and training in getting a job.....	1	2	3	4
10. My parent/guardian talks with me about the importance of hard work and doing my best.....	1	2	3	4

- | | | | | |
|--|---|---|---|---|
| 11. My parent/guardian has stressed that males and females have similar abilities and can do the same kinds of work..... | 1 | 2 | 3 | 4 |
| 12. My parent/guardian tries to help me feel good about myself and develop confidence in my abilities..... | 1 | 2 | 3 | 4 |
| 13. My parent/guardian has talked with me about the kind of job I would like to have... | 1 | 2 | 3 | 4 |
| 14. My parent/guardian talks with me about deciding on a career..... | 1 | 2 | 3 | 4 |

How **much importance** do you think your parent or guardian would want you to place on the following job characteristics? Circle the number you feel best describes your parent/guardian's level of agreement with the following statements.

<u>Statement</u>	<u>Not important at all</u>	<u>Somewhat unimportant</u>	<u>Somewhat important</u>	<u>Very important</u>
15. The opportunity for promotion or advancement in a job.	1	2	3	4
16. The amount of money a job pays.....	1	2	3	4
17. The fit between your interests and skills and the type of job you want...	1	2	3	4
18. Work similar to your parent(s) or guardians(s) job.....	1	2	3	4
19. The chance to make your own decisions about the kind of job you want.....	1	2	3	4

APPENDIX G

Hollingshead Two-Factor Index of Social Status

Hollingshead's Index of Social Position (ISP)

Occupation Scale (Weight of 7)

<u>Description</u>	<u>Score</u>
Higher executives of large concerns, proprietors, and major professionals	1
Business managers, proprietors of medium-sized businesses, and lesser professionals	2
Administrative personnel, owners of small businesses, and minor professionals	3
Clerical and sales workers, technicians, and owners of little businesses	4
Skilled manual employees	5
Machine operators and semiskilled employees	6
Unskilled employees	7

Hollingshead's Index of Social Position (ISP)

Education Scale (Weight of 4)

<u>Description</u>	<u>Score</u>
Professional (MA, MS, ME, MD, PhD, LLD, and the like)	1
Four-year college graduate (BA, BS, BM)	2
One to three years college (also business schools)	3
High school graduate	4
Ten to 11 years of school (part high school)	5
Seven to nine years of school	6
Less than seven years of school	7

Hollingshead's Index of Social Position (ISP)

$$\text{ISP score} = (\text{Occupation score} \times 7) + (\text{Education score} \times 4)$$

Classification System

<u>Description</u>	<u>Range of Scores</u>	<u>Socioeconomic Level</u>
Upper	11-17	5
Upper-middle	18-31	4
Middle	32-47	3
Lower-middle	48-63	2
Lower	64-77	1

APPENDIX H

Behavioral Dimension Interpretation Guide

193

182

Behavioral Dimension 1
DOMINANCE

**Emphasis is on shaping the environment by overcoming
opposition to accomplish results**

Strengths	Examples	Limitations
Goal-Oriented	They know what they want, and go after it, constant activity	Become impatient, tunnel-visioned
Confident	Willing to handle a lot of things at the same time on their own	Self-reliant, come across as needing other
Gets Results	When they agree to do something, they take action right away and get it done.	Goals become more important than people, alienate friends
Competitive	They have a lot of drive and can be counted on 100%	Always needs to win, can't just have fun
Decisive, Determined	Willing to do what needs to be done, and don't get side-tracked	Becomes stubborn, won't consider other's ideas
Courageous	Take charge and take the lead	Reckless, ignore risks, endanger themselves and others
Direct, Straightforward	Honest in expressing what they think, up-front with people	Blunt and harsh, hurt the feelings of others
Responds Quickly	Don't put things off, get them done right away	Don't take time to think about other's needs, lacks sensitivity

(Bright, 2002; Macha & Kamper, 1999)

Dominance (continued)

<p>This person desires an environment which includes:</p> <ul style="list-style-type: none"> • Power and authority • Prestige and challenge • Opportunity for individual accomplishments • Wide scope of operations • Direct answers • Opportunity for advancement • Freedom from controls and supervision • Many new and varied activities 	<p>This person needs others who:</p> <ul style="list-style-type: none"> • Weight pros and cons • Calculate risks • Use caution • Structure a more predictable environment • Research facts • Deliberate before deciding • Recognize the needs of others <p>To be more effective, this person needs:</p> <ul style="list-style-type: none"> • Difficult assignments • To understand that they need people • Techniques based on practical experience • Verbalize reason for conclusions • To pace self and to relax more
<p><u>Balanced Responses</u> “D”s Emotions Naturally aggressive leader Dynamic and active Compulsive need for change Must correct wrongs Strong-willed and decisive Unemotional Not easily discouraged Independent and self-sufficient</p>	<p><u>Extreme Responses</u> Bossy Impatient Quick-tempered Can't relax Impetuous Enjoys controversy and arguments Won't give up when losing Comes on too strong</p>
<p><u>Balanced Responses</u> “D” At Work Goal oriented Sees the whole picture Organized well Seeks practical solutions Delegates work Insists on production Makes the goal Thrives on opposition</p>	<p><u>Extreme Responses</u> Little tolerance for mistakes Doesn't analyze details Bored by trivia May make rash decisions Manipulates people Demanding of others End justifies the means Demands loyalty in the ranks</p>

(Bright, 2002; Carlson Learning Company, 1994)

Behavioral Dimension 2
INFLUENCE

**Emphasis is on working with existing circumstances
to promote quality in products and services**

Strengths	Examples	Limitations
Enthusiastic	Out-going and full of energy	Overly eager, don't take time to plan
Good Communicator	Willing to speak-up, and easily expresses thoughts, opinions, & feelings	Talk too much, don't listen to others
Optimistic	Positive attitude, looks at the best in people and situations	Unrealistic, don't check things out, ignore negatives
Involved	Notice things that are going on around them, and are eager to participate	Become overly committed, take on more than can be done and does not follow through
Spontaneous	Flexible, don't get bothered by changed circumstances and loose ends	Act without fully considering the consequences
Persuasive	Has a way with words, and encourages others to become positively motivated	Come across as manipulative, over-sell ideas
People-person	Fun to be with, being around people seems to energize their batteries.	Conform, "go along" with others
Imaginative	Creative, and are good at seeing new and better ways of doing things	Become day dreamers, loose touch with reality

(Bright, 2002; Macha & Kamper, 1999)

Influence (continued)

<p>This person desires an environment which includes:</p> <ul style="list-style-type: none"> • Popularity, social recognition • Making a favorable impression • Verbalizing with articulateness • Creating a motivational environment • Generating enthusiasm • Entertaining people • Viewing people and situations optimistically • Participating in a group 	<p>This person needs others who:</p> <ul style="list-style-type: none"> • Concentrate on the task • Seek facts • Speak directly • Respect sincerity • Develop systematic approaches • Prefer dealing with things to dealing with people • Take a logical approach • Demonstrate individual follow-through <p>To be more effective, this person needs:</p> <ul style="list-style-type: none"> • Control of time • Objectivity in decision-making • Participatory management • More realistic appraisals of others • Priorities and deadlines • To be more firm with others
<p><u>Balanced Responses</u> “I”s Emotions Talkative, story-telling Life-of-the-party Good sense of humor Holds on to listener Emotional and demonstrative Enthusiastic Changeable disposition</p>	<p><u>Extreme Responses</u> Compulsive talker Exaggerated and elaborates Dwells on trivia Scares other off Too happy for some Has restless energy Gets angry easily</p>
<p><u>Balanced Responses</u> “I” At Work Volunteers for jobs Thinks up new activities Looks great on the surface Has energy and enthusiasm Starts in a flashy way Inspires other to join Charms others to work</p>	<p><u>Extreme Responses</u> Would rather talk Forgets obligations Doesn't follow through Undisciplined Priorities out of order Decides by feelings Waste time talking</p>

(Bright, 2002; Carlson Learning Company, 1994)

Behavioral Dimension 3
STEADINESS

Emphasis is on cooperating with others to carry out a task

Strengths	Examples	Limitations
Organized	Takes time to do things step-by-step and does not seem pressured by time	Becomes unwilling to try new things, resist change
Stable	Dependable and can be relied upon	Too predictable, become boring
Methodical	Does not rush to make decisions, and sticks to things that work	Too slow paced, always do things the same way
Easy Going	Go out of their way to get along with others	Demonstrate low initiative, are unwilling to make decisions
Agreeable	Does not create conflict or make waves, and is accepting of others	Self-sacrificing, always tries to please others
Good listener	Easy to talk to and has a calming influence on others	Withhold good ideas, does not speak up
Soft-Hearted	Has compassionate nature and tender heart, feels other's hurt and burdens	Easily manipulated, does not stand up for themselves
Loyal, Reliable	There when people need them, and follow through on promises	Become too protective of others, covers for others

(Bright, 2002; Macha & Kamper, 1999)

Steadiness (continued)

<p>This person desires an environment which includes:</p> <ul style="list-style-type: none"> • Predictable routines • Credit for work accomplished • Minimal conflict • Identification with the group 	<p>This person needs others who:</p> <ul style="list-style-type: none"> • React quickly to unexpected change • Become involved in more than one thing • Apply pressure on others • Are flexible in work procedures <p>To be more effective, this person needs:</p> <ul style="list-style-type: none"> • Validation of self-worth • Guidelines for accomplishing task • Encouragement of creativity • Work associates of similar competence and sincerity
<p><u>Balanced Responses</u> “S”s Emotions Low-key personality Easy-going and relaxed Well-balanced Quiet Sympathetic and kind Keeps emotions hidden</p>	<p><u>Extreme Responses</u> Unenthusiastic Fearful and worried Avoids responsibility Selfish Too shy and reticent Too compromising</p>
<p><u>Balanced Responses</u> “S”s At Work Easy to get along with Pleasant and enjoyable Inoffensive Good listener Dry sense of humor Enjoys watching people Happy making friends</p>	<p><u>Extreme Responses</u> Dampens enthusiasm Stays uninvolved Is not exciting Indifferent to plans Judges others Sarcastic and teasing Resists change</p>

(Bright, 2002; Carlson Learning Company, 1994)

Behavioral Dimension 4
CONSCIENTIOUSNESS

**Emphasis is on working with existing circumstances
to promote quality in products and services**

Strengths	Examples	Limitations
Analytical	Think things through in hopes of understanding all they can about what they are doing	Critical of others, over-analyze
Cautions, Intense	Serious about what they do and think deeply about before attempting a task	Withdrawn from others, unsociable
Conscientious	Like things to be correct and try to do the best they can	Worrisome, overly picky
Sensitive	Very attentive to what others say and feel and are finely tuned to others around them.	Easily hurt, take things personally
Does things correctly	Precise and accurate, interested in key details	Fear making a mistake, does not try new ways or things
Strives for excellence	Strives to obtain the highest possible level of performance, both for themselves & others.	Demands perfection from self & others
High personal standards	Does not compromise standards just to please others	Judgmental of others, self-critical
Curious, Investigates	Has a questioning mind, and often asked questions others won't ask.	Asks too many questions, comes across as nosey

(Bright, 2002; Macha & Kamper, 1999)

Conscientiousness (continued)

<p>This person desires an environment which includes:</p> <ul style="list-style-type: none"> • Clearly defined performance expectations • Valuing quality and accuracy • Reserved, business-like atmosphere • Opportunity to demonstrate expertise • Control over those factors that affect their performance • Opportunity to ask “why” questions • Recognition for specific skills and accomplishments 	<p>This person needs others who:</p> <ul style="list-style-type: none"> • Delegate important tasks • Make quick decisions • Use policies only as guidelines • Compromise with the opposition • State unpopular positions • Initiate and facilitate discussions • Encourage teamwork <p>To be more effective, this person needs:</p> <ul style="list-style-type: none"> • Opportunity for careful planning • Exact job descriptions and performance objectives • Scheduled performance appraisals • Specific feedback on performance • To respect people’s personal worth as much as their accomplishments
<p><u>Balanced Responses</u> “C”s Emotions Deep and thoughtful Genius-prone Talented and creative Sensitive to others Self-sacrificing Serious and purposeful</p>	<p><u>Extreme Responses</u> Remembers the negatives Moody and depressed Enjoys being hurt Has selective hearing Self-centered Tends to hypochondria</p>
<p><u>Balanced Responses</u> “C” At Work Schedule oriented Perfectionist Detail conscious Persistent and thorough Orderly and organized Loves research See the problem Senses needs Finds creative solutions Needs to finish what he/she starts Likes charts, graphs and figures Can solve other’s problems</p>	<p><u>Extreme Responses</u> Not people oriented Depressed over imperfections Choose difficult work Hesitate to start projects Spends too much time planning Prefers analysis to work Hard to please Self-deprecating Standards too high Deep need to approve. Dislikes those in opposition</p>

(Bright, 2002; Carlson Learning Company, 1994)

APPENDIX I

Interview Scenarios

202

191

Interview Scenarios

To be read to students:

I am going to read you several scenarios (situations) that involve home, school, work and friends. Listen to each scenario carefully and think about what you would do if placed in these situations. Think about emotions you would feel toward others and ways you would respond and behave. I will ask you additional questions based upon what you say. These situations are probably ones you have been in before. Please be honest and speak openly. I am now going to turn the tape recorder on. Remember, you can ask me to stop recording at any time.

Scenario 1

You and a group of friends have been planning on going to the movies for an entire week. Friday during your lunch you all decided what movie you want to see. Because it stars your favorite actor, you are especially excited. However, when you get to the theatre there is a very long line to buy tickets for the movie. The line is so long that it stretches around the building. Your group gets in line for the movie. The line is moving pretty fast, but there are still a lot of people in front of you. Some of your friends begin to say that they would rather see a movie with a shorter line but you have your heart on seeing the other movie starring your favorite actor. Actually the movie with the shorter line is one you have never even heard of. Your friends say that the movie you want to see will probably be sold out anyway. They keep telling you that the line is too long. What do you do?

Scenario 2

You walk into your class and your teacher says, "Pop quiz in 5 minutes." Because it is a pop quiz you had no idea that you were having one.

What would you do? How would you respond to the teacher (not say anything, tell her it was not fair)? What would you say to the other students in the classroom?

Scenario 3

It is 6:45 pm on a Friday night and you are still at work. You have had a hectic day so you are excited that your shift ends in fifteen minutes. Although you are a bit tired, you are planning to go to a party at 9:00 p.m. All of a sudden your boss calls you into his office and says that another employee has called in sick and he needs you to work until 10:00 pm.

How do you respond? How does this make you feel?

Scenario 4

It is Thursday before spring break and your friend invites you to go to Florida with his/her family for the entire week. You have money saved from a part-time job so you don't have to ask your parent for any. Excited about the chance to go to the beach for a week, you immediately call you parents and ask their permission. Your parents tell you NO because they say you have to paint the house during break.

How do you respond? What do you tell your parents? How does this make you feel?

Scenario 5

You and four other students are working on a group project for you social studies class. Your teachers say that each person is in charge of a different part of the project. The group must select a leader, a person to do the research, a person to write the report, a person to draw graphs, and a person to present the information to the class. Which part do you choose? Why?

APPENDIX J

Case Study Review Sheet

205

194

Number _____

Case Study Review Sheet

1. Academics

GPA

Academic Strengths

Academic Limitations

2. Disability

Type and IQ

Amount of time in special education

Other

3. Career and Vocational:

Goals and aspirations

Interests

Past/present vocational experiences

Other

4. Behavior

5. Other information/comments

APPENDIX K

Observation and Interview Data Analysis Grid

Observation and Interview Data Analysis Grid

Student Identification Number _____

DOMINANCE Behaviors Code - Blue	INFLUENCE Behaviors Code - Yellow
1.	1.
2.	2.
3.	3.
4.	4.
5.	5.
6.	6.
7.	7.
8.	8.
9.	9.
10.	10.
12.	12.
13.	13.
14.	14.
15.	15.
16.	16.
17.	17.
18.	18.
19.	19.
20.	20.

STEADINESS Behaviors Code - Green	CONSCIENTIOUSNESS Behaviors Code - Pink
1.	1.
2.	2.
3.	3.
4.	4.
5.	5.
6.	6.
7.	7.
8.	8.
9.	9.
10.	10.
12.	12.
13.	13.
14.	14.
15.	15.
16.	16.
17.	17.
18.	18.
19.	19.
20.	20.

APPENDIX L
Data Triangulation Rubric

213

202

Data Triangulation Rubric

<u>I-Sight</u> <i>Perceived Behavioral Work Style</i>	<u>Interview</u> <i>Perceived Behavioral Work Style</i>	<u>Observation</u> <i>Realized Behavioral Work Style</i>
Predominant-	Predominant-	Predominant-
Perceived Behaviors: 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15.	Exhibited Behaviors: 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15.	Exhibited Behaviors: 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15.

Data Triangulation (2)

Themes and Patterns:

I-Sight and Interview (Perceived and Perceived)

I-Sight and Observations (Perceived and Realized)

Observations and Interview (Realized and Perceived)

I-Sight, Interview, and Observations (Perceived and Realized)

APPENDIX M

Case Study Outline

216

205

Student Number _____

Case Study Outline

1. Perceived Style(s)

2. Realized Styles

3. Perceptions of Parental Involvement

217

Student Number _____

Case Study Outline (p. 2)

4. SES

5. School

6. Career/Vocational

218

207

BIBLIOGRAPHY

219

208

BIBLIOGRAPHY

Adelman, P. B., & Vogel, S. A. (1993). Issues in employment of adults with learning disabilities. Learning Disability Quarterly, 16, 219-232.

Agbenyega, S., & Jiggetts, J. (1999). Minority children and their over-representation in special education. Education, 119(4), 619-32.

Albert, K. A., & Luzzo, D. A. (1999). The role of perceived barriers in career development: a social cognitive perspective. Journal of Counseling and Development, 77(4), 431-60.

Alfred, M. V. (2001). Expanding theories of career development: Adding the voices of African American women to the White Academy. Adult Education Quarterly, 51(2), 108-27.

Allport, G. W. (1937). Personality: A Psychological Interpretation. New York: Holt, Rinehart & Winston.

Andrew, E. N., & Dornsife, C. (1997). Lessons Learned: Five Years in the Urban School District. Berkeley, CA: National Center for Research in Vocational Education.

Arbona, C. N., & Novy, D. M. (1991). Career aspirations and expectations of black, Mexican American, and white students. Career Development Quarterly, 39, 231-250.

Babbie, E. R. (1986). The Practice of Social Research. Belmont, CA: Wadsworth.

Bailey, T., & Merritt, D. (1997). School-To-Work for the college bound. Berkeley, CA: National Center for Research on Vocational Education, University of California at Berkeley.

Banks, J. A., & McGee-Banks, C. A. (1997). Multicultural Education: Issues and Perspectives. Boston: Allyn and Bacon.

Banks, J. A. (2001). Cultural Diversity and Education: Foundations, Curriculum, and Teaching. Boston: Allyn and Bacon.

Benz, M. R., Yovanoff, P., & Doren, B. (1996). School-to-Work components that predict post school success for students with and without disabilities. Exceptional Children, 63(2), 155-165.

Betz, N. E., & Fitzgerald, L. F. (1995). Career assessment and intervention with racial and ethnic minorities. In F. T. Leong (Ed.), Career Development and Vocational Behavior of Racial and Ethnic Minorities (pp. 263-280). Mahwah, New Jersey: Lawrence Erlbaum Associates.

Bies, J. D., & Turetzky, J. A. (1982). Styles of work. Training and Development Journal, 36(6), 76-80.

Bingham, G. (1978). Career attitudes among boys with and without learning disabilities. Exceptional Children, 44, 341-342.

Bingham, G. (1980). Career maturity of learning disabled adolescents. Psychology in the Schools, 17(1), 135-138.

Bingham, R. P., & Ward, C. M. (1994). Career counseling with ethnic minority women. In W. B. Walsh, (Ed.), Career Counseling for Women (pp. 165-95). Hillsdale, New Jersey: Lawrence Erlbaum Associates.

Blalock, J. W. (1982). Residual learning disabilities in young adults: Implications for rehabilitation. Journal of Applied Rehabilitation Counseling, 13, 9-13.

Bloom, B. L. (1985). A factor analysis of self-report measures of family functioning. Family Process, 24, 225-239.

Blustein, D. L. (1997a). A context-rich perspective of career exploration across the life roles. The Career Development Quarterly, 45(2), 260-274.

Blustein, D. L., Jobin-Davis, K., Finkelberg, S. L., & Roarke, A. E. (1997). A theory-building investigation of the school-to-work transition. The Counseling Psychologist, 25, 5-19.

Bogdan & Biklen (1998). Qualitative Research in Education: An Introduction to Theory and Methods. Needham Heights, MA: Allyn & Bacon.

Bondy, E. R. (1998). Confronting myths about teaching black children: a challenge for teacher educators. Teacher Education and Special Education, 21(4), 241-54.

Bowman, C. (1999). Bureau of Labor Statistics: projections to 2008: A Summary. Monthly Labor Review, 122(11), 3-4.

Bowman, S. L. (1993). Career intervention strategies for ethnic minorities. The Career Development Quarterly, 42(1), 14-25.

Bowman, S. L. (1995). Career interventions strategies and assessment issues for African Americans. In F. T. Leong (Ed.), Career Development and Vocational Behavior of Racial and Ethnic Minorities (pp. 137-161). Mayhay, NJ: Lawrence Erlbaum.

Bright, T. D. (2002). Behavioral Interpretation Guide. Michigan Center for Career and Technical Education, Lansing, Michigan.

Bright, T. D., & Jackson, T. (1998). Diversity in Michigan's School-to-Work Systems. Paper presented at the Michigan School-to-Work Conference, Lansing, MI.

Brolin, D. (1977). Career development: A national priority. Education and Training of the Mental Retarded, 12(2), 154-156.

Brotherton, P. (2000). Diverse solutions: connecting education and careers. Techniques, 75(2), 18-21.

Brown, B. L. (1989). What's Happening in School-to-Work Programs? Columbus, OH: Clearinghouse for Adult, Career and Vocational Education. (ERIC Document Reproduction Service No. ED 414 435).

Brown, D., Minor, C. W., & Jepsen, D. A. (1991). The opinions of minorities about preparing for work. Report of the second NCDA national survey. The Career Development Quarterly, 40(1), 5-19.

Brown, M. T. (1995). The career development of African Americans: theoretical and empirical issues. In F. T. Leong (Ed.), Career Development and Vocational Behavior of Racial and Ethnic Minorities (pp. 7-36). Mahway, New Jersey: Lawrence Erlbaum Associates.

Burac, Z. T., & Yanello, R. (1992). Exemplary Programs Serving Special Populations. National Center for Research in Vocational Education. Berkeley, California: University of California at Berkeley.

Calabrese, R. L. (1990). The public school: A source of alienation for minority parents. Journal of Negro Education, 59, 148-154.

Campbell-Whately, G. D. (2000). Self-concept and African-American student achievement: Related issues of ethics, power, and privilege. Teacher Education and Special Education, 23(1), 19-31.

Carl D. Perkins Vocational and Applied Technology Act of 1990, Public Law 98-425.

Carlson Learning Company (1996). I-Sight Behavioral Analysis Assessment. Minneapolis, MN: Inscape Publishing.

Carlson Learning Company (1996). I-Sight Research Report. Minneapolis, MN: Carlson Learning Company.

Carlson Learning Company. (1994). Personal Profile System. Minneapolis, MN: Carlson Learning Company.

Carter, R. T., & Cook, D. A. (1992). A culturally relevant perspective for understanding the career paths of visible racial/ethnic group people. In A. B. Leibowitz (Ed.), Adult Career Development (Vol. 2nd, pp. 192-217). Alexandria, VA: National Career Development Association.

Chartrand, J. M., & Rose, M. L. Career interventions for at-risk populations: incorporating social cognitive influences.

Cheatham, H. E. (1990). Africentricity and career development of African Americans. The Career Development Quarterly, 38(4), 334-346.

Chess, S., & Thomas, A. (1991) Temperament and the concept of goodness to fit. In J. Strelau & A. Angleitner (Eds.), Explorations in Temperament: International Perspectives on Theory and Measurement (pp. 15-28). New York: Plenum Press.

Collet-Klingenberg, L. L. (1998). The reality of best practices in transition: A case study. Exceptional Children, 65(1), 67-78.

Connor, M. H. (1999). Special education: When differences are disabilities. Educational Horizons, 78(1), 14-15.

Constantine, M. G., Erickson, C. D., Banks, R. W., & Timberlake, T. L. (1998). Challenges to the career development of urban racial and ethnic minority youth: Implications for vocational interventions. Journal of Multicultural Counseling and Development, 26(2), 83-95.

Courtland, L. (1984). Predicting the career choice attitudes of rural black, white, and native American high school students. Vocational Guidance Quarterly, 32, 177-84.

Creswell, J. W. (1994). Research Design: Qualitative & Quantitative Approaches. Thousand Oaks, CA: Sage.

Cross, W. E. (1994). Nigrescence theory: Historical and explanatory notes. Journal of Vocational Behavior, 44(2), 119-23.

Cummings, R. W., & Maddux, C. D. (1987). Holland personality types among learning disabled and nonlearning disabled high school students. Exceptional Children, 54, 167-170.

Cummings, R. W., & Maddux, C. D., & Casey, J. (2000). Individualized transition: Planning for students with learning disabilities. The Career Development Quarterly, 49, 61-72.

Cushner, K., McClelland, A., & Safford, P. (1996). Human Diversity in Education: An Integrative Approach. New York: McGraw-Hill.

D'Andrea, M., & Daniels, J. (1992). A career development program for inner-city Black youths. The Career Development Quarterly, 40(3), 272-280.

Davis, R. V. (1996). The theory of work adjustment and person-environment-correspondence counseling. In D. B. Brown (Ed.), Career choice and development (3rd ed., pp. 75-120). San Francisco: Jossey-Bass.

Day, S. X., & Rounds, J. (1998). Universality of vocational interest structure among racial and ethnic minorities. American Psychologist, 53, 728-736.

Dean, C. D. (1997). Curricular Change Process: A Case Study. Unpublished doctoral dissertation, University of Alabama at Birmingham.

deBettercourt, L. U., Zigmong, N., & Thorton, H. (1989). Follow-up of postsecondary-age rural learning disabled graduates and dropouts. Exceptional Children, 56, 40-49.

Delpit, L. (1988). The silenced dialogue: power and pedagogy in educating other people's children. Harvard Educational Review, 58(3), 280-98.

Dillard, J. M. (1980). Some unique career behavior characteristics of Blacks: Career theories, counseling practice, and research. Journal of Employment Counseling, 17(2), 288-96.

Dillard, J. M. (1983). Multicultural Counseling: Toward Ethnic and Cultural Relevance in Human Encounters. Chicago: Nelson-Hall.

Dillard, J. M., & Campbell, N. J. (1981). Influences of Puerto Rican, Black, and Anglo parents' career behavior on their adolescent children's career development. The Vocational Guidance Quarterly, 30(2), 139-48.

Dilworth-Anderson, P., & McAdoo, H. P. (1988). The study of ethnic minority families: Implications for practitioners and policymakers. Family Relations, 37, 265-267.

Dougherty, B., & Ellibee, M. (1997a). Curriculum Quality Standards for School-to-Work. Berkeley, California: National Center for Research on Vocational Education.

Dougherty, B. & Ellibee, M. (1997b). Curriculum Quality Standards for School-To-Work: A Guidebook. Berkeley, California: National Center for Research in Vocational Education.

Dowdy, C., Carter, J. K. & Smith, T. (1990). Differences in transitional needs of high school students with and without learning disabilities. Journal of Learning Disabilities, 23(6), 343-348.

Duffy, G. (1993). Teachers' progress toward becoming expert strategy teachers. The Elementary School Journal, 94(2), 109-20.

Duncan, G. A. (2000). Urban pedagogies and the "ceiling" of adolescents of color. Social Justice, 27(3), 29-42.

Dunn, C. (1996). A status report of transition planning for individuals with learning disabilities. Journal of Learning Disabilities, 29(1), 17-30.

Edelman, M. (1987). Families in Peril: An Agenda for Social Change. Cambridge, MA: Harvard University Press.

Engels, E., Jolin, J., Lambert, R., Pa'alani, M., & Pugh, J. (1992). Module 6: Developing an awareness of multicultural issues. In J. M. Ettinger (Ed.), Improved Career Decision Making in a Changing World. Garrett Park, MD: Garrett Park Press.

Englert, C. S., Mariage, T. V., & Garmon, M. A. (1998). Accelerating reading progress in early literacy program classrooms: Three exploratory studies. Remedial and Special Education, 19(3), 142-59.

Epstein, J. L. (1987). Parent involvement: What research says to administrators. Education and Urban Society, 19(2), 119-137.

Evans, K. M., & Herr, E. L. (1991). The influence of racism and sexism in the career development of African American women. Journal of Multicultural Counseling and Development, 19(4), 130-135.

Evers, R. B. (1996). The positive force of vocational education: Transition outcomes for youth with disabilities. Journal of Learning Disabilities, 29(1), 69-78.

Farmer, H. S. (1985). The role of typical female characteristics in career and achievement motivation. Youth & Society, 16(3), 315-334.

Farrell, E. C., & Pollard, D. S. (1987). An examination of factors related to minority students' decision to attend college. Milwaukee, WI: The Graduate School, University of Wisconsin - Milwaukee.

Feagin, J., Orum, A., & Sjoberg, G. (1991). A Case for Case Study. Chapel Hill, NC: University of North Carolina Press.

Ferguson, B. (1996). Behavior Analysis. The Performing Group Newsletter (May, 1996). Retrieved December 17, 2001 from <http://www.theperformancegrp.com/behavior.htm>.

Fine, M., & Asch, A. (1988). Disability beyond stigma: Social interactions, discrimination, and activism. Journal of Social Issues, 44(1), 3-21.

Fisher, T. A., & Griggs, B. G. (1995). Factors that influence the career development of African-American and Latino youth. Journal of Vocational Education Research, 20(2), 57-74.

Fisher, T. A., & Padmawidjaja, I. (1999). Parental influences on career development perceived by African American and Mexican college students. Journal of Multicultural Counseling and Development, 27(3), 136-52.

Fitzgerald, L., F. & Betz, N.E. (1995). Career development in cultural context: The role of gender, race, class, and sexual orientation. In M. L. L. Savikas, R. W. (Ed.), Convergence in Career Development Theories (pp. 103-18). Palo Alto, California: Consulting Psychologists Press.

Flack, M. (1997). Work-Based learning. In E. N. Andrew, C. Dornsife, M. Flack., M. T. Hallman, & L. Jackson. (Ed.), Lessons Learned: Five Years in the Urban Schools Network (pp. 39-62). Macomb, IL: National Center for Research on Vocational Education.

Flannery, B. K. (1996). School-to-Work in Rural Areas: Oregon's Rural Communities Share their Vision, Challenges, and Strategies. Portland: Office of Vocational Education.

Fouad, N. A., & Keeley, T. J. (1992). The relationship between attitudinal and behavioral aspects of career development. The Career Development Quarterly, 39(3), 257-71.

Fournier, G., & Pelletier, R. (1996). Beliefs of unemployed young adults regarding educational and career contexts: An exploratory analysis of vocational locus of control. Guidance and Counseling, 11, 3-14.

Fourqurean, J. M., Meisgeir, C., Swank, P. R., & Williams, R. E. (1991). Correlates of postsecondary employment outcomes for young adults with learning disabilities. Journal of Learning Disabilities, 24(400-405).

Fretz, B. R. (1981). Evaluating the effectiveness of career interventions. Journal of Counseling Psychology, 28(1), 77-90.

Gab Dow, N. F., & DuBois, D. A. (1998). Adult Learners with Special Needs. Malabar, FL: Krieger Publishing.

Gainor, K. A., & Forrest, L. (1991). African American women's self-concept: Implications for career decisions and career counseling. The Career Development Quarterly, 39(3), 261-72.

Gardner, H. (1991). The Unschooled Mind: How Children Think and How Schools Should Teach. New York: Basic Books.

Geier, J. G. (1983). The Personal Profile System Manual. Minneapolis: Performax Systems, International, Inc.

Geier, J. G., & Downey, D. E. (1989). Energetics of Personality. Minneapolis, Minnesota: Aristos Publishing House.

Gerber, P. J., Schnieders, C. A., Paradise, L. V., Reiff, H. B., Ginsberg, R. J., and Popp, P. A. (1990). Persisting problems of adults with learning disabilities: Self-reported comparisons from their school-age and adult years. Journal of Learning Disabilities, 23(9), 570-573.

Gerber, P. J., & Reiff, H. (1994). Learning disabilities in adulthood: Persisting problems and evolving issues. Stoneham, MA.: Butterworth-Heinemann.

Gloria, A. M. & Hird, J. S. (1999). Influences of ethnic and nonethnic variables on the career decision-making self-efficacy of college students. The Career Development Quarterly, 48(3), 157-73.

Goldberger, S., Kazis, R., & O'Flanagan, M. K. (1994). Learning through work: Designing and implementing quality worksite learning for high school students. New York, NY: Manpower and Demonstration Research Corporation.

Goldstein, D., Murray, C., & Edgar, E. (1998). Employment earnings and hours of high school graduates with learning disabilities through the first decade after graduation. Learning Disabilities Research and Practice, 13, 53-64.

Gordon, H. R. D. (1999). The History and Growth of Vocational Education in America. Boston: Allyn and Bacon.

Gray, D. (2000). Shaping America's workforce for the new millennium. Education, 120(4), 631-35.

Green, J. C., Caracelli, V. J., & Graham, W. F. (1999). Toward a conceptual framework for mixed-method evaluation designs. Educational Evaluation and Policy Analysis, 11, 255-274.

Gregorc, A. F. (1982). An Adult's Guide to Style. Columbia, CT: Gregorc Associates.

Griggs, M. B., Copeland, E. J., & Fisher, T. A. (1992). Factors that influence the academic and vocational development of African American and Latino youth. Berkeley: CA: National Center for Research in Vocational Education.

Grubb, W. N. (1995). Education through Occupations: Approaches to Integrating Academic and Vocational Education. (Vol. 1). New York: Teachers College Press, Columbia University.

Guest, C. L. (2000). Introduction to the special issue: career issues in education. Education, 120(4), 602-04.

Gumperz, J. J. (1981). Discourse strategies. New York: Cambridge University Press.

Hackett, G., & Byars, A. M. (1996). Social cognitive theory and the career development of African American women. The Career Development Quarterly, 4(4), 322-40.

Hackett, G., & Lent, R. W. (1992). Theoretical advances and current inquiry in career psychology. In S. D. Brown & R. W. Lent (Eds), Handbook of Counseling Psychology (2nd ed., pp. 419-451). New York: Wiley.

Hallahan, D. P., & Kauffman, J. M. (1991). Exceptional children: Introduction to Special Education. (5th ed.). Englewood Cliffs, NJ: Prentice-Hall.

Halpern, A. S. (1994). The Transition of Youth with Disabilities to Adult Life: A Positive Statement of the Division on Career Development and Transition, The Council for Exceptional Children. Career Development for Exceptional Children, 17, 115-24.

Hammersley, M., & Atkinson, P. (1983). What is ethnography? In Ethnography: Principals and Practice. London: Tavistock.

Hansen, L. S. (1977). An Examination of the Definitions and Concepts of Career Education. Washington, D.C.: U.S. Government Printing Office.

Hardman, M. L., Drew, C.J., & Egan, M.W. (1996). Human Exceptionality: Society, School, and Family. (5th ed.). Boston: Allyn and Bacon.

Hardy, L. (1999). Curriculum based on "School-to-Work". The Education Digest, 64(7), 8-14.

Harrington, S. A. (1997). Transition programming for students with learning disabilities. The Journal of Special Needs Education, 20(1), 22-24.

Harris, S. M. (1986). The influence of personal and family factors on achievement needs and concerns of African American and Euro-American college women. Sex Roles: A Journal of Research, 29, 671-689.

Hawks, B. K., & Muha, D. (1991). Facilitating the career development of minorities: Doing it differently this time. The Career Development Quarterly, 39(3), 251-60.

Helms, J. E., & Piper, R. E. (1994). Implications of racial identity theory for vocational psychology. Journal of Vocational Behavior, 44(2), 124-38.

Hendricks, F. M. (1994). Career counseling with African American college students. Journal of Career Development, 21(2), 177-26.

Herr, E. L., & Cramer, S. H. (1996). Career Guidance and Counseling through the Lifespan. New York: HarperCollins.

Highhouse, S., & Doverspike, D. (1987). The validity of the learning style inventory as a predictor of cognitive style and occupational preference. Educational and Psychological Measurement, 47(3), 749-753.

Hoffman, F. J., Sheldon, K. L., Minskoff, E. H., Sautter, S. W., Steidle, E. F., Baker, D. P., Bailey, M. B., and Echols, L. D. (1987). Needs of learning disabled adults. Journal of Learning Disabilities, 20(1), 43-52.

Holland, J. L. (1966). The Psychology of Vocational Choice: A Theory of Personality Types and Model Environments. Waltham, Massachusetts: Blaisdell Publishing Company.

Holland, J. T. (1998). Universality of vocational interest structure among racial and ethnic minorities. American Psychologist, 53(7), 728-36.

Holland, M. (1981). Relationships between vocational development and self-concept of sixth grade students. Journal of Vocational Behavior, 18(2), 228-36.

Hollingshead, A. B., & Redlich, F. C. (1953). Social stratification and psychiatric disorders. American Sociological Review, 18, 139-69.

Hotchkiss, L., & Borow, H. (1984). Sociological perspective on career choice and attainment. In D. Brown & L. Brooks (Eds.) Career Choice and Development: Applying Contemporary Theories to Practice (Chapter 6). San Francisco: Jossey-Bass.

Individuals with Disabilities Act (IDEA) of 1990. Public Law 101-476.

Jackson, L. K., & Roberts, D. K. (1996). Career counseling with African Americans: How far have we really come? Paper presented at the Paper presented at the annual meeting of the Southwest Educational Research Association, New Orleans.

Jacobs, A. E., & Hendricks, D. J. (1992). Job accommodations for adults with learning disabilities: Brilliantly disguised opportunities. Learning Disability Quarterly, 15, 274-284.

Jagger, L. (1992). Congruence between personality traits and chosen occupation as a predictor of job satisfaction for people with disabilities. Rehabilitation Counseling Bulletin, 36, 53-60.

Jenkins, J. (1981). Styles: A Pivotal Point for Retention and Career Decision Making. Columbus, OH: Clearinghouse for Adult, Career and Vocational Education. (ERIC Document Reproduction Service No. ED 215 624).

Johnson, L. S. (2000). The relevance of school to career: A study in student awareness. Journal of Career Development, 26(4), 263-276.

Jung, C. G. (1923). Psychological Types or the Psychology of Individualization. New York: Mentor Books.

Kapes, J. T. (1998, December 11, 1998). Career Assessment: Recently developed instruments useful for School-to-Work programs. Paper presented at the American Vocational Association, New Orleans, LA.

Kavale, K. A., & Forness, S. R. (1996). Learning disability grows up: Issues for individuals with learning disabilities. The Journal of Rehabilitation, 62, 34-42.

Kendall, W. S. (1981). Affective and career education for the learning disabled adolescent. Learning Disability Quarterly, 4(1), 69-75.

Kerka, S. (1998). Career Development and Gender, Race, and Class. ERIC Clearinghouse on Adult, Career, and Vocational Education. ERIC Digest. Greensboro, NC.

Kimbrough, V., & Salomone, P. (1993). African Americans: Diverse people, diverse career needs. Journal of Career Development, 19(1), 256-279.

Kincheloe, J. L. (1995). Toil and Trouble: Good Work, Smart Workers, and the Integration of Academic and Vocational Education. New York: Peter Lang Publishing.

King, S. (1989). Sex differences in a causal model of career maturity. Journal of Counseling & Development, 68(2), 208-215.

Kohler, P. D. (1993). Best practices in transition: Substantiated or implied? Career Development for Exceptional Individuals, 16(1), 107-121.

Kokan, J. L., & Biggs, J. B. (1982). Student characteristics and motivational and process factors in relation to styles of career development. Journal of Vocational Behavior, 21(1), 1-16.

Kolb, D. A. (1984). Experimental Learning: Experience as a source of Learning and Development. New Jersey: Prentice-Hall.

Koller, J. R. (1994). Improving transition outcomes for persons with learning disabilities. American Rehabilitation, 20, 37-43.

Lakes, R. D. (1995). The new vocationalism: Community economic development. Journal of Teacher Education, 33, 66-69.

Lankard, B. A. (1992). Integrating Academic and Vocational Education: Strategies for Implementation. ERIC Clearinghouse on Adult Career and Vocational Education, ERIC Digest No. 120, 1-5.

Lee, C. C. (1984). Predicting the career choice attitudes of rural Black, White, and Native American high school students. Vocational Guidance Quarterly, 32(3), 177-84.

Lent, R. W. (1996). A social cognitive framework for studying career choice and transition to work. Journal of Vocational Education Research, 21(4), 3-31.

Lent, R. W., Brown, S. D., & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. Journal of Vocational Behavior, 45, 79-122.

Lent, R. W., Brown, S. D., & Hackett, G. (1998). Extending social cognitive theory to counselor training: Problems and prospects. Counseling Psychologist, 26, 295-306.

Leong, T. L. (1997). Career interventions and assessments in a multicultural world. In R. F. G. Walz (Ed.), Career Transition in Turbulent Times (pp. 275-283). Greensboro: ERIC/CASS Publications.

Levine, P. & Nourse, S. (1998). What follow-up studies say about post school life for young men and women with learning disabilities: A critical look at the literature. Journal of Learning Disabilities, 31, 212-233.

Levinson, E. M., & Ohler, D. L. (1998). Transition from high school to careers for students with learning disabilities: Needs, assessment, and services. School Journal, 82, 62-80.

Lewis, J. M., & Looney, J. G. (1988). The Long Struggle: Well-Functioning working-class Black Americans. New York: Brunner/Mazel.

Lim, B. (n.d.) Behavioral Profile and Career Choice. Retrieved December 17, 2001 from <http://www.rebrown.com/rebrown/id.htm>.

Locke, L. F., Spirduso, W. W., & Silverman, S. J. (1987). Proposals that Work: A Guide for Planning Dissertations and Grant Proposals (2nd Ed). Newbury Park, CA: Sage.

Loughead, T. A., Liu, S., & Middleton, E. B. (1995). Career development for at-risk youth: A program development. The Career Development Quarterly, 43(3), 274-284.

Love, L. L. (1997). What happens to students leaving secondary special education services in Arizona? Implications for educational program improvement and transition services. Remedial and Special Education, 18(2), 261-269.

Lozada, M. (1999). All in good time. Techniques, 74(8), 14-19.

Luster, T., & McAdoo, H. (1996). Family and child influences on educational attainment: A secondary analysis of the high/scope Perry Preschool Data. Developmental Psychology, 32, 26-39.

Luster, T., & McAdoo, H. (1995). Factors related to self-esteem among African American youths: A secondary analysis of the high/scope Perry Preschool Data. Journal of Research on Adolescence, 5, 451-467.

Luzzo, D. A., & McWhirter, E. H. (2001). Sex and ethnic differences in the perception of educational and career-related barriers and levels of coping efficacy. Journal of Counseling & Development, 79(1), 61-67.

Lynch, R. L., & Harnish, D. (1998). Preparing pre-service teacher education students to use work-based strategies to improve instruction, In Contextual Teaching and Learning: Preparing Teacher to Enhance Student Success in the Workplace and Beyond. (pp. 127-158). Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education, Center on Education.

Lynch, R. L. (2000). High School career and technical education for the first decade of the 21st century. Journal of Vocational Education Research, 25(2), 155-98.

MacMillan, D. L., & Reschly, D. J. (1998). Overrepresentation of minority students: The case for greater specificity or reconsideration of the variables examined. The Journal of Special Education, 32(1), 15-24.

Macha, D. E., & Kamper, C. R. (1999). Being Yourself: Experiencing Success in Relationships. Muskegon, MI: HPower & Associates.

Maddy-Bernstein, C. (2000). Career Development Issues Affecting Secondary Schools: The Highlight Zone. Columbus, OH: National Dissemination Center for Career and Technical Education.

Mamlin, N., Harris, K., & Case, L. P. (2001). A methodological analysis of research on locus of control and learning disabilities: Rethinking a common assumption. The Journal of Special Education, 34(4), 214-25.

Mariage, T. V. (2001). Features of an interactive writing discourse: Conversational involvement, conventional knowledge, and internalization in "morning message". Journal of Learning Disabilities, 34(2), 172-96.

Marston, W. M. (1928). Emotions of Normal People. New York: Harcourt Brace.

Mau, W. (1995). Educational planning and academic achievement of middle school students: A racial and cultural comparison. Journal of Counseling and Development, 73(5), 518-26.

Mau, W. (2000). Educational and vocational aspiration of minority and female students: A longitudinal study. Journal of Counseling and Development, 78, 186-94.

Maxwell, M. P., Maxwell, J. D., & Krugly-Smolka, E. (1996). Ethnicity, gender, and occupational choice in two Toronto schools. Canadian Journal of Education, 21(3), 257-79.

McAdoo, H. P. (1999). Family Ethnicity: Strength in Diversity. Thousand Oaks, CA: Sage.

McAdoo, H. P. (1991). Family values and outcomes for children. Journal of Negro Education, 60, 361-365.

McCrae, R. R., & Costa, P. T. (1997). Personality trait structure as a human universal. American Psychologist, 52, 509-516.

McCombs, B. (1991). Metacognition and motivation in higher level thinking. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.

McDale, K. (1995). How we parent: Race and ethnic differences. In C. K. Jacobson (Ed.), American Families: Issues in Race and Ethnicity. New York: Garland.

McGoldrick, M. (1989) Ethnicity and the family life cycle. In B. Carter & M. McGoldrick (Eds.), The Changing Family Life Cycle. Needham Heights, MA: Allyn & Bacon.

McKay, W. R., & Miller, C. A. (1982). Relations of socioeconomic status and sex variables to the complexity of worker functions in the occupational choice of elementary school children. Journal of Vocational Behavior, 20(1), 31-39.

McNair, D., & Brown, D. (1983). Predicting the occupational aspirations, occupational expectations, and career maturity of Black and White male and female 10th graders. Vocational Guidance Quarterly, 32(1), 29-36.

McWhirter, E. H. (1997). Perceived barriers to education and career: Ethnic and gender differences. Journal of Vocational Behavior, 50, 124-140.

Meehl, P. E. (1991). In D. Cicchetti & W. M. Grove, Thinking Clearly About Psychology (pp. 236). Minneapolis: University of Minnesota Press.

Merriam, S. B. (1988). Case Study research in education. San Francisco: Jossey-Bass Publishers.

Michigan Department of Career Development (2001). Career Preparation System Overview. Lansing, MI: Michigan Department of Career Development.

Michigan Department of Career Development (1998). Innovators to Watch. Lansing MI: Michigan Department of Career Development.

Miles, M. M., & Huberman, A. M. (1984). Qualitative Data Analysis: A Sourcebook of New Methods. Newbury Park, CA: Sage.

Mireles, C. & Elizabeth, W. (1994). School-to-Work: Opportunity or Barrier? ASPIRA Issue Brief. Washington, D.C: ASPIRA Association.

Miller, D.C. (1991). Handbook of Research Design and Social Measurements. Newbury Park, Cal.: Sage Publications.

Mortimer, J. T., Lorence, J., & Kumka, D. S. (1986). Work, Family, and Personality. Norwood, NJ: Ablex Publishing Corporation.

Murry, E., & Mosidi, R. (1993). Career development counseling for African Americans: An appraisal of the obstacles and intervention strategies. Journal of Negro Education, 62, 441-447.

Mutua, N.K. (2001). Policies identified: Children with disabilities. Educational Studies, 32(3), 289-300.

Naidoo, A. V., Bowman, S. L., & Gerstein, L. H. (1998). Demographics, causality, work salience, and the career maturity of African-American students: A casual model. Journal of Vocational Behavior, 53(1), 15-27.

National Center for Research in Vocational Education (1996). Technical Assistance for Special Populations: TASPP Bulletin. Berkeley, California: University of California at Berkeley.

National Center for Research in Vocational Education (1996). Voices of Diversity: Connecting Education and Work Through Authentic Instruction. Berkeley, California: University of California at Berkeley.

Neel, R. S., Meadows, N., Levine, P. & Edgar, E. B. (1988). What happens after special education: A statewide follow-up study of secondary students who have behavioral disorders. Behavioral Disorders, 13(2), 209-216.

Norusis, M. J. (1988). SPSS: Guide to Data Analysis. Englewood, N.J: Prentice Hall.

Oakes, J., & Guiton, G. (1994). Matchmaking: The dynamics of high school tracking decision. American Education Research Journal, 32, 3-34.

O'Brien, K. M. (1999). Broadening career horizons for students in at-risk environments. Career Development Quarterly, 47(4), 215-229.

Ochs, L. A., & Roessler, R. T. (2001). Students with disabilities: How ready are they for the 21st century? Rehabilitation Counseling Bulletin, 44(3), 170-176.

O'Connor, S. C., & Spreen, O. (1988). The relationship between parents' socioeconomic status and education level and adult occupational and educational achievement of children with learning disabilities. Journal of Learning Disabilities, 21, 148-153.

Ohler, D. L., Levinson, E. M, & Hays, G. M. (1996). The relationship between career maturity and congruence, consistency, and differentiation among individuals with and without learning disabilities. Journal of Employment Counseling, 33(1), 50-59.

Ogbu, J. (1978). Minority Education and Caste. New York: Academic Press.

Okocha, A. A. G. (1994). Preparing racial ethnic minorities for the work force 2000. Journal of Multicultural Counseling and Development, 22(2), 106-114.

Okolo, C. M., & Sitlington, P. (1986). The role of special education in LD adolescents' transition from school to work. Learning Disability Quarterly, 9(2), 292-303.

Olson, D. H., & Hanson, M. K. (1990). Preparing Families for the Future. Minneapolis, MN: National Council on Family Relations.

Omizo, S. A., & Omizo, M. M. (1992). Career and vocational assessment information with program planning and counseling for students with disabilities. The School Counselor, 40(1), 32-39.

O'Regan, K., & Quigley, J. M. (1996). Teenage employment and the spatial isolation of minority and poverty households. The Journal of Human Resources, 31, 692-702.

Osipow, S. H. (1983). Theories of Career Development. (3rd ed. ed.). Englewood Cliffs, N.J.: Prentice-Hall.

Osipow, S. H., & Littlejohn, E. M. (1995). Toward a multicultural theory of career development: prospects and dilemmas. In F. T. Leong (Ed.), Career Development and Vocational Behavior of Racial and Ethnic Minorities (pp. 251-62). Mahwah, New Jersey: Lawrence Erlbaum Associates.

Owens, T. R. (1995). Washington's School-to-Work Evaluation. Portland, OR: Education and Work Program.

Page, J. (2001). Take two and call me in the morning. Smithsonian, 32, 96-105.

Parham, T. A., & Austin, L. N. (1994). Career development and African Americans: A contextual reappraisal using the Nigrescence construct. Journal of Vocational Behavior, 44(3), 139-154.

Parnell, D. (1995). Why Do I Have to Learn This? Waco, Texas: Center for Occupational Research and Development.

Parnell, D. (1999). Making it fly. Techniques, 74(2), 18-21.

Patton, M. Q. (1990). Qualitative Evaluation and Research Methods. Newbury Park, New York: Sage.

Phelps, L. A. (1998). Changing work, changing learning: The imperative for teacher learning in workplaces and communities, In Teacher Learning in the Workplace and Community. Madison: Center for Education and Work, University of Wisconsin.

Pierangelo, R., & Crane, R. (1997). Complete Guide to Special Education Transition Services. West Nyack, NY: The Center for Applied Research in Education.

Pucel, D. J. (2001). Beyond Vocational Education. Poughkeepsie, NY: Eye on Education.

Rank, M. R. (1994). Living on the Edge: The Realities of Welfare in America. New York: Columbia University Press.

Rojewski, J. M., & Miller, R. J. (1991). Involvement of minority youth in vocational education. Journal of Vocational Special Needs Education, 14(1), 25-27.

Rojewski, J. W., & Sheng, P. (1993). Differences in student perceptions of secondary vocational education: Implications for multicultural career counseling. Journal of Multicultural Counseling and Development, 21(4), 211-266.

Rojewski, J. M. (1994). Career indecision types for rural adolescents from disadvantaged and nondisadvantaged backgrounds. Journal of Counseling Psychology, 41, 356-63

Rojewski, J. W. (1996). Occupational aspirations and early career-choice patterns of adolescents with and without learning disabilities. Learning Disability Quarterly, 19(1), 99-114.

Rojewski, J. W. (1999). The role of chance in the career development of individuals with learning disabilities. Learning Disability Quarterly, 22(4), 267-278.

Rojewski, J. W. (2002). Preparing the workforce for tomorrow: a framework for career and technical education. ??

Rose, M. (1999). "Our Hands Will Know": The Development of Tactile Diagnostic Skill: Teaching, Learning, and Situated Cognition in a Physical Therapy Program. Anthropology & Education Quarterly, 30(2), 133-60.

Rossetti, R. (1989). Student and parent images of vocational education offerings: Declining enrollment in vocational education. Paper presented at the Paper presented at the annual convention of the American Vocational Association, Orlando, Fl.

Rowntree, D. (1981). Statistics without Tears. New York: Charles Scribner's Sons.

Russell, C. N., & Kolstad, R. K. (1998). Critical job-skill requirements for 21st century: living and working with people. Journal of Instructional Psychology, 25(3), 176-80.

Russell, R. L. (1994). Preparing veterinary students with the interactive skills to effectively work with clients and staff. Journal of Veterinary Medical Education, 21(2).

Schalock, R. L., Holl, C., Elliott, B., & Ross, I. (1992). A longitudinal study: Follow-up of graduates from a rural special education program. Learning Disability Quarterly, 15(1), 29-38.

School-to-Work Opportunities Act of 1994, Public Law 103-239.

Secretary of Labor's Commission on Achieving Necessary Skills. (1991). What Work Requires of Schools: A SCANS Report for American 2000. Washington, DC: U. S. Government Printing Office.

Short, E. J. & Weissberg-Benchell, J. (1989). The triple alliance for learning: Cognition, metacognition, and motivation. In C. B. McCormick, G. E. Miller, & M. Pressley (Eds.), Cognitive Strategy Research: From Basic Research to Educational Applications, (pp. 33-63). New York: Springer-Verlag

Singer, B., & Saldana, D. (2001). Educational and career aspirations of high school students and race gender, class differences. Race, Gender, Class, 8(1), 22-34.

Smith, A. E. (2000). Middle school career exploration: The role of teachers and principals. Education, 120(4), 626-30.

Smith, E. J. (1976). The profile of the Black individual in vocational literature. Journal of Vocational Behavior, 18, 191-211.

Smith, E. J. (1981). The career development of young Black females: The forgotten group. Youth & Society, 12(3), 277-312.

Smith, E. J. (1983). Issues in racial minorities' career behavior. In S. H. Walsh, (Ed.), Handbook on Vocational Psychology. Hillsdale, New Jersey: Erlbaum.

Smith, T. E. (1991). Agreement of adolescent educational expectations with perceived maternal and paternal educational goals. Youth and Society, 23(2), 155-74.

Spokane, A. R. (1991). Career Interventions. Englewood Cliffs, NJ: Prentice-Hall.

Stout, K. L. (1982). The role of self-concept in interpersonal communication. The Journal of Social Psychology, 12, 119-130.

Stranger, B. (1997). Parent Perceptions of Career Awareness, Career Exploration and Community-Based Learning. Michigan State University, East Lansing.

National Center for Education Statistics (2000). Vocational Education in the United States: Toward the Year 2000 (Statistical Analysis Report). Washington, D.C.: United States Department of Education.

Steinberg, A. (1998). Real Learning, Real work: School-To-Work as High School Reform. New York: Routledge.

Stern, D. (1998). Learning and Earning: The Value of Working for Urban Students. Berkeley, California: University of Berkeley, National Center for Research in Vocational Education.

Storms, J., Stefano, L., & O'Leary, E. (1996). Individuals with Disabilities Education Act: Transition Requirements. Stillwater, OK: National Center of Rehabilitation Training Materials, Oklahoma State University.

Strauss, A., & Corbin, J. (1990). Basics of Qualitative Research: Grounded Theory Procedures and Techniques. Newbury Park, CA: Sage.

Sturomski, N. (1996). The transition of individuals with learning disabilities into the work setting. Topics in Language Disorders, 16(3), 37-51.

Super, D. E. (1990). A life-span, life-space approach to career development. In B. L. Brooks (Ed.), Career Choice and Development: Applying Contemporary Theories to Practice (Vol. 2nd,). San Francisco: Jossey-Bass.

Swinton, D. H. (1990). The economic status of African Americans: Limited ownership and persistent inequality. In B. J. Tidwell (Ed.), The State of Black America (pp. 61-117). New York: National Urban League.

Sue, S., Keefe, D., Enomoto, K., Durvasula, R. S., & Chao, R. (1996). Asian American and white college students' performance on the MMPI-2. In J. N. Butcher (Ed.), International Adaptations of the MMPI-2: Research and Clinical Applications (pp. 206-218). Minneapolis: University of Minnesota Press.

Tobias, C. U. (1995). The Way We Work: A Practical Approach to Dealing with People on the Job. Colorado Springs, CO: Focus on the Family.

Toepfer, C. (1994). Vocational/career/occupational education at the middle school level: What is appropriate for young adolescents? Middle School Journal, 25(1), 59-65.

U. S. Bureau of Census (1998). Poverty level in the United States. Washington, D.C. Department of Commerce. Education, 120(1), 186-90.

Vaidyna, S. R. (1999). Metacognitive learning strategies for students with learning disabilities. Education

Valles, E. C. (1998). The disproportionate representation of minority students in special education: responding to the problem. The Journal of Special Education, 32(1), 52-54.

Wagner, M. M., & Blackborby, J. (1996b). Transition for high school to work or college: How special education students fare. The Future of Children: Special Education for Students with Disabilities, 6(1), 103-120.

Wang, M. C., Haertel, G. D., Walberg, H. J. (1994). Educational resilience in inner cities. In M. C. W. E. W. Gordon (Ed.), Educational Resilience in Inner-City America (pp. 45-72). Hillsdale: NJ: Erlbaum.

Warner, W. L., Meeker, M., & Eells, K. (1960). Social Class in America. New York: Harper & Row.

Watkins, W. H., Lewis, J. H., & Chou, V. (2001). Race and Education: The Roles of History and Society in Educating African American Students. Boston: Allyn and Bacon.

Watson, M. B., & Stead, G. B. (1990). Work-role salience of South African adolescents, Journal of Vocational Behavior, 36, 249-257.

Way, W. L., & Rossmann, M. M. (1994). The interrelation of work and family: A missing piece of the vocational education research agenda. Journal of Vocational Education Research, 19(2), 1-24.

Way, W. L., & Rossmann, M. M. (1996). Family contributions of adolescent readiness for School-to-Work transition. Journal of Vocational Education Research, 21(2), 5-22.

Wehmeyer, M. L., & Schwartz, M. (2001). Disproportionate representation of males in special education services: biology, behavior, or bias? Education and Treatment of Children, 24(1), 28-45.

Wentling, R. M., & Wright, D. (1999). Barriers that hinder the successful transition of minority youth into the workplace. Journal of Vocational Education Research, 24(4), 165-83.

Wentling, R. M. (2001). Diversity in the Work Force: The Highlight Zone. Columbus, OH: National Dissemination Center for Career and Technical Education.

Westbrook, B. W., Sanford, E. E., Merwin, G., Fleenor, J., & Gilleland, K. (1988). Career maturity in Grade 9: Can students who make appropriate career choices for others also make appropriate career choices for themselves? Measurement and Evaluation in Counseling and Development, 21(1), 64-71.

Westbrook, B. W. (1991). The validity of career maturity attitude measures among black and white high school students. The Career Development Quarterly, 39(3), 199-208.

Westbrook, B. W. (1992). The relationship between career choice attitudes and career choice competencies of black 9th-grade pupils. Educational and Psychological Measurement, 52(2), 347-51.

Wilson, P. M., & Wilson, J. R. (1992). Environmental influences on adolescent educational aspirations: A logistic transform model. Youth & Society, 24, 52-70.

Wood, P. C., Hillman, S. B., & Sawilowsky, S. S. (1996). Locus of control, self-concept, and self-esteem among at-risk African-American adolescents. Adolescence, 31, 597-604.

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(2), 218-34.

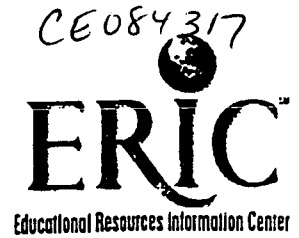
Yin, R. K. (1989). Case study research: Design and methods (2nd ed.). New Park, CA: Sage.

Young, R. A., & Friesen, J. D. (1992). The intentions of parents in influencing the career development of their children. The Career Development Quarterly, 40(1), 198-207.

Zunker, V. G. (1994). Career counseling: Applied Concepts of Life Planning. (4th Ed.). Pacific Grove: CA: Brooks/Cole.



U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)



REPRODUCTION RELEASE

(Specific Document)

I. DOCUMENT IDENTIFICATION:

Title: The Differential Behavioral Work Styles of African American Students With and Without Learning Disabilities	
Author(s): Tony D. Bright	
Corporate Source: Michigan State University	Publication Date: July 2002

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

<p>The sample sticker shown below will be affixed to all Level 1 documents</p> <div style="border: 1px solid black; padding: 10px;"> <p>PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY</p> <p align="center"><i>Sample</i></p> <p>_____</p> <p>_____</p> <p>TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)</p> <p>1</p> </div> <p align="center">Level 1</p> <p align="center">↑</p> <div style="border: 1px solid black; width: 30px; height: 30px; margin: 0 auto; text-align: center; line-height: 30px;">X</div> <p>Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) and paper copy.</p>	<p>The sample sticker shown below will be affixed to all Level 2A documents</p> <div style="border: 1px solid black; padding: 10px;"> <p>PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY</p> <p align="center"><i>Sample</i></p> <p>_____</p> <p>_____</p> <p>TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)</p> <p>2A</p> </div> <p align="center">Level 2A</p> <p align="center">↑</p> <div style="border: 1px solid black; width: 30px; height: 30px; margin: 0 auto;"></div> <p>Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only</p>	<p>The sample sticker shown below will be affixed to all Level 2B documents</p> <div style="border: 1px solid black; padding: 10px;"> <p>PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY</p> <p align="center"><i>Sample</i></p> <p>_____</p> <p>_____</p> <p>TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)</p> <p>2B</p> </div> <p align="center">Level 2B</p> <p align="center">↑</p> <div style="border: 1px solid black; width: 30px; height: 30px; margin: 0 auto;"></div> <p>Check here for Level 2B release, permitting reproduction and dissemination in microfiche only</p>
---	--	---

Documents will be processed as indicated provided reproduction quality permits.
If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Sign here, → please

Signature: <i>Tony D. Bright</i>	Printed Name/Position/Title: Tony Bright/Educational Consultant	
Organization/Address: Michigan Center for Career and Technical Education	Telephone: (517) 3534403	FAX: (517) 432-2931
	E-Mail Address: Brightto@msu.edu	Date: 12/30/02



(Over)

III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:
Address:
Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:
Address:

V. WHERE TO SEND THIS FORM:

<p>Send this form to the following ERIC Clearinghouse Acquisitions Coordinator ERIC Clearinghouse on Adult, Career, and Vocational Education Center on Education and Training for Employment 1900 Kenny Road Columbus, OH 43210-1090</p>
--

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to: